



# Strategic Human Resource Planning and Sustainable Competitive Advantage in Kenya's Aviation Companies

Ali Ibrahim Roba

United States International University – Africa, Kenya

## Article History

Received: 14.01.2026

Revised: 02.05.2026

Accepted: 10.05.2026

Published: 15.05.2026

## Keywords

Aviation industry

Human resources

Planning

Workforce

## How to cite:

Roba, A. I. (2026). Strategic Human Resource Planning and Sustainable Competitive Advantage in Kenya's Aviation Companies. *Eastern African Journal of Humanities and Social Sciences*, 5(1), 299-311.

## Abstract

This study examined the influence of Strategic Human Resource Planning (SHRP) on sustainable competitive advantage among aviation companies in Kenya. Grounded in the Resource-Based View and institutional theory, the study adopted an explanatory sequential mixed-methods research design. Quantitative data were collected through a census survey of 360 managers drawn from all 60 aviation companies licensed by the Kenya Civil Aviation Authority, complemented by in-depth interviews with senior managers involved in flight operations planning and operational safety oversight. Strategic Human Resource Planning was operationalised through training and development, workforce gap analysis, and supply and demand forecasting. Quantitative data were analysed using simple linear regression, while qualitative data were thematically analysed to provide explanatory insights. The findings indicate that Strategic Human Resource Planning has a strong and statistically significant influence on sustainable competitive advantage ( $\beta = 0.615$ ,  $p < 0.001$ ), explaining 37.4% of the variance in competitive outcomes ( $R^2 = 0.374$ ). Qualitative results further reveal that strategically aligned training programs, systematic identification of skills gaps, proactive workforce forecasting, and regular human resource capability audits enhance workforce readiness, operational continuity, regulatory compliance, and organisational resilience. The study concludes that Strategic Human Resource Planning functions not merely as an administrative support activity, but as a strategic organisational capability that enables aviation firms to achieve and sustain competitive advantage in a highly regulated and skills-intensive environment, with important implications for aviation managers and policymakers.

Copyright © 2026



## Introduction

Business organisations today operate in an increasingly dynamic and competitive environment characterised by rapid technological advancement, regulatory complexity, evolving customer expectations, and intensified global competition (Möller et al., 2020; Newman et al., 2020). Within knowledge-intensive and safety-critical industries such as aviation, organisational performance and long-term competitiveness are heavily dependent on the availability, competence, and strategic deployment of human capital (Abate et al., 2020). As a result, aviation organisations are increasingly shifting from traditional personnel administration to Strategic Human Resource Planning (SHRP) to ensure workforce readiness, operational continuity, and sustainable competitive advantage.



Globally, the aviation industry has experienced a strong recovery and expansion, with passenger traffic surpassing nine billion in 2024 following the resurgence of international travel (Airports Council International [ACI] World, 2025). This growth has intensified demand for highly skilled aviation professionals including pilots, engineers, air traffic controllers, safety officers, and operations managers. However, the industry continues to face persistent challenges related to skills shortages, workforce aging, high training costs, and regulatory competency requirements, making strategic workforce planning a critical managerial priority (International Air Transport Association [IATA], 2025). In this context, human resource planning has evolved from a support function into a strategic capability that directly influences safety performance, operational efficiency, and competitive positioning.

Strategic Human Resource Planning emphasises proactive training and development, systematic workforce gap analysis, and accurate supply and demand forecasting to ensure that organisations possess the right skills, in the right numbers, at the right time. Through structured training and development programs, aviation firms can maintain regulatory compliance, enhance employee productivity, and adapt to technological and operational changes. Workforce gap analysis enables organisations to identify current and future skill deficiencies, while supply-and-demand forecasting supports informed staffing decisions that minimise labour shortages, overstaffing, and operational disruptions (Pereira et al., 2021). When integrated into organisational strategy, these HR planning practices enhance resilience and enable firms to respond effectively to environmental uncertainty.

