

FLIGHT SAFETY STRATEGY AS A DRIVER OF AIRLINE PERFORMANCE: THE EFFECTS OF INDUSTRY PARTNERSHIPS ON KENYAN AIRLINES

Rasmus Amoni Otwane.

MBA Student, School of Business, Economics and Tourism, Kenyatta University, Kenya.

Paul Waithaka.

Lecturer, Department of Business Administration, School of Business, Economics and Tourism, Kenyatta University, Kenya.

©2025

International Academic Journal of Human Resource and Business Administration (IAJHRBA) | ISSN 2518-2374

Received: 19th April 2025

Published: 24th April 2025

Full Length Research

Available Online at: https://iajournals.org/articles/iajhrba_v5_i1_67_96.pdf

Citation: Otwane, R. A., Waithaka, P. (2025). Flight safety strategy as a driver of airline performance: the effects of industry partnerships on Kenyan airlines. *International Academic Journal of Human Resource and Business Administration (IAJHRBA)*, 5(1), 67-96.

ABSTRACT

The airline industry contributes immensely to the Kenyan economy but performed dismally from 2016 to 2022 as compared to other regional airlines. Circumstances related to flight safety resulted to this dismal performance. The study sought to examine effects of industry partnerships on performance of airlines in Kenya. Specifically, code-share agreements, resource sharing, and joint safety training effect on performance of airlines. Resource Based View, Balanced Score Card and Contingency theories anchored the study while descriptive research design was applied. Target population was 33 airlines and proportionate stratified purposive sampling technique was used with a sample size of 7 airlines. Fifty-seven respondents filled the semi-structured questionnaires for primary data collection while a document review tool assisted to collect secondary data. Pilot study involved 8 respondents from Safari Link Airlines ascertaining the questionnaires appropriateness via content and construct validity while its reliability proven by 0.794 Cronbach's Alpha test. Descriptive and inferential statistics were employed to analyze data. The results

indicated that industry partnerships significantly affected airline performance with strong contribution from code-share agreements, resource sharing, and joint safety training. The study concluded that industry partnerships having significantly linked to positive airline performance through sharing of best practices and resources for efficient flight operations and improved job satisfaction, necessitated airlines to form favourable stakeholder industry partnerships. This study recommends incorporating other sectors of the aviation for findings to be fully representative of Kenya's aviation sector and for comparison with other countries. It also recommends investigating the influence of industry regulations and political interference as mediating and moderating variables that may be restrictive to management's autonomy. Finally, the study recommends airlines and industry regulatory bodies to freely avail substantial secondary data to compliment the primary data for eliminating bias and comprehensive analysis of findings.

Keywords: Flight Safety; Industry Partnerships; Airline Performance.

INTRODUCTION

Customers' preference for service quality verses airlines' profit maximization desire have greatly influenced airline performance (Kasim & Mahmut, 2020). Performance of airlines pertains to operational efficiency, financial performance, customer satisfaction, and safety status for a competitive advantage in the aviation environment. Being a service industry, critical to airline performance is customer perception that is based on reputation and flight safety status of the airlines (Kalemba & Campa Planas, 2019). Flight safety is the freedom of harm to crew

and passengers or damage to equipment that has a direct impact to airline's reputation and thus performance. For airlines to remain competitive in aviation environment on matters service quality and profitability performance, airlines have to adopt various flight safety change management strategies that include industry partnerships.

The airline sector is a huge and complex industry that is critical to the world economy to attune of USD 2.7 trillion (3.6% of global economic output) and way of life in terms of trade, transport and tourism (Gill, 2016; Kearns, 2018). In spite of this growth, airlines operate in a volatile environment with exposures like the exogenous shocks of terrorism and natural disasters that negatively affect their performance. For instance, the 2008 great recession that negatively affected airline industry to attune of approximately USD 5.2 billion. (Vasigh *et al.*, 2018). This performance can be measured in financial, operational and service quality perspectives (Kasim & Mahmut, 2020) and can be evaluated through various metrics like customer satisfaction, safety records, baggage handling and financial stability that determine aviation industry's evolution.

Since the beginning of the 21st century, aviation industry has witnessed constant growth on the global scale except for periods of natural mishaps like Covid-19 pandemic (IATA, 2020; Dube *et al.*, 2021) that caused unprecedented financial losses. However, it regained its steady path post the pandemic dent with increased carrying capacity from 21.8 billion passengers in 2020 to 2.2 billion in 2021 translating to 18.6% increase in airline performance (AFRAA, 2022). This performance was mimicked by the U.S airline industry from 2000 to 2009 due to severe demand downturn after 9/11 terrorist attack (Ito & Lee, 2019) and covid pandemic (Hotle & Mumbower, 2021). The European airline industry (Drakos, 2019) and China's airline industry (Zhang *et al.*, 2022) experienced similar fate in performance as result of same circumstances. The future of the airline industry in Africa is positive with an expected linear and gradual growth trajectory (Njoroge, & Samunderu, 2021). However, its performance since 2000 has also been a mix of challenges and growth. The challenges include; high operating costs, limited infrastructure, and competition from international airlines that have rendered African airlines inferior in performance as compared to others. The African Airline Association report (2022) indicates that African continent was the weakest contributor to the global air traffic at 1.9%. However, African airlines had managed to improve from 61 to 95.6 million passenger capacity in the year 2010 and 2019 respectively (AFRAA, 2022).

Organizational Performance

Organizational performance is how effective an entity can achieve its purpose and objectives by evaluating various factors that gauge its accomplishments and success. (Heydari *et al.*, 2020). Organizational performance is an important measure on an organizations' productivity consisting of both financial and non-financial results. Financial performance indicators like favourable return on investment and company profits equate to an increase in flight volumes and financial success in the aviation industry (Olaganathan, 2021). The organizational financial performance is an indicator of how well an organization competes in the industry.

The non-financial indicators of strategy decisions and understanding, resource availability, effectiveness of organizational structure, and adoption of advanced technology are critical in improving organizational performance (Serrano & Kazda, 2020). The view that both the organizational financial and non-financial matters are critical to evaluating its achievements or shortcomings primarily is the reason why organizations have adopted the Balanced Score Card approach of measuring performance. This approach employs the perspectives of finance, customer, internal processes, and learning and growth to measure performance (Tawse, & Tabesh, 2023). The balanced scorecard gives a balanced approach to external and internal factors critical to the organizational performance (Quesado *et al.*, 2018).

Farooq *et al.*, (2018) research on how service quality impacts customer satisfaction in Malaysia airlines concluded that airlines should put much emphasis on service quality dimensions especially personnel services and image in order to enhance their customer satisfaction levels. Airlines should endeavour to have high quality catering services, well maintained aircraft interior, clean and comfortable seats, and equip the aircraft with latest and modern technology. This is made possible by having a collaborative approach and partnerships with other stakeholders in the industry. Being a very competitive industry, airlines with superior service quality have high capacity to satisfy and retain their customers for competitive performance. This study measures airline performance on the basis of financial profitability, operational efficiency, and employee satisfaction with emphasis on stakeholder industry partnerships for good reputation, customer satisfaction, competitive advantage, and sustainable performance.

Industry Partnerships

Since the Airline Deregulation Act of 1978, safety remains a critical aspect in the management of the commercial airline industry as all stakeholders endeavour to prevent the prevalence of mishaps (Kalemba & Campa Planas, 2019). Airlines with a good flight safety record often have a positive brand image and reputation for being reliable, trustworthy, and responsible, offering it a competitive edge in increased market share and customer preference. For the airline industry to leverage on the benefits derived from the good flight safety record, it has to employ some sound flight safety change management strategies like industry stakeholder collaborations and partnerships that are superior to their competitors.

Industry partnerships refer to the existing collaboration among various stakeholders within the industry in sharing best practices and resources to address common concerns. Airline partnerships embody a formal cooperation involving multiple airlines geared towards improving their competitive advantages (Seo, 2020). Research by Thendu *et al* (2020) found out that airlines use partnerships as an avenue to explore new markets without the need to employ much resources that would otherwise have been uneconomical if they operated alone. Airline partnerships improve the quality and efficiency of airline operations (Tuncikiene & Katinas, 2020). The complexity of aviation environment necessitates the airlines to form partnerships with relevant stakeholders for efficiency (Thendu *et al*, 2020). These partnerships provide an avenue for top management teams to access specialized knowledge and expertise for improved airline performance

Airlines in Kenya

Airline sector in Kenya has come of age with multiple airlines operating in the country. The existence of multiple airlines in Kenya has led to a healthy competition within the Kenyan aviation sector with improved services. Kenya Civil Aviation Authority (KCAA), a legitimate regulatory entity enforcing safety compliance and issuance of licenses to the Kenyan airlines, registered 49 airlines operating both domestically and internationally. Kenya Airways (KQ) is Kenya's national carrier operating from JKIA with over 40 aircraft in its fleet (ACF, 2020). KCAA regulations (2018) requires all airline license holders to make monthly returns for monitoring the aviation sector in Kenya. The airline industry has been a significant contributor to Kenya's economy. The importance of air transport in Kenya report (2018) indicated that the overall industry spending stood at US \$3.2 billion which was an equivalent of 4.6% of the Kenya's GDP. However, airline financial performance in Kenya as compared to regional counterparts over the years has been found to be low (Chege, 2022).