Empirical evidence from global aviation leaders demonstrates the strategic value of human resource planning. Airlines that invest consistently in competency-based training, succession planning, and long-term workforce forecasting have reported improved safety outcomes, lower employee turnover, and greater operational reliability (Wendel et al., 2024). For instance, major international carriers have embedded workforce analytics and predictive HR planning tools to anticipate future skill needs arising from fleet expansion, route growth, and technological innovation. These practices have enabled such firms to sustain service quality, meet regulatory requirements, and maintain competitive advantage in volatile operating environments (Molchanova et al., 2020).

### **Theoretical Framework**

Theoretically, the Resource-Based View (RBV) provides a strong foundation for understanding the strategic contribution of human resource planning to sustainable competitive advantage. The theory posits that organisational resources generate sustained competitive advantage when they are valuable, rare, inimitable, and embedded within organisational processes (Barney, 1991). In aviation, human capital developed through targeted training, aligned through gap analysis, and strategically deployed through supply-and-demand forecasting constitutes a critical strategic resource. When these human resource planning practices are institutionalised, they evolve from administrative routines into core organisational capabilities that are difficult for competitors to replicate.

Complementing the RBV, Institutional Theory offers additional explanatory power for understanding how Strategic Human Resource Planning becomes embedded in organisational practice within the Kenyan aviation sector. Institutional theory posits that organisations adopt and institutionalise certain practices not only because of their technical efficiency, but also because of normative pressures, regulatory coercive forces, and mimetic influences within their operating environment (DiMaggio & Powell, 1983). In aviation, the Kenya Civil Aviation Authority imposes regulatory mandates on training, competency verification, and licensing that effectively coerce aviation firms to formalise and sustain systematic human resource planning practices. Over time, these externally mandated practices



become internalised as legitimate organisational routines, evolving into core capabilities that support sustained competitive advantage.

In Kenya, the aviation sector contributes approximately 3.1 per cent to the national Gross Domestic Product and supports nearly 460,000 jobs, underscoring its strategic importance to economic development and regional connectivity (IATA, 2025). Aviation organisations operating in Kenya are regulated by the Kenya Civil Aviation Authority, which mandates strict competency, licensing, and recurrent training requirements across all operational roles. Compliance with these regulations necessitates robust human resource planning systems that ensure the continuous availability of qualified personnel (Kenya Civil Aviation Authority [KCAA], 2024).

Despite this regulatory environment, Kenyan aviation firms continue to face challenges related to workforce shortages, unevenly distributed skills, high training costs, and limited succession planning, particularly in specialised technical and safety-critical roles. Variations in training investment, workforce forecasting accuracy, and HR planning maturity across aviation organisations raise concerns about operational sustainability and competitive positioning. Existing empirical studies in Kenya have largely focused on safety management systems, regulatory compliance, and operational performance, with limited attention given to Strategic Human Resource Planning as a distinct driver of sustainable competitive advantage (Njeru, 2019; Mwikya et al., 2018).

Beyond its academic contribution, this study holds significant practical relevance for Kenya's aviation industry. The findings offer actionable insights for aviation managers seeking to align human resource planning with strategic business objectives, and for regulators seeking to strengthen competency-based oversight frameworks. Furthermore, the study provides a basis for benchmarking workforce planning practices in Kenyan aviation against those of industry counterparts in sub-Saharan Africa, supporting evidence-based policy decisions to enhance the industry's regional competitiveness and operational sustainability.

### **Literature Review**

Al-Hawary and Al-Rasheedy (2021) conducted a study on the effect of strategic human resource learning on the dynamic capabilities of Kuwaiti airlines. This study set out to investigate how strategic learning affected the dynamic skills of human resources in Kuwaiti aviation firms. All managers employed by these airline companies, across ranks, comprised the study sample. A questionnaire-based survey was employed to collect data, and 110 responses from Kuwaiti airline businesses were used to empirically evaluate the model via multiple regression analysis in SPSS. Based on the study's findings, the researchers advised managers and decision-makers in Kuwait's airline sector to capitalise on opportunities from businesses that exhibit significant market importance by using a variety of strategies to grow their market share, thereby improving their competitive position.

Alserhan and Shbail (2020) conducted a study to examine the role of organisational commitment in the relationship between human resource management practices and sustainable competitive advantage in the Jordanian Aviation industry. Additionally, the study aimed to evaluate organisational commitment as a mediating factor between competitive advantage and HR policies among employees in the Jordanian Aviation industry. The information was collected from 232 people within the Aviation industry. The data were subjected to PLS and SEM analyses using the SmartPLS 3 program. The study found that sustainable Competitive advantage varies statistically significantly as a result of HRM practices. Organisational commitment partially mediated the relationship between HRM practices and sustainable competitive advantage. Organisational commitment varied statistically significantly as a function of HRM methods. The results add to the research corpus on the



mediating role of organisational commitment in the linkages between sustainable competitive advantage and the HR practices implemented by aviation companies.

A study conducted in India by Singh and Kumar (2021) examined the impact of human resource planning on the sustainable competitive advantage of aviation enterprises. The researchers employed a qualitative research methodology, utilising semi-structured interviews with HR managers and aviation industry specialists. The interview data were subjected to content analysis. The study revealed that comprehensive human resource planning, encompassing effective talent acquisition, training, and development initiatives, is crucial for building a competent and driven workforce. Consequently, this improves the company's ability to operate efficiently and fosters innovation, resulting in a long-lasting competitive edge by enabling the organisation to adapt to evolving market conditions and technological advances.

An investigation by Mehta (2017) in India examined the influence of human resource planning on the long-term sustainable competitive advantage of aviation enterprises. Data was collected from 200 HR professionals in the aviation business using a cross-sectional survey design. The researchers employed factor analysis and multivariate regression analysis to scrutinise the data. The study revealed that comprehensive human resource planning, encompassing talent acquisition, training, and development initiatives, is crucial to maintaining a proficient and driven staff, which is imperative for maintaining a competitive edge in the ever-changing aviation industry.

Anene (2021) assessed the Determinants of Strategy Implementation on Performance of the Aviation Industry in Kenya. The study employed positivism as its philosophical framework. To assess the validity of the instruments, which had a reliability of 0.720, 27 respondents participated in a pilot study. Using a census and descriptive research design, the study was conducted on 13 registered airlines, which served as the target population. The study employed systematic random sampling to choose the managers who served as the observation unit and study participants. Data from 200 managers who responded to a self-administered questionnaire were gathered. The results of the study showed that the performance of Kenyan airlines was positively correlated with the growth of human capital, innovation expertise, strategic alliances, and organisational resources.

Mati and Atikiya (2022) conducted a study on Human Resource Strategy Implementation practices and performance of the Kenyan Aviation Industry. The study's theoretical framework included the job embedding theory, reinforcement theory, role behaviour theory, and Herzberg's two-factor theory. A descriptive research design was utilised in this study to describe the characteristics of the subject under investigation. From the target population of 1089 respondents at Kenya Airlines, a sample of 109 respondents was selected using a stratified sampling technique and simple random selection. Self-administered structured questionnaires dispersed via the drop-and-pick method were used to collect primary data. To obtain accurate results, secondary data were gathered and utilised for gap identification, goal formulation, validation of findings, and interpretation of primary data. Both quantitative and qualitative analyses were performed on the gathered data. The Statistical Package for Social Sciences (SPSS) version 24 was used to do both descriptive and inferential statistics. According to the study, aviation companies can gain a competitive edge by investing in staff development and fostering an innovative culture, enabling them to adapt more quickly to market opportunities and technological advancements.

Collectively, the reviewed literature underscores the strategic importance of human resource planning in enhancing organisational performance in the aviation sector. However, a critical knowledge gap persists: despite the growing body of evidence from global and African contexts, empirical studies specifically examining the influence of Strategic Human Resource Planning on sustainable



competitive advantage among Kenyan aviation firms remain limited. This study addresses that gap by providing context-specific evidence from Kenya's regulated aviation environment.