The Kenya airline industry has had a steady growth path since the beginning of the 21st Century with an indication in the rise of license issuance by KCAA. For instance, air passengers visiting Kenya rose from 1,671, 900 in 2014 to 2,027,700 in 2018 (ACF, 2020). Despite the challenges that this industry continues to face, IATA (2018) forecasts Kenyan airline sector to grow by 249% by the year 2037 resulting in an additional 11.8 million passengers. The development of the Kenyan airline industry is majorly contributed by domestic and African travels. Africa is the main source of foreign passengers to Kenya standing at 70% of total visitors annually. From the onset of the 21st Century, two major circumstances have significantly affected the performance and survival of the airline industry; the 66% decline in world revenue passenger kilometres in 2020 as a result of the pandemic (ACF, 2020) and 2001 airline terrorists attack effects (Kioko & Bwire, 2021), that all point to aviation safety and security issues. The negative effects felt in the global aviation environment including the United States, Europe, China, Africa, were also felt in Kenya in similar or equal measure in relation to flight safety having a significant effect on the performance of airlines. Therefore, adoption of strategies like superior industry partnerships by airlines is critical to improvement of their performance.

Statement of the Problem

Airline industry in Kenya realized dismal performance improvement from 2016 to 2022 as compared to other regional airlines (Skytrax World Airline Awards report, 2022). African Airlines Association (AFRAA) report (2023) indicated that Ethiopian Airlines handled 11.3 million passenger traffic as compared to Kenya Airways' 2.7 million in the year 2022. Therefore, the overall performance of Kenyan airline industry during this period was below the expected level in comparison with other regional airlines.

Kenya Airways PLC consolidated statement (2023) showed that the last full-year operating profit was in 2017 at Kshs. 1.6 billion and since then, the airline has been operating on losses including 2022 at Kshs. 5.6 billion loss. Moreover, KCAA National Aviation Safety Report (2023) indicated that the Kenyan airlines had a total of 54 flight accidents with 39 fatalities for the period between 2017 and 2022 that had a significant dent on customer and employee satisfaction. In effect, there was a higher employee turnover at 55% and passengers' preference

shifted to other airlines that had good image and reputation. Airlines having good reputation withstand tough times because of preference by the passengers and customer loyalty leading to sustainable performance. While airlines with tainted reputation have reduced passenger capacity leading to reduced performance and in worst case scenario, receivership.

Kenyan airlines have performed differently due to varied passenger reputation ratings as a result of employee satisfaction indexes, on time performance and safety standings. Internally, Kenya Airways' relatively good reputational rating resulted to a 53% customer retention while Fly Sax Airlines with a lower rating had a 23% that even forced it to cease operations in 2019 and later renamed to EastAfrican Airlines (Matara, 2018). Furthermore, Silverstone Air, founded in 2017, ceased operations in 2019 partly due to a relatively a higher accident rate (Nyangudi, 2021). Therefore, it was critical to determine specific factors influencing airline reputation that ultimately determined its performance when faced with safety-related situations like flight accidents and natural occurrences like pandemics.

Studies have been done on how other internal factors like leadership styles had affected airline performance in Kenya but limited studies have been carried out on how industry partnerships as a flight safety strategy had influenced airline performance in Kenya. Zou and Chen (2017) focused on the influence of code-share agreements on Star, Skyteam and Oneworld airline partnerships and found out that the airlines' revenue performance increased with code-share partnerships. Peng and Lu (2022) study on global airline alliances' cooperation effects in Asian airports found out that airports with higher internal cooperation were linked to significant home-ground advantages for the airline alliances. This study sought to find out whether conclusions regarding airline global alliances were applicable in the Kenya setting.

Previous studies indicated relationships between internal factors and airline performance in Kenya but limited literature existed to show how industry partnerships influenced that performance. The prevalence of aviation accidents, operational efficiency and professionalism in terms of service quality in relation to stakeholder partnerships, have shaped the operations of aviation industry in Kenya on matters flight safety. Therefore, flight safety is vital in determining airline performance in Kenya. Based on this standing, this study explored the effects of industry partnerships on the performance of airlines in Kenya.

Objective of the Study

The study sought to investigate the effect of industry partnerships on the performance of selected airlines in Kenya.

LITERATURE REVIEW

Both theoretical and empirical literatures were reviewed in relation to the contribution of industry partnerships to airline performance in Kenya. Regarding the theoretical review, the study was guided by Resource-Based View, Balanced Score Card theory, and Contingency theory.

Resource-Based View

The Resource Based View originally founded by Penrose (Penrose, 1959) and later refined by Wernerfelt (1984) and Barney (1991) premised on the basis of organization's competitive advantage in relation to its internal resources and capabilities. This gives relevance in achieving superior organizational performance (Yu, *et al.*, 2018). Organizations achieve the competitive edge over others so long as they possess resources that are considered valuable, rare, imperfectly imitable, and non-substitutable (Nason & Wiklund, 2018; Chen *et al.*, 2021).

The organizational resources include both tangible and intangible assets in various forms including physical, financial, personnel, and organizational resources (Clarke & MacDonald, 2019; Freeman *et al.*, 2021). Tangible resources are physical assets owned by the organization while intangible resources hold no physical but provide more sustainable source of competitive advantage like intellectual property and brand reputation (Manikas *et al.*, 2019). Capabilities encompass mobilization, reconfiguration and deployment of organizational resources to achieve superior organizational performance (Collins, 2021). They represent the unique strengths and competencies enabling organizations to function more efficiently than their competitors (Jawed & Siddiqui, 2019).

Farooq *et al.*, (2018) study on service quality and passenger contentment found out that Malaysian Airlines should put more emphasis to human service for the airlines to enhance customer satisfaction for improved performance. High service quality improves the airline's reputation and flight safety standings. This motivates the airlines management and employees to sustain the status and performance levels which ultimately become the culture of the airline organization. This necessitates the airline in forming partnerships and alliances with renown stakeholders that would improve organizational safety standing as pertains to compliance with established industry standards and regulations which is a resource and a capability that uplifts an airline above others in the industry thus giving it a competitive advantage in performance.

Balanced Score Card

Kaplan and Norton (1992) introduced the Balanced Score Card theory focusing on comprehensive evaluation of organizational performance by measuring finance, customer, internal process, and learning and growth metrics that organizations can use to identify all important features of their strategy and to continuously improve on their performance (Aryani & Setiawan, 2020; Tawse & Tabesh, 2023). These perspectives allow for the planning and control of the organization's strategy in a holistic manner (Sartor, 2019). Therefore, the BSC balances between external metrics and internal measures tied to essential processes (Quesado *et al.*, 2018).

The financial perspective focuses on the traditional financial metrics like profitability, revenue growth and cashflows that help the organization track its financial success. (Aryani & Setiawan, 2020). The customer perspective puts much emphasis on meeting customer needs and expectations that ultimately lead to achieving high customer satisfaction, customer retention, improved market share, and high quality after sales services (Gupta *et al.*, 2020). Internal processes viewpoint centers on efficiency of internal operations driving the organization's delivery of products or services (Sartor, 2019). Learning and growth viewpoint

centers on capacity of the organization to improve or adapt to the dynamic environment for future success by nurturing employee skills and adopting new technology (Mikula *et al.*, 2020). Lang and Jentsch (2021) study on airline pilots' noncompliance and decision-making found out that adaptive expertise was associated with deliberate deviations and intentional noncompliance with established SOPs that led to undesirable outcomes in the flight deck. For instance, during unstable approaches, 97% of flight crew continue to land instead of going-around and this presents aviation hazard that can lead to a fatal accident. Therefore, it is imperative that pilots develop a safety culture of adhering to SOPs in order to uphold safety performance in their respective airlines in line with the dictates of partnerships with the regulatory bodies.

Contingency Theory

Fiedler (1967) introduced the Contingency Theory to assess leadership styles and behaviors that are appropriate to an organization achieving its objectives at the prevailing circumstances. It advocates for no best approach to tackle all situations but rather the most popular choice of strategy variables is dependent upon various contingency factors like the environment, people and contextual elements (Farah *et al.*, 2018; Reams, 2023). That different situations or circumstances need different management styles and structures for optimal effectiveness or performance.