### **Methodology**

The study adopted a pragmatist philosophical paradigm and a sequential mixed-methods research design. The quantitative phase examined the direct influence of Strategic Human Resource Planning on sustainable competitive advantage among all 60 aviation companies licensed by the Kenya Civil Aviation Authority (KCAA), using a census approach. Within each organisation, stratified sampling across key departments, human resource management, safety management, flight operations, maintenance, quality assurance, and executive leadership, yielded a sample of 360 managerial respondents. For the qualitative phase, twenty senior managers were purposively selected to triangulate and explain the quantitative findings through in-depth interviews, with data collection continuing until thematic saturation was reached. Strategic Human Resource Planning was operationalised through training and development, workforce gap analysis, and supply and demand forecasting, measured on a structured five-point Likert scale questionnaire with Cronbach's alpha coefficients exceeding 0.70. Sustainable competitive advantage was similarly measured using an eight-item scale capturing cost efficiency, operational reliability, service consistency, customer trust, market positioning, and organisational resilience.

Quantitative data were analysed using simple linear regression, preceded by diagnostic tests for linearity, normality, multicollinearity, autocorrelation, and heteroscedasticity to ensure robustness of results. Qualitative data were transcribed verbatim and analysed thematically using NVivo 14 through open, axial, and selective coding cycles. The integration of regression analysis and thematic interpretation provided a methodologically rigorous understanding of the strategic influence of human resource planning on competitive advantage in Kenya's aviation industry. Ethical clearance was obtained from the United States International University–Africa Institutional Ethics Review Committee (IERC/2024/123), and a research permit was granted by the National Commission for Science, Technology and Innovation (NACOSTI/P/24/28371). Informed consent was secured from all participants, confidentiality was maintained throughout, and organisational anonymity was assured.

### **Results**

This section presents the study's findings, organised into descriptive statistics, diagnostic statistical tests, and regression analysis results. The quantitative findings are complemented by qualitative insights drawn from in-depth interviews with senior aviation managers.

#### **Descriptive Statistics**

The findings indicate that Strategic Human Resource Planning (SHRP) is strongly emphasised among aviation companies in Kenya, with an overall mean score of 4.28 and a standard deviation of 0.57. This suggests a high level of institutionalisation of strategic HR practices across the industry, with relatively low variability indicating consistent adoption. These results are summarised in Table 1 among licensed aviation organisations.

Among the SHRP dimensions, training and development recorded a high mean score ( $M = 4.30$ ,  $SD = 0.49$ ), highlighting its central role in enhancing employee competence, reducing human error, and improving operational efficiency. Supply and demand forecasting emerged as the most highly rated component ( $M = 4.31$ ,  $SD = 0.61$ ), underscoring the importance of proactive workforce planning to prevent staffing shortages that could compromise safety and service reliability.



Workforce gap analysis also received strong support ( $M = 4.26, SD = 0.55$ ), indicating that aviation firms actively identify and address skill mismatches to align employee capabilities with operational and regulatory demands. Similarly, auditing current HR capability recorded a high mean score ( $M = 4.25, SD = 0.62$ ), reflecting the perceived importance of regular competency assessments in informing training, succession planning, and long-term workforce alignment.

*Table 1: Descriptive Statistics Test for Strategic Human Resource Planning and SCA*

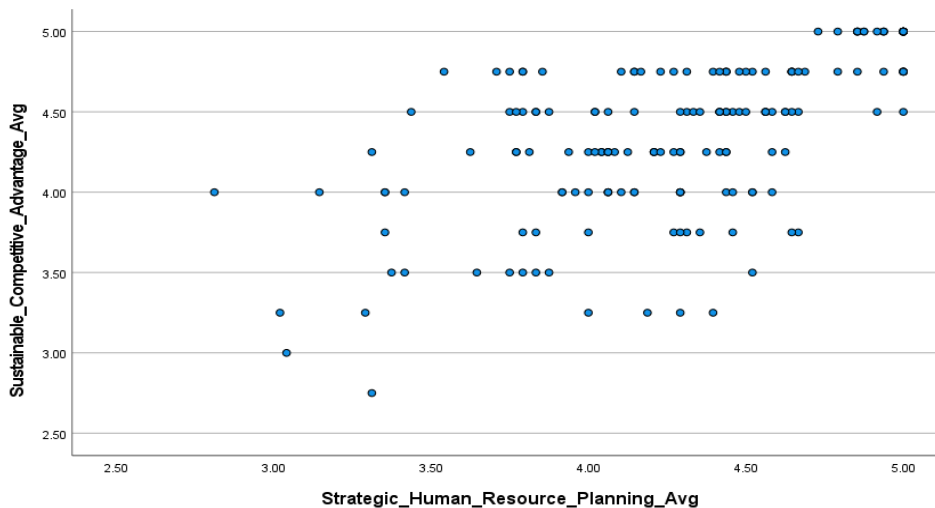
Aspects of Measurement	Mean	Std. Dev
Training and Development and Competitive Positioning	4.30	0.49
Gap Analysis and Workforce Efficiency	4.26	0.55
Supply and Demand Forecasting and Long-Term Competitiveness	4.31	0.61
Role of HR Auditing in Achieving Operational Stability	4.25	0.62
<b>Aggregate</b>	<b>4.28</b>	<b>0.57</b>

**Statistical Tests**

The following sub-sections present the results of the diagnostic statistical tests conducted prior to regression analysis. These tests were performed to verify the assumptions underlying the regression model and to ensure the robustness and validity of the analytical findings.

*Linearity Test*

The scatter plot in Figure 4.1 shows a moderate-to-strong positive linear relationship between Strategic Human Resource Planning and Sustainable Competitive Advantage. Organisations with higher SHRP scores tend to exhibit greater competitive advantage, confirming the appropriateness of linear regression analysis. The observed variability at lower SHRP levels suggests that while HR planning is a strong contributor to competitiveness, it must be complemented by other strategic capabilities to achieve optimal performance.



*Figure 1: Linear Relationship between Strategic Human Resource Planning and Sustainable Competitive Advantage*



**Normality Test**

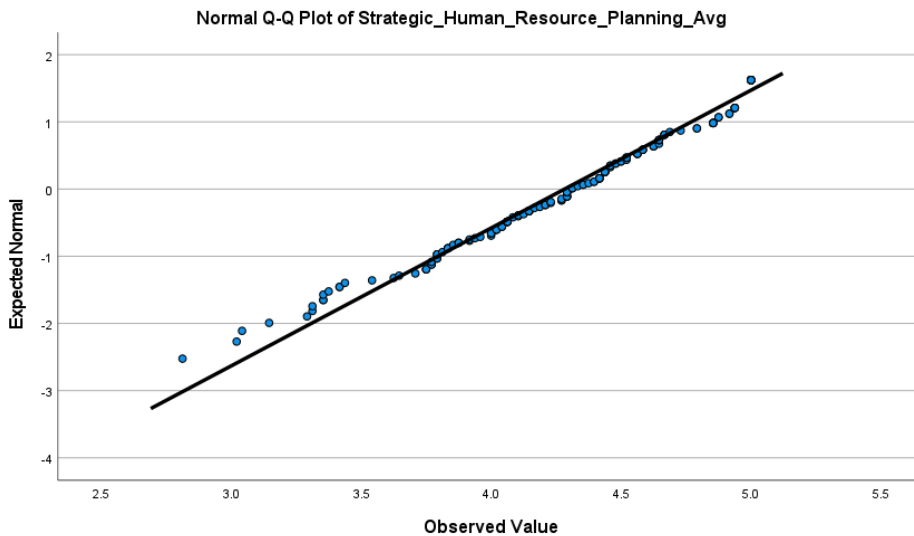
Normality was assessed using both the Kolmogorov–Smirnov and Shapiro–Wilk tests, as shown in Table 2. The Kolmogorov–Smirnov test yielded a statistic of 0.070 ( $p = 0.038$ ), while the Shapiro–Wilk test produced a statistic of 0.964 ( $p < 0.001$ ), indicating mixed results. Given the sensitivity of formal tests to larger samples, a Q–Q plot was examined.