The leadership style that has been proven to have been successful in one situation may not be effective in another. Organizational leaders should therefore be cognizant of the contingency factors to the emerging organizational issues at hand. Contingency factors play a significant role connecting sustainability initiatives and performance (Maletič & Gomišček, 2018). Kankaew and Pongsapak (2020, October) study on analyzing air transport before, during and after Covid-19 pandemic in Thailand, used the Contingency Theory in arriving to the conclusion of not a single best strategy exists that aviators could employ to alter their operations to ensure survival in the competitive market. But rather, it was a combination of strategies that were dependent on the prevailing circumstances like social-distancing protocols. The situation at hand dictated that respective airlines formed collaborations and partnerships with other organizations to ensure safety of passengers and continued operations of the airlines in the industry like health partners and code-share agreements respectively.

Remencová and Sedláčková (2022) in their study on how to revitalize air transport in Slovak Republic concluded that partnerships and cooperation with other airlines was the best way forward. They argued that virtual airline model with virtual code-share agreements would be ideal as it could provide a larger destination market as provided by partners and would also target different segment of passengers as the Slovak Republic aviation market was relatively small as compared to other EU markets. Code-share agreement permeates an airline to operate a flight while another airline simultaneously markets it under its own code designation. This allows sharing of available aircraft capacity by several airlines especially at times of unforeseen circumstances.

Empirical Literature Review

This section identifies relevant data from previous studies and critically analyzes it to answer specific research questions relating to the connection between airline performance and industry partnerships (Renner *et al.*, 2022). Research by Zou and Chen (2017) on global airline alliances examined code-share agreements' influence on airline partnerships. Data was obtained from 81 sampled airlines involving Star, Skyteam and Oneworld global alliances. Study found out that the airlines' profit margin increased with code-share partnerships. Code-share agreements being a form of airline industry partnerships facilitated efficient and safe flights by leveraging on the strengths of multiple airlines and ensuring compliance with industry safety standards. Moreover, code-share agreements ensure partner airlines to have similar maintenance standards and regulations that ensures a consistent maintenance of safety requirements regardless of the airline code displayed on the ticket.

Peng and Lu (2022) study on global airline alliances' cooperation effects in ten selected Asian airports examined the cooperation effects of Star, Skyteam and Oneworld Alliances with a focus on international passengers on a round-trip with transfers. Qualitative analysis was used to express the cooperation status for each airline alliance at each airport. The study found out that all airports had higher internal cooperation that led to a significant home-ground advantages for the airline alliances. This was attributed to collaborative resource sharing among partnering airlines at airport connections in which they enhanced their collective ability to address emerging concerns like safety by reconfiguring the available resources and capabilities to suit the circumstances.

Abdullah (2020) conducted a study to investigate how training program influences performance at Palembang Aviation Training Center. The study involved a saturated sample of 38 respondents that filled the questionnaires data collection. Study found out that training level attained influenced organizational performance as a result of shared best practices and standardized procedures. In the aviation sector, safety training among partnerships contributes to learning where effective knowledge and other complex capabilities are transferred to partner airlines (Mamédo *et al.*, 2019). Safety training programs and standardized procedures reduce the likelihood of errors resulting to operational efficiencies among partner airlines.

The researcher identified code-share agreements, resource sharing and safety training, were airline industry partnership factors having most significant influence on the performance of various airlines. These partnerships expand market reach, achieve cost efficiencies, improve customer convenience, and share best practices that enable airlines to offer better services and increased returns for improved performance.

RESEARCH METHODOLOGY

This part presents the research design, target population, sampling design, data collection instruments and procedure, validity and reliability, and analysis and presentation of data collected.

Research Design

Asenahabi (2019) posited that research design constitutes a framework depicting the total plan of undertaking research work to solve a research problem in a valid way. In order to adequately answer this study's specific questions, descriptive research design was employed in examining characteristics of population, existing problems in the airlines as well as variations in practices among airlines (Siedlecki, 2020). This design was appropriate as it employed various research methods in investigating the variables under study (Ansari, *et al.*, 2022). Other studies that had adopted this research design included Farah, Munga & Mbebe (2018), Kinyua (2020), and Kioko & Bwire (2021).

Target Population

Target population comprised elements satisfying the criteria for inclusion in the study based on research questions and objectives (Zehnalová & Kubátová, 2019). Target population included 33 airlines that have been registered and operating in Kenya as of the year 2022. These airlines had met the requirement of having a valid Air Operator Certificate (AOC) as issued by Kenya Civil Aviation Authority for passenger transportation and had their main hubs either at JKIA and Wilson Airports. They were categorized into three classes based on fleet size. Large airlines had more than 20 aircraft fleet, medium airlines had a fleet of between 5 and 20 aircraft while small airlines operated less than 5 aircraft.

The employees having a direct influence on flight safety in those airlines formed the unit of observation. This comprised of airline primary flight managers; pilots, cabin crew, and flight engineers and, the airline management teams constituting of safety managers, operation managers, and HR managers. The KCAA data (2022) indicated that 33.3% of the airlines had their main hub in JKIA while 66.7% of the airlines had theirs in Wilson Airport. The airlines have been categorized as; large (6%), medium (27%) and small (67%). The data shows that more airlines (66.7%) are domiciled in Wilson Airport than in JKIA while only 33% of the total airlines in the two hubs fit in the medium to large airlines category.

Sample Size and Sampling Technique

Thirty-three airlines formed the unit of analysis. They were stratified into those having their main hub either in JKIA or Wilson Airport. They were further classified on the basis of fleet size to include small, medium or large categories. This assisted in the understanding of their similarities and challenges as per the scale of operations and market presence. This study comprised of airlines operating from both the main hubs and satisfying the criterion of having at least five aircraft in their fleet. Therefore, the study involved the airlines in the medium to large categories.

Mugenda and Mugenda (2003) study on research methods for quantitative and qualitative approaches posited that the appropriate sample size for descriptive research should be 10% of population minimum. Eleven airlines fell in the medium to large categories out of which Safari Link Aviation was utilized in the pilot study. Seven airlines participated in the study, three in JKIA; Kenya Airways, 748 Air Services and Jambo jet, and four in Wilson Airport; Skyward Express, Renegade Air, Freedom Airline Express and Jetways Airlines in line with the intended

proportionate stratified purposive sampling technique. This constituted a 21.2% sample of the target population and therefore meeting that criterion (Mugenda & Mugenda, 2003; Gay & Diehl, 1992).

The employees having a direct influence on flight safety in these airlines comprised of airline primary flight managers; pilots, cabin crew, and flight engineers and, the airline management teams constituting of safety managers, operation managers, and HR managers. For full representation and diversity of opinion, this study involved two respondents in each of the six departments and this equated to 12 respondents for each sampled airline. Therefore, 36 respondents were from JKIA while 48 respondents were from Wilson Airport. Ultimately, with a sample size of 7 airlines, the intended unit of observation was 84 participants.

Data Collection Instrument

Study used semi-structured questionnaires to obtain primary data. Questionnaires offered a good platform to access large amounts of data with ease and to make comparisons among respondents (Gartner, 2023). The questionnaire had a Likert scale that was filled by the sampled target respondents. The Likert scale, being a fundamental psychometric tool, measured the respondents' opinions and perceptions in quantifiable and structured manner (Mirahmadizadeh, *et al.*, 2018; Cheng, *et al.*, 2021). Given that a large amount of data on wide range of constructs like attitudes, beliefs, and perceptions on organizational flight safety was needed, Likert scale questionnaire was adopted.

Questionnaire structure was based on specific research objectives as well a section having demographic information. The questionnaires were shared by use of google forms via the respondents' email addresses. The respondents filled the questionnaires and a substantial response rate was achieved within four weeks. This was made possible with a follow up email on the respective respondents that had not filled the questionnaires in the expiry of the third week that resulted in a sizeable better response rate.

Secondary data that provided contextual understanding of trends and practices over time, was collected from authentic databases and reports by use of the document review tool. It included documents like policies, standards, procedures, minutes, and performance evaluation reports. It also included the public records from the Ministry of Transport, KCAA, ICAO, respective airlines' annual reports, airline accidents reports, aviation publications and media articles. Incorporating primary and secondary data sources ensured data complementation, mitigation of bias, depth addition to data collected, robust analysis of the findings, and enhanced credibility and reliability of results as recommended by Fusch *et al.* (2018).