*Table 2: Test of Normality for the Strategic Human Resource Planning*

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Strategic Human Resource Planning	.070	171	.038	.964	171	.000

**a. Lilliefors Significance Correction**

Visual inspection of the Q–Q plot (Figure 4.2) revealed that data points closely aligned with the diagonal reference line, suggesting approximate normality. This supported the suitability of the data for regression analysis.



*Figure 2: Normal Q-Q plot for Strategic Human Resource Planning*

**Multicollinearity Test**

Multicollinearity diagnostics revealed a Tolerance value of 1.000 and a Variance Inflation Factor (VIF) of 1.000, as shown in Table 3, confirming the absence of multicollinearity. Strategic Human Resource Planning was therefore suitable for inclusion in the regression model without compromising statistical validity.



Table 3: Multicollinearity Test for the Strategic Human Resource Planning and SCA

**Coefficients<sup>a</sup>**

Model		Unstandardised Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.717	.264		6.512	.000		
	Strategic Human Resource Planning	.615	.061	.612	10.058	.000	1.000	1.000

**a. Dependent Variable: Sustainable Competitive Advantage**

**Autocorrelation Test**

The Durbin-Watson statistic was 1.784, which falls within the acceptable range of 1.5 to 2.5. This indicates the absence of autocorrelation in the residuals and confirms that the assumption of independent errors was satisfied, as shown in Table 4.

Table 4: Test for Autocorrelation in the Regression Residuals of SHRP and SCA

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.612 <sup>a</sup>	.374	.371	.38872	1.784

a. Predictors: (Constant), Strategic Human Resource Planning

b. Dependent Variable: Sustainable Competitive Advantage

**Heteroscedasticity Test**

The Breusch-Pagan test yielded an F-statistic of 10.225 with a p-value of 0.002, as presented in Table 5, indicating the presence of heteroscedasticity. This violation suggests that residual variances are not constant across observations. To address this issue, heteroscedasticity-consistent (robust) standard errors are recommended to ensure reliable inference.

Table 5: Breusch-Pagan Test for Heteroscedasticity in the SHRP Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.413	1	.413	10.225	.002 <sup>b</sup>
	Residual	6.826	169	.040		
	Total	7.239	170			

a. Dependent Variable: RES\_SQ

b. Predictors: (Constant), Strategic Human Resource Planning

**Regression Analysis for Strategic Human Resource Planning and SCA**

**Regression Model Results**

Regression analysis revealed a strong positive relationship between Strategic Human Resource Planning and Sustainable Competitive Advantage, with an R-value of 0.612, as shown in Table 6. The R<sup>2</sup> value of 0.374 indicates that SHRP explains 37.4% of the variance in sustainable competitive advantage. The adjusted R<sup>2</sup> value (0.371) confirms the model's robustness, while the standard error of the estimate (0.38872) indicates a good fit.



Table 6: Regression Results for Strategic Human Resource Planning and SCA

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Sig. F Change	
					R Square Change	F Change	df1		df2
1	.612 <sup>a</sup>	.374	.371	.38872	.374	101.165	1	169	.000

a. Predictors: (Constant), Strategic Human Resource Planning

**Regression Coefficients**

The regression coefficients indicate that Strategic Human Resource Planning has a statistically significant positive effect on Sustainable Competitive Advantage, as presented in Table 7. The unstandardised coefficient (B = 0.615, p < 0.001) indicates that a one-unit increase in SHRP is associated with a 0.615-unit increase in sustainable competitive advantage, holding other factors constant. The standardised beta coefficient ( $\beta = 0.612$ ) further confirms the strong predictive influence of SHRP.

Qualitative findings reinforce these results, with respondents emphasising that comprehensive training and development, regular gap analysis, workforce forecasting, and HR capability audits are critical in maintaining operational excellence, reducing safety risks, and sustaining competitive advantage in the aviation industry.