Data Collection Procedure

Data was collected by sending google form questionnaires by email to 84 respondents from the 7 sampled airlines and a follow up email was sent as a reminder for a better response rate. Secondary data was extracted from authentic databases and documents from Ministry of Transport, KCAA, ICAO, respective airlines' annual reports, airline accidents reports, aviation publications and media articles by the use of document review tool. To initiate the process of

data collection, an Introduction Letter from Kenyatta University and a Permit from National Commission for Science, Technology, and Innovation (NACOSTI) was obtained. Permission from respective airline managements and individual respondents was obtained before the commencement of data collection exercise. Respondents were given up to four weeks to fill and submit questionnaires using online google forms. Then, the collected data was finally arranged accordingly and collated for analysis.

Validity and Reliability of the Research Instrument

Questionnaires were analyzed for validity and reliability before subjecting them to respondents for data collection. This was intended to refine the questionnaires by identifying and rectifying any potential flaws and ambiguities for accurate measurements and consistent results that ultimately increase confidence in the research outcomes. This was done by conducting a pilot study.

Pilot study is a feasibility exercise to test aspects of the research instrument and methods as will be applied to larger study (Lowe, 2019). This prevents researchers from engaging in main study deficient of requisite knowledge on adequacy and appropriateness of the research instrument. Piloting of the questionnaire was carried out on 12 respondents from Safari Link Airlines from Wilson Airport out of which 8 responded. This represented a 75% response rate which is desirable to make a conclusion on its appropriateness before the actual data collection (Mugenda & Mugenda, 2003). It also informed time estimate revision for filling the questionnaire from five weeks to four weeks (Daud *et al.*, 2018).

Validity relates to the instrument measuring the quality or behaviour as intended (Sürücü & Maslakçi, 2020). There are numerous categories of validity but content validity and construct validity were of particular importance to this study. Content validity indicates each item in the instrument serving its intended purpose. The researcher obtained a comprehensive understanding of flight safety concepts through literature reviews and developed questions relating to those concepts that covered all aspects in the study. The questionnaire was then subjected to double checks and expert cross-check by the supervisor in ensuring that all variables were well covered.

Construct validity shows the extent the instrument purports to measure concept or quality as intended. It ensures that the questionnaire accurately measures what was intended and ultimately providing meaningful results to the study (Sürücü & Maslakçi, 2020). The researcher performed factor analysis by assessing questionnaire items' structure after collecting data and confirmed that they grouped as per the structure of variables in the questionnaire as expected. This helped identify patterns within a set of variables. It was achieved through correct operationalization of terms as regards to each variable to reflect the theories underpinning the study's conceptual framework.

Reliability relates to the instrument's stability and consistency over time under same circumstances (Daud *et al.*, 2018). It is the ability that the measuring instrument gives similar results when employed at different times. Sürücü and Maslakçi (2020) indicated that internal

consistency measure was one of the most appropriate and frequently used method for determining reliability. It measures the degree for which items on research instrument assess same underlying construct. The study employed internal consistency measure to ascertain the questionnaire’s reliability based on Cronbach’s Alpha coefficient as presented in the Table 1 below.

Table 1 Reliability Statistics

Variables	Items	Reliability (Cronbach Score)	Remarks
Industry Partnerships	7	0.794	Accepted
Airline Performance	7	0.790	Accepted

Source: Pilot Test Data (2025)

The findings in Table 3.2 above established that the seven questions that were employed on the independent and dependent variables, had a Cronbach’s Alpha score of 0.794 for industry partnerships and 0.79 score for airline performance. All the questions in each of the variables had an internal consistency of above 0.7 score. According to Taber (2018) the administered questionnaire was considered reliable and accepted if it achieved a Cronbach Alpha score of above 0.7 threshold. Therefore, the questionnaire for this study met the set internal consistency threshold and therefore did not warrant any revision before being utilized in the main data collection.

Data Analysis and Presentation

Descriptive and inferential statistical methods were used for analysis of quantitative data with the assistance of SPSS computer packages. Descriptive statistics summarized the essential features of sample research data and simplified communication of large datasets (Mishra *et al.*, 2019). Inferential statistics established the relationship between variables and conclusions deduced from data having random variation. Qualitative data was processed into coded form and triangulated with quantitative data so as to be presented in narrative form.

Conducting a proportionate stratified purposive sampling technique as well as having a larger sample size, minimized the likelihood of committing Type I and Type II errors. For the purposes of gauging the relationship between dependent and independent variables, regression analysis was employed with a five-level Likert scale model consisting of strongly disagree, disagree, neutral, agree and strongly agree. Airline performance was projected to be determined by industry partnerships and Beta value indicated the level of this variation.

The regression model below was adopted:

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

In which;

Y = Airline performance

β_0 = Constant or intercept

β_1 = Beta coefficient

X_1 = Industry partnerships

ε = Error term

RESEARCH FINDINGS AND DISCUSSIONS

This section presents research findings and follow-on discussions on response rates, demographic characteristics of respondents, variable descriptive statistics and regression analysis.

Analysis of Response Rates

The preliminary data on the number of questionnaires administered to the respondents in comparison to those filled and returned is presented in Table 2 below.

Table 2: Response Rates

Airline Organization	Distributed Questionnaires	Returned Questionnaires	Response Rate per Airline
Kenya Airways	12	8	66.7%
748 Air Services	12	8	66.7%
Jambo jet	12	7	58.3%
Skyward Express	12	7	58.3%
Jetways Airlines	12	9	75.0%
Renegade Air	12	10	83.3%
Freedom Airline Express	12	8	66.7%
Overall	84	57	67.8%

Source: Survey Data (2025)

Each of the airlines received 12 questionnaires, totalling to 84 questionnaires. Out of these, 57 questionnaires were filled and submitted representing a 67.8% response rate. Renegade Air had the highest response rate at 83.3%, followed by Jetways Airlines at 75% while Kenya Airways, 748 Air Services and Freedom Airline Express had 66.7%. Jambo Jet and Skyward Express both had a response rate of 58.3%. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate, 60% is generally good, while above 70% is excellent for analysis and reporting to generalize the opinions of the population on the study problem. This study received an overall response rate of 67.8% and therefore considered generally good to generalize the opinions of the population under study and to adequately draw inferences and make conclusions.

Descriptive Analysis of the Characteristics of Respondents

This section gives distribution of the respondents based on gender orientation, employment duration and position held in the airline organization. The results are presented in Table 3 below.

Table 3: Characteristics of Respondents

Characteristic	Category	Distribution	Percentage (%)
Gender	Male	41	71.9
	Female	16	28.1
	Total	57	100
Employment duration	1-5 Years	25	43.9
	6-10 Years	19	33.3
	Over 10 Years	13	22.8
	Total	57	100
Airline position	Pilot	10	17.5
	Cabin Crew	10	17.5
	Flight Engineer	9	15.8
	Safety Manager	11	19.3
	Operations Manager	9	15.8
	HR Manager	8	14.1
	Total	57	100

Source: Survey Data (2025)

All the respondents indicated their gender orientation as either male or female. The male respondents were at 71.9% while the female respondents were at 28.1%. This indicates a greater gender disparity in the Kenyan airline industry with male domination over female gender. The male domination in the Kenyan airline industry is the reflection of the global gender disparities in the aviation sector. Traditionally, the aviation sector key roles such as pilots and flight engineers, have been the preserve for the male gender. ICAO report (2023) on global aviation gender equality status revealed that women holding positions such as pilots, flight engineers and air traffic controllers stood at 4.9% in 2021.

A study by Ferla and Graham (2019) on women slowly taking off in the aviation sector pinpointed discrimination, sexism, lack of female role models and balancing work life and family responsibilities as the main reasons for female underrepresentation in the industry. The study goes further to indicate the initiatives that the airlines and other entities are putting forward to address the gender diversity and equality issues in order to turn around the situation which agreed with the study by Casebolt (2023) on gender diversity in aviation.

The Survey Data (2025) shows that there is positive change in aviation gender roles in Kenya as 60% of the cabin crew were male while 20% of the pilots being female. This indicates that, whereas traditionally, cabin crew roles were the preserve of the female gender, it has now been adopted for both genders. Additionally, whereas the global women pilots stood at 4% (ICAO Report, 2023), the 20% women pilots' respondents is an indication that airlines have embraced positive change of recruiting women pilots into their organizations through initiatives like Women in Aviation Kenya.

The dominance of male respondents in this study may skew findings toward perspectives and experiences that align with male employees, potentially underrepresenting perceptions and

challenges faced by female employees. This gender disparity may introduce bias in the interpretation of the study findings as male perspectives dominate over the female ones. As a result, the findings may be influenced by male-dominated viewpoints, particularly in relation to leadership and technical roles such as pilots and flight engineers, which have historically been male-centric.

The results also indicated that the airline employees had been on continuous employment terms for the varied duration. The respondents having worked with the respective airlines for the duration of less than five years stood at 43.9%, between six to ten years stood at 33.3% while those employed in excess of ten years stood at 22.8%. This indicates that most of the employees in the respective airline organizations have been in continuous working terms for the duration of less than five years. This in essence indicates a higher employee turnover.

International Air Transport Association report (2023) showed that turnover rates for the airline ground handling staff was as high as 50%. Overall, the high turnover rates in the airline sector have been a problem spanning decades that has resulted in organizational instability, impact on productivity and turnover associated costs like recruitment, training and development costs. Moreover, high turnover rates could damage the airline's image and reputation resulting in difficulty in attracting top talent. To mitigate these negative effects, Tabakovic (2024) advocates for the airline managers to enhance employee benefits and promptly addressing employee feedback in order to optimize airline operations.

The high percentage of employees with less than five years of employment indicating a high turnover rate could influence the findings of this study in relation to airline stability, employee satisfaction and retention strategies. Respondents with shorter employment durations may provide less accurate insights into long-term airline trends or policies compared to those with over ten years of experience. As a result, the responses largely reflect the experiences and perspectives of relatively new employees who are more exposed to recent policy implementation efforts and airline reforms as compared to the smaller proportion of long-serving employees having deeper insights into the airline growth and development aspects that are less represented in the findings

Finally, the table also depicts the various airline positions that had an influence on the overall flight safety performance in the respective airline organizations. This included; pilots at 17.5%, cabin crew at 17.5%, flight engineers at 15.8%, safety managers at 19.3%, operation managers at 15.8% and human resource managers at 14.1%. The findings indicate that the primary flight managers comprising of pilots, cabin crew and flight engineers cumulatively were responsive at 50.8% against the airline management teams at 49.2%. This indicates that both the primary flight managers and the airline management teams are conscious of aviation safety needs in their airline organizations. Furthermore, the safety managers were the highest responsive at 19.3% as they consider themselves to be the primary consumers of research study outcome.

This high level of consciousness of safety matters among all the actors, primary flight managers and airline management teams, led to the effectiveness of the industry's safety oversight

mechanisms. This underscores Kenya aviation industry’s commitment to adhering to ICAO safety standards. As a result, the Federal Aviation Administration (FAA) in 2017 granted Kenya a Category 1 rating (FAA Report, 2017). It is therefore imperative for all the airline organizations to have a dedicated safety branch that ensures compliance with international standards and safety for all the industry players.

These findings capture a balanced perspective from all the operational and administrative dimensions within the aviation industry that ensures a broad perspective on airline dynamics and challenges across different levels. The employees in the management roles provided insights into the strategic decision-making processes while the operational staff provide insights into day-to-day process perspectives. This role diversity provides a comprehensive view of the industry but may also introduce biases based on positional hierarchies. However, the insights on changing trends based on positions are possible due to the inclusion of participants from traditionally gendered job categories, allowing a contrast between past and current employment patterns.

Descriptive Statistics on Industry Partnerships

The study aimed to determine the effect of industry partnerships on the performance of airlines in Kenya. To achieve this, respondents were requested to indicate their level of agreement on code-share agreements, resource sharing and joint safety training dimensions on a scale of 1-5 as shown in Table 4 below.

Table 4: Descriptive Results on Industry Partnerships

Statement	Mean	Std. Dev
Partnerships with other airlines and industry stakeholders improve the airline’s market reach and operational efficiency	4.39	0.675
Code-share agreements with reputable partner airlines have enhanced the airline’s safety credibility and reputation	4.18	0.759
Airline safety standards have improved due to the influence of code-share agreements	4.00	0.756
Shared safety report data on investigated accidents by other airlines improves the airline’s ability to prevent similar incidents	4.28	0.750
Shared best practices and resources enhances the airline’s overall safety performance	4.23	0.598
Collaborative safety training with other airlines enhances the employee’s safety awareness and skills	4.35	0.641
Joint safety training reduces prevalence of flight accidents	4.23	0.732
Total		

Source: Survey Data (2025)

Table 4 above demonstrates concurrence amongst respondents that industry partnership strategy positively influenced airline performance indicated by a mean of above 4. Respondents agreed with a mean of 4.39 that implementation of industry partnership strategies of code-share agreements, resource sharing and joint safety training, positively contributed to the improvement of airline performance. With the mean values ranging from 4.00 to 4.35, the respondents agreed that these strategies had a positive impact on the performance of airlines.

The low to moderate standard deviation of 0.675 indicated that in spite of the agreement that industry partnerships positively influenced airline performance, there were variations upon which different airlines had collaborated with other industry stakeholders for wider market reach and improved operational efficiency.

The code-share agreements statements; reputable partner airlines collaborations for safety credibility and safety standards improvement, with a mean of 4.18 and 4.00 respectively, indicated that the respondents agreed that code-share agreements positively influenced airline performance. With an average mean of 4.09 and a moderate standard deviation ranging from 0.756 to 0.759, it suggested that although the respondents agreed that code-share agreements positively contributed to airline performance, some airlines especially those with only domestic operations had varied opinions as they did not have much engagements in code-share agreements. Therefore, their safety credibility, reputation and standards were derived from other factors not relating to code-share collaborations.

The resource sharing statements; shared airline accident investigative reports and shared safety best practices, with a mean of 4.28 and 4.23 respectively, indicated that the respondents agreed that sharing of safety related resources positively contributed to the performance of airlines. With the average mean of 4.25 and a low to moderate standard deviation ranging from 0.598 to 0.750, this indicated that although the respondents generally agreed that the sharing of the available resources improved airline performance, some airlines could not fully benefit from this as airlines are stratified based on size and performance which also dictated the resources available in a particular stratum and in most case the sharing goes on within the strata. Therefore, with limited sharing of safety investigative reports and best practices, safety performance of the partner airlines in the lower cadre would not compare with those in the higher strata.

The joint safety training statements; airline collaborative safety training for skills and joint safety training reduced accidents, with a mean of 4.35 and 4.23 respectively, indicated that the respondents agreed that the conduct of safety training alongside other airlines had a positive contribution to the performance of airlines. With the average mean of 4.29 and moderate standard deviation ranging from 0.641 to 0.732, the respondents agreed that joint safety training improved airline performance in terms of enhanced safety awareness skills and reduced prevalence of accidents but with variations as skills and training needs of staff from one airline differed to the other. Therefore, specific airline tailored training would sometimes be more desirable especially for those airlines that are new in the industry.

Overall, the respondents agreed that industry partnership strategy had a positive influence on the performance of airlines in Kenya. The findings of this study resonated with previous studies (Zou & Chen, 2017; Abdullah, 2020; Cacciolatti *et al.*, 2020; Thendu *et al.*, 2020; Bastola, 2022; Remencová & Sedláčková, 2022) that industry partnership positively contributed to organizational performance. Industry partnerships have immensely contributed to enhancing the performance of airlines in Kenya by improving operational efficiency, expanding market reach, and upscaling safety standards.

Code-share agreements allow an airline to operate a flight while another simultaneously markets it under its own code designation thereby providing a larger destination market and sharing of scarce resources enhanced operational efficiency and profitability performance. These partnerships also facilitate efficient and safe flights by leveraging on the strengths of multiple airlines and ensuring compliance with industry safety standards. Moreover, strategic alliances amongst partner airlines results into reduced operational costs among partner airlines, extended economies of scale and sharing of knowledge pertaining to safety results in increased airline performance. Moreover, partner airlines can share the available human resource ultimately leading to reduced hiring cost at the same time enhancing skill sharing in the industry.

Sharing of safety-related resources like investigative reports and best practices is key to the prevention of flight accidents that have occurred in the past in similar circumstances. The access to these investigative reports allows airlines to adopt proactive risk management strategies. For instance, the partnership between South African Airways and Kenya Airways in 2021 aimed to leverage shared resource capacity to the improvement of safety and reduction of costs. The airlines can also exchange safety procedures and operational insights that ultimately benefit the whole industry for improved performance.

However, more established airlines share insights within their tier while smaller airlines struggle to access comprehensive safety data from established airlines. This hinders smaller airlines from achieving the same safety standards and treatment as their established counterparts

Joint safety training improving employee safety awareness and reduce the prevalence of accidents as employees are well prepared with knowledge, skills and expertise across the industry to deal with any safety related eventuality. Collaborative safety training enables employees gain exposure to industry best practices and expertise from different airlines for holistic growth in the sector for individual and collective improvement. However, training needs differ across airlines as some airlines would prefer customized safety programs tailored to their specific operational challenges especially for new airlines that require foundational safety training distinct from the established airlines.

Airlines should therefore strengthen collaborative agreements, expand knowledge-sharing networks, and enhance industry-wide safety training programs for operational efficiency, market competitiveness, employee development and enhanced safety performance.

Descriptive Results on Airline Performance

The study looked at establishing the various dimensions and indicators of performance of airlines in Kenya in relation to industry partnerships. The performance of airlines was determined by measuring both primary and secondary data. For primary data, respondents were requested to indicate their level of agreement on profitability, employee satisfaction and operational efficiency dimensions of airline performance on a scale of 1-5 as shown below.

Table 5: Descriptive Results on Airline Performance

Statement	Mean	Std. Dev
Minimal number of accidents, if any, have occurred for the past five years	4.67	0.476
Profit margins have increased in the past five years	4.77	0.423
The airline’s profitability has exceeded the industry’s average over the past five years	4.82	0.384
The airline has employees that are highly motivated with great job satisfaction index in the past five years	4.89	0.310
The relationship between management and employees is satisfactory	4.86	0.350
Operational efficiency for the past five years is at optimum levels	4.79	0.411
In-flight services, boarding process, and baggage handling, have been excellent during the last five years	4.53	0.538
Total		

Source: Survey Data (2025)

Table 5 above demonstrates that respondents strongly agreed that airline performance in Kenya for the past five years has been on a higher trajectory as indicated by greater than 4.5 mean. Respondents strongly agreed that profitability, employee satisfaction and operational efficiency dimensions had all improved for the past five years. With the mean values ranging from 4.53 to 4.89, the respondents strongly agreed that all these performance indicators showed a robust airline performance during the period. The low standard deviation across all the performance indicators confirmed further that all the respondents concurred that the airlines had performed very well during that period.

The profitability statements; airline’s profit margins and exceedance of industry’s profit average, with a mean of 4.77 and 4.82 respectively, indicated that the respondents strongly agreed that airline profitability was excellent. With an average mean of 4.79 and a low standard deviation ranging from 0.384 to 0.423, it suggests that there was very little variation among airlines pertaining to the view that airline profitability had been excellent in the past five years. The profit margins have continued to increase due to the resurgence out of the Covid-19. This profitability is considered to have exceeded the industry average due to the fact that the airlines under study were drawn from the medium to large category only where performance is also considered better in comparison to other airlines in the small airlines category.

The employee satisfaction statements; highly motivated employees with great job satisfaction and satisfactory relationship between management and employees, with a mean of 4.89 and 4.86 respectively, indicated that the respondents strongly agreed that employee satisfaction was excellent. With an average mean of 4.87 and a low standard deviation ranging from 0.31 to 0.35, it suggests that there was very little variation among airlines pertaining to the employee motivation and job satisfaction. The aviation industry being a highly professional sector, would dictate that the management and staff read from the same script if flight operations are to be conducted in a safe and efficient manner. This would also lead to the staff being committed to their jobs as they feel more valued by the management leading to greater job satisfaction.

The operational efficiency statements; prevalence of flight accidents, operational efficiency and in-flight services, with value of 4.67, 4.79 and 4.53 respectively, indicated that the respondents strongly agreed that operational efficiency for the past five year was satisfactory. With an average mean value of 4.66 and low standard deviation ranging from 0.411 to 0.538, it suggests that there was very little variation among airlines pertaining to the view that airlines had been conducting flight operations in an efficient manner. The minimal number of accidents and efficiency in airline operations can be attributed to the adherence to the industry standards and the need to remain competitive in the industry that had just been extremely affected by the pandemic.

Overall, respondents strongly agreed that airlines continued experiencing good performance in the past five years. Employee satisfaction dimension was the greatest indicator of airline performance followed by profitability and operational efficiency in that order.

The secondary data for the financial performance was derived from published financial documents for public limited companies. Out of seven airline companies under the study, only Kenya Airways and Jambo Jet are public limited companies, the rest are private limited companies that are legally not obliged to publish their financial statements. Jambo Jet being a fully-owned subsidiary of Kenya Airways, has its financial performance being consolidated within Kenya Airways Group's financial statements as stated in Kenya Airways Integrated Report (2022). The data in Table 4.7 below is for both Kenya Airways and Jambo Jet airlines analyzing the total profits, total assets, total liabilities, total equity and cash flows data as derived from the consolidated Annual Reports from year 2017 to 2022. The results of secondary data acquisition and follow-on discussions are presented below.

Table 6: Kenya Airways and Jambo Jet financial performance in billions

S/No	Airline	2017	2018	2019	2020	2021	2022
1	Total Profits	(9.24)	(5.94)	(8.85)	(46.26)	(19.17)	(24.75)
2	Total Assets	146.14	136.63	195.67	171.46	155.55	168.91
3	Total Liabilities	191.05	139.12	213.56	235.62	238.89	277.00
4	Total Equity	(44.91)	(2.48)	(17.89)	(64.16)	(83.33)	(108.09)
5	Cash Flows	9.17	6.43	3.09	7.72	6.09	9.63

Source: KQ's Consolidated Annual Reports (2017, 2018, 2019, 2020, 2021 & 2022)

Table 6 above indicates that the profitability of the two airlines consistently showed negative total profits from 2017 to 2022. However, there was profit performance improvement from Ksh -9.24 billion (2017) to Ksh. -8.85 billion (2019). As a result of pandemic outbreak, profits further dipped in 2020 to Ksh. -46.26 billion but the profits were rejuvenated to Ksh. -19.17 billion in 2021 and further slipped to Ksh. -24.75 billion in 2022 indicating persistent operational changes.

The annual reports for Kenya Airways for 2023 and 2024 have shown that the company has continued to have a positive profitability trend. The Kenya Airways press release (2024) reported that the company, for the first time since 2013 made a profit after tax. The airline achieved after tax profit of Ksh 513 million compared to a Kshs 21.7 billion reported in the year ending 2023. The company attributed the results to operational excellence, customer satisfaction and innovation. This significant milestone in profitability is in concurrence with

the Survey Data (2025) that indicated that the respondents strongly agreeing to profit margins positively increasing from the 2020 to 2025.

The total assets generally increased from Ksh 146.14 billion (2017) to Ksh 168.91 billion (2022) indicating a continuous investment in fleet modernization and general infrastructure that could tackle the safety needs of the company. The total liabilities grew significantly from Ksh 191.05 billion (2017) to Ksh 277.0 billion (2022) indicating an increase in operating costs to service the improving profitability trend. The results of liabilities exceeding the company’s assets led to the shareholders’ equity declining from Ksh -44.91 billion in 2017 to Ksh -108.09 billion in 2022.

Lastly, the cash flows remained positively stable ranging from Ksh 9.17 billion in 2017 to Ksh 9.63 billion in 2022. This indicated that despite the times when the airlines were making huge losses like in 2022 due to the effects of covid-19, the airlines still generated some liquidity. This is attributed to the efficient management of operations and sustainable ticket sales as a result of customer confidence, loyalty and strong safety reputation. This concurs with the Survey Data (2025) that the airlines strongly agreed to having achieved optimum operational efficiency levels from 2020 to 2025.

Regression Analysis

Findings of the regression model tested whether flight industry partnerships significantly predicted airline performance in Kenya are presented in this section. The measure of performance included both financial and no-financial perspectives.

Table 7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Airline Performance	0.738	0.544	0.518	0.84313

Predictor: (Constant), Industry Partnerships

Source: Survey Data (2025)

Table 7 above presents the model summary results showing R value of 0.738 indicating very strong correlation between industry partnerships and the performance of airlines. Therefore, this model explains the substantial measure of variations on the airline performance as a result of industry partnerships. R Square value of 0.544 indicated that 54.4% variability in airline performance was a result of industry partnerships.

Table 8 Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
Airline Performance	Regression	44.991	3	14.997	21.097	.000b
	Residual	37.676	53	0.711		
	Total	82.667	56			

Predictor: (Constant), Industry Partnerships

Source: Survey Data (2025)

Results of variance in Table 8 above indicate the model having a high F-statistic of 21.097. This demonstrates that the model is significantly better to predict airline performance with industry partnerships predictor as compared to a model without it. Probability value of 0.000 confirms statistical significance of the overall model. This indicates that the model was valid and reliable to explain airline performance based on the adoption of favourable industry partnerships.

Table 9 Regression Coefficients

		B	Std. Error	Beta	T	Sig.
Airline Performance	(Constant)	13.554	2.760		4.911	0.000
	Industry Partnerships	0.177	0.077	0.253	2.293	0.026

Source: Survey Data (2025)

Table 9 above indicate regression coefficient results that were used to test industry partnerships significance in predicting airline performance. Without influence of industry partnerships, the performance of airlines is expected to be at 13.554. This constant is statistically significant with a probability value of 0.000 that is less than 0.05. This demonstrates the existence of other factors not included study that influence airline performance in Kenya.

Results of regression model and follow-on analysis are presented below.

$$Y = 13.554 + 0.253 X_1 + \varepsilon$$

In which;

Y = Airline Performance

X₁ = Industry partnerships

ε = Error term

The industry partnerships coefficient of 0.253 implies that, with the assumption of other variables remaining constant, increasing industry partnerships by a unit would result in the improvement of airline performance by 0.253 units. The p-value of 0.026 indicates that industry partnerships positively influenced airline performance.

Conclusion of the Study

The study concluded that industry partnerships significantly affected airline performance. The results showed that industry partnerships were moderately significant to enhancing airline performance of airlines. That partnerships and collaboration amongst airlines, regulatory bodies and other industry stakeholders ultimately contributed to the sharing of best practices and overall improvements in operational efficiency. The code-share agreements among partner airlines and the joint training and resource sharing involving the industry stakeholders and regulatory bodies led to the improvement of employee job satisfaction levels, increased profitability and improved efficiency in the conduct of flight operations. This in essence led to the improvement of performance in the airline organizations. Therefore, airlines should collaborate with regulatory bodies like ICAO, IATA and KCAA and other airlines and stakeholders like ATC for safety performance benchmarking and best practices.

Recommendations of The Study

Based on study findings and conclusions, the study recommends that airlines should actively pursue and expand code-share agreements with both domestic and international partners. These agreements enable airlines to access new markets, optimize route networks, and improve operational efficiency without incurring the full costs of independent expansion. They also enhance safety credibility and reputation through standardized procedures and shared regulatory compliance. These partnerships allow airlines to optimize fleet utilization and offer passengers a seamless travel experience across broader destinations for improved service quality and financial performance that ultimately enhances competitive advantage leveraged on shared resources and customer bases.

The study recommends airlines to develop formal mechanisms and frameworks for sharing critical resources such as maintenance facilities, ground handling equipment, safety audit reports, technical staff, and operational infrastructure. Resource sharing reduces operational costs, improves asset utilization, and fosters collaboration that can lead to improved service quality and operational efficiency across partner airlines. Shared investigative reports and best practices significantly enhance safety performance and allow smaller airlines to learn from more established ones, thereby elevating industry-wide safety norms. This approach ultimately helps partner airlines to maintain consistent safety standards and remain competitive in a challenging environment.

The study recommends that airlines and other industry stakeholders should formalize and prioritize joint safety training initiatives to equip aviation personnel with standardized knowledge, best practices, and crisis response skills that ultimately improve flight safety standards. This training also builds a culture of safety that directly impacts airline reputation and customer confidence. Improved safety records contribute to better employee satisfaction and customer loyalty that are crucial for sustainable performance. Regulatory bodies and airline associations should facilitate regular, inclusive training that considers both foundational needs for emerging airlines and advanced modules for seasoned operators to address diverse safety challenges effectively.

The study recommends airlines to engage with other broad spectrum of aviation stakeholders including regulatory bodies and service providers, in forming strategic partnerships for policy development and improvement. These collaborations facilitate the development of policy frameworks in the industry that address common challenges and emerging issues that ultimately support airline growth. This includes easing the approval processes for alliances, protecting competition, and incentivizing safety and compliance-focused collaborations. Encouraging participatory policymaking ensures the unique need of different aviation stakeholders are accommodated and supported.

Lastly, the study also recommends that both airlines and regulatory authorities should commit to freely sharing comprehensive secondary data related to operational performance, safety incidents, and financial metrics. Transparent data sharing enables more accurate analysis,

benchmarking, and informed decision-making. It also helps eliminate biases in research and supports continuous improvement efforts across the industry.

Suggestions for Further Study

The study focused on effects of industry partnerships on the performance of airlines in Kenya. Findings and conclusions are therefore limited to only those airlines that are registered and operating in Kenya. All airlines operating in the Kenyan airspace, whether registered in Kenya or not, have significant influence on operations and performance in the industry. Therefore, future research should include all airlines operating in the Kenya airspace in order to validate the findings and conclusions of this particular study.

This study embarked on the use of employee satisfaction aspect of measuring performance. Being a service industry that is also concerned with the perception of customers in terms of service quality and operational efficiency, further research should focus on the hybrid of both customer and employee satisfaction levels than limiting the focus to only employee satisfaction levels of measuring airline performance based on the implementation of industry partnerships.

REFERENCES

- Abdullah, A. (2020). Relationship the work culture and training programs within performance. *International Journal of Progressive Sciences and Technologies (IJPSAT)*, 20(1), 92-101.
- ACF (2020) African Competition Forum, cross country study on airlines
- AFRAA (2022). African airlines association annual report.
- AFRAA (2023). African airlines association annual report.
- Ansari, M., Rahim, K., Bhoje, R., & Bhosale, S. (2022). A study on research design and its types. *International Research Journal of Engineering and Technology (IRJET)*, 9(7), 1132-1135.
- Aryani, Y. A., & Setiawan, D. (2020). Balanced scorecard: Is it beneficial enough? A literature review. *Asian Journal of Accounting Perspectives*, 13(1), 65-84.
- Asenahabi, B. M. (2019). Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, 6(5), 76-89.
- Barney, J. (1991). Special theory forum the resource-based model of the firm: origins, implications, and prospects. *Journal of management*, 17(1), 97-98.
- Bastola, D. (2022). Strategic factors for organizational performance: A study of Aviation Industry. *International Journal of Advanced Research and Publications*, 5(1), 5-13.
- Cacciolatti, L., Rosli, A., Ruiz-Alba, J. L., & Chang, J. (2020). Strategic alliances and firm performance in startups with a social mission. *Journal of Business Research*, 106, 106-117.

- Casebolt Ed D, M. K. (2023). Gender Diversity In Aviation: What Is It Like To Be In The Female Minority?. *Journal of Aviation/Aerospace Education & Research*, 32(1), 4.
- Chege, J. G. (2022). Effect of tax incentives on financial performance of domestic airlines in Kenya. *African Tax and Customs Review*, 5(2), 28-28.
- Chen, M. J., Michel, J. G., & Lin, W. (2021). Worlds apart? Connecting competitive dynamics and the resource-based view of the firm. *Journal of Management*, 47(7), 1820-1840.
- Cheng, C., Lay, K. L., Hsu, Y. F., & Tsai, Y. M. (2021). Can Likert scales predict choices? Testing the congruence between using Likert scale and comparative judgment on measuring attribution. *Methods in Psychology*, 5, 100081.
- Clarke, A., & MacDonald, A. (2019). Outcomes to partners in multi-stakeholder cross-sector partnerships: A resource-based view. *Business & Society*, 58(2), 298-332.
- Collins, C. J. (2021). Expanding the resource-based view model of strategic human resource management. *The International Journal of Human Resource Management*, 32(2), 331-358.
- Daud, K. A. M., Khidzir, N. Z., Ismail, A. R., & Abdullah, F. A. (2018). Validity and reliability of instrument to measure social media skills among small and medium entrepreneurs at Pengkalan Datu River. *International Journal of Development and sustainability*, 7(3), 1026-1037.
- Drakos, K. (2019). Terrorism-induced structural shifts in financial risk: airline stocks in the aftermath of the September 11th terror attacks. In *Transnational Terrorism* (pp. 311-322). Routledge.
- Dube, K., Nhamo, G., & Chikodzi, D. (2021). COVID-19 pandemic and prospects for recovery of the global aviation industry. *Journal of Air Transport Management*, 92, 102022.
- Farah, H. A., Munga, J., & Mbebe, J. (2018). Influence of competitive strategies on performance of commercial airlines in Kenya: A survey of the airline industry in Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(1), 170-189.
- Farooq, M. S., Salam, M., Fayolle, A., Jaafar, N., & Ayupp, K. (2018). Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. *Journal of Air Transport Management*, 67, 169-180.
- Ferla, M., & Graham, A. (2019). Women slowly taking off: An investigation into female underrepresentation in commercial aviation. *Research in Transportation Business & Management*, 31, 100378.
- Fiedler, F. E. (1967). A Theory Of Leadership Effectiveness. *Mcgraw-Hill Series In Management*.
- Freeman, R. E., Dmyriyev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management*, 47(7), 1757-1770.

- Fusch, P., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Sustainable Social Change*, 10(1), 2.
- Gartner, M. C. (2023). Questionnaires and their use in primate welfare. In *Nonhuman primate welfare: from history, science, and ethics to practice* (pp. 255-264). Cham: Springer International Publishing.
- Gay, L. R., & Diehl, P. L. (1992). *Research methods for business and management*. Macmillan Publishing Company.
- Gill, M. (2016). Aviation benefits beyond borders. *Air Transport Action Group (ATAG)*, 1(1), 1-76.
- Gupta, A. K., Maheshwari, M., & Sharma, S. (2020). Customer perspective of balanced scorecard: an empirical view of company's performance from customer outlook (an inter-bank and inter-sector comparison of public and private sector banks in India). *Pacific Business Review International*, 12(10), 80-88.
- Heydari, M., Xiaohu, Z., Lai, K. K., & Yuxi, Z. (2020). Evaluation of organizational performance strategies. *Proceedings of National Aviation University*, 82(1).
- Hotle, S., & Mumbower, S. (2021). The impact of COVID-19 on domestic US air travel operations and commercial airport service. *Transportation Research Interdisciplinary Perspectives*, 9, 100277.
- <https://corporate.kenya-airways.com/globalassets/corporate/investment--shareholders/financial-results/2024>
- <https://www.faa.gov/newsroom/faa-announces-aviation-safety-rating-kenya>
- <https://www.icao.int/Newsroom/Pages/ICAO-releases-survey-data-on-status-of-global-aviation-gender-equality>
- IATA (2018). The importance of air transport in Kenya report
- IATA (2020). Economic performance of airline industry.
- Ito, H., & Lee, D. (2019). Assessing the impact of the September 11 terrorist attacks on US airline demand. In *Transnational Terrorism* (pp. 323-344). Routledge.
- Jawed, I., & Siddiqui, D. A. (2019). What matters for firms' performance: Capabilities, tangible or intangible resources? Evidence from corporate sectors on Pakistan. *Evidence From Corporate Sectors on Pakistan (December 28, 2019)*.
- Kalembe, N., & Campa-Planas, F. (2019). Safety and the economic and financial performance in the airline industry: is there any relationship?
- Kankaew, K., & Pongsapak, T. (2020, October). Contingency theory: the analysis in air transportation before, during, and after the pandemic in Thailand. In *IOP Conference Series: Materials Science and Engineering* (Vol. 918, p. 012047). IOP Publishing.

- Kaplan, R., & Norton, D. (1992). The balanced scorecard: measures that drive performance, *Harvard Business Review* 70 (1).
- Kasim, K., & Mahmut, B. (2020). Evaluation of airlines performance using an integrated critic and CODAS methodology: The case of Star Alliance member airlines. *Studies in Business and Economics*, 15(1), 83-99.
- KCAA (2018). The Civil Aviation (Licensing of Air Services) Regulations
- KCAA (2023). National Aviation Safety Report
- Kearns, S. K. (2018). *Fundamentals of international aviation*. Routledge.
- Kinyua, J. K. (2020). *Determinants Of Implementation Of Safety Oversight Program In Aerodromes Towards Enhancing Safety. A Case Of Jomo Kenyatta International Airport* (Doctoral dissertation, University of Nairobi).
- Kioko, B. M., & Bwire, J. F. (2021). Influence of Change Management on Performance of Airlines in Kenya. *Management*, 7(4), 105-132.
- Lang, C. J., & Jentsch, F. (2021, September). Noncompliance and decision-making of airline pilots: an analysis of narratives from the Aviation Safety Reporting System. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 65, No. 1, pp. 231-235). Sage CA: Los Angeles, CA: SAGE Publications.
- Lowe, N. K. (2019). What is a pilot study?. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 48(2), 117-118.
- Maletič, M., Maletič, D., & Gomišček, B. (2018). The role of contingency factors on the relationship between sustainability practices and organizational performance. *Journal of cleaner production*, 171, 423-433.
- Mamédio, D., Rocha, C., Szczepanik, D., & Kato, H. (2019). Strategic alliances and dynamic capabilities: A systematic review. *Journal of Strategy and Management*, 12(1), 83-102.
- Manikas, A. S., Patel, P. C., & Oghazi, P. (2019). Dynamic capital asset accumulation and value of intangible assets: An operations management perspective. *Journal of Business Research*, 103, 119-129.
- Matara, G. L. (2018). Influence Of Generic Strategies On Customer Retention Of Aviation Industry In Kenya.
- Mikula, B., Vajdová, I., Koščák, P., & Jenčová, E. (2020, September). Learning and growth perspective in balanced scorecard. In *2020 New Trends in Aviation Development (NTAD)* (pp. 174-178). IEEE.
- Mirahmadizadeh, A., Delam, H., Seif, M., & Bahrami, R. (2018). Designing, constructing, and analyzing Likert scale data. *Journal of Education and Community Health*, 5(3), 63-72.
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of cardiac anaesthesia*, 22(1), 67-72.

- Mugenda, O. M., & Mugenda, A. G. (2003). Research methods: Quantitative and qualitative approaches.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative & qualitative approaches* (Vol. 2, No. 2). Nairobi: Acts press.
- Nason, R. S., & Wiklund, J. (2018). An assessment of resource-based theorizing on firm growth and suggestions for the future. *Journal of management*, 44(1), 32-60.
- Njoroge, S. P., & Samunderu, E. (2021, April). Africa Aviation: Challenges and opportunities. In Bode, Umuerrri (Eds.): *Universities, Entrepreneurship and Enterprise Development in Africa—Conference Proceedings 2020* (pp. 110-133).
- Nyagudi, C. S. (2021). *An Assessment of the Crisis Response Strategies Employed By Silverstone Airline in Managing Its Corporate Reputation* (Doctoral dissertation, Daystar University, School of Communication. Nairobi).
- Olaganathan, R. (2021). Impact of COVID-19 on airline industry and strategic plan for its recovery with special reference to data analytics technology. *Global Journal of Engineering and Technology Advances*, 7(1), 33.
- Peng, I. C., & Lu, H. A. (2022). Coopetition effects among global airline alliances for selected Asian airports. *Journal of Air Transport Management*, 101, 102193.
- Penrose, E. (1959). A Resource-Based View of the firm. *Strategic management journal*, 5, 171-180.
- Quesado, P. R., Aibar Guzmán, B., & Lima Rodrigues, L. (2018). Advantages and contributions in the balanced scorecard implementation. *Intangible capital*, 14(1), 186-201.
- Reams, L. C. (2023). Fred Fiedler's contingency model revisited: 30 years later. *Filosofiya osvity. Philosophy of Education*, 29(1), 111-124.
- Remencová, T., & Novák Sedláčková, A. (2022). The model of the virtual air carrier as a concept for the revival of air transport in the slovak republic. *Applied Sciences*, 12(19), 9755.
- Renner, A., Müller, J., & Theissler, A. (2022, March). State-of-the-art on writing a literature review: An overview of types and components. In *2022 IEEE Global Engineering Education Conference (EDUCON)* (pp. 1895-1902). IEEE.
- Sartor, M. (2019). The balanced scorecard. In *Quality management: Tools, methods, and standards* (pp. 55-76). Emerald Publishing Limited.
- Seo, G. H. (2020). Competitive advantages of international airline alliances: a critical review. *HOLISTICA—Journal of Business and Public Administration*, 11(1), 139-145.
- Serrano, F., & Kazda, A. (2020). The future of airports post COVID-19. *Journal of Air Transport Management*, 89, 101900.

- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12.
- Sürücü, L., & Maslakçı, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 8(3), 2694-2726.
- Tabakovic, J. (2024). Effective Strategies to Decrease Employee Turnover in the Aviation Industry (Doctoral dissertation, Walden University).
- Tawse, A., & Tabesh, P. (2023). Thirty years with the balanced scorecard: What we have learned. *Business Horizons*, 66(1), 123-132.
- Thendu, B., Kariuki, P., Muturi, W., & Wanjohi, P. (2020). Influence of strategic alliances on the performance of airline carriers registered under IATA: a literature-based review. *African Journal of Emerging Issues*, 2(2), 48-69.
- Tunčikienė, Ž., & Katinas, R. (2020). Solutions for improving the partnership between airport and airline companies. *Business, Management and Economics Engineering*, 18(2), 247-264.
- Vasigh, B., Fleming, K., & Tacker, T. (2018). *Introduction to air transport economics: from theory to applications*. Routledge.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.
- Yu, W., Chavez, R., Jacobs, M. A., & Feng, M. (2018). Data-driven supply chain capabilities and performance: A resource-based view. *Transportation Research Part E: logistics and transportation review*, 114, 371-385.
- Zehnalová, J., & Kubátová, H. (2019). From a target population to representative samples of translations and translators. *The Translator*, 25(2), 87-100.
- Zhang, Y., Zhu, L., & Hao, F. (2022). The Impact of the COVID-19 Pandemic on China's Airline Industry. *Frontiers in public health*, 10, 865463.
- Zou, L., & Chen, X. (2017). The effect of code-sharing alliances on airline profitability. *Journal of Air Transport Management*, 58, 50-57.