Table 7: Coefficients for Strategic Human Resource Planning and SCA

**Coefficients<sup>a</sup>**

Model		Unstandardised Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.717	.264		6.512	.000
	Strategic Human Resource Planning	.615	.061	.612	10.058	.000

a. Dependent Variable: Sustainable Competitive Advantage

**Analysis of Variance (ANOVA)**

The ANOVA results indicate that the regression model is statistically significant (F = 101.165, p < 0.001), as presented in Table 8. The regression sum of squares (15.286) substantially exceeds the residual sum of squares (25.536), confirming that Strategic Human Resource Planning makes a significant contribution to explaining variations in Sustainable Competitive Advantage.

Table 8: ANOVA for Strategic Human Resource Planning and SCA

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.286	1	15.286	101.165	.000 <sup>b</sup>
	Residual	25.536	169	.151		
	Total	40.822	170			

a. Dependent Variable: Sustainable Competitive Advantage

b. Predictors: (Constant), Strategic Human Resource Planning



## Discussion

This section discusses the study's findings in relation to the existing literature and the specific context of Kenya's aviation industry. The discussion is organised around the key dimensions of Strategic Human Resource Planning examined in the study.

The central focus of this section is to interpret how Strategic Human Resource Planning (SHRP) contributes to sustainable competitive advantage for aviation companies in Kenya, drawing on the study's empirical findings. The results demonstrate that SHRP is a significant driver of sustainable competitive advantage, confirming that human resource practices in aviation extend beyond administrative support functions to constitute strategic organisational capabilities that shape long-term performance.

Kenya's aviation sector, which contributes approximately 3.1 per cent to national GDP and supports nearly 460,000 jobs (IATA, 2025), operates in a competitive regional landscape alongside the growing aviation markets of Ethiopia, Rwanda, and South Africa. According to ACI World (2025), East African airports collectively processed over 35 million passengers in 2024, with Nairobi Jomo Kenyatta International Airport serving as the region's second busiest hub. Against this backdrop, the findings of this study take on heightened significance: the strong positive relationship between Strategic Human Resource Planning and sustainable competitive advantage ( $\beta = 0.615$ ,  $p < 0.001$ ) suggests that Kenyan aviation firms that invest strategically in workforce planning are better positioned to sustain and expand their competitive standing within this rapidly growing regional market.

Training and development emerged as a critical pillar of SHRP in enhancing sustainable competitive advantage. The findings indicate that aviation organisations that align employee training programs with strategic business and safety objectives achieve superior operational efficiency, service quality, and workforce reliability. It may be argued that targeted training ensures employees possess the technical, safety, and decision-making competencies required to operate in a highly regulated and risk-sensitive aviation environment. This finding is consistent with Kimanthi (2014), who argued that strategic investment in training and development enhances not only individual performance but also fosters an organisational culture of accountability, excellence, and continuous improvement. Such a culture strengthens productivity and institutional resilience, both of which are central to sustaining competitive advantage in the aviation sector.

Beyond training, the study confirmed that workforce gap analysis plays a pivotal role in aligning employee capabilities with evolving industry demands. The findings suggest that aviation companies that systematically assess skill mismatches and anticipate future human capital requirements are better positioned to respond to technological change, regulatory updates, and operational complexity. Regular gap analysis enables organisations to identify deficiencies in technical knowledge, safety management, and human factors competencies, thereby supporting proactive workforce development. These findings align with Balaraman and Kamalakannan (2016), who demonstrated that skill gap analysis is an essential component of strategic human resource planning in the aerospace and aviation industry, particularly in contexts characterised by rapid technological advancement and stringent global safety standards.

Another key finding relates to the role of supply and demand forecasting in sustaining competitive advantage. The results indicate that accurate forecasting of workforce requirements enables aviation companies to anticipate staffing needs, prevent skill shortages, and maintain optimal staffing levels during periods of operational expansion or contraction. It may be argued that effective workforce forecasting supports operational continuity by ensuring that the right number of suitably qualified personnel are available at the right time, thereby minimising safety risks, service disruptions, and



inefficiencies. This finding is consistent with the U.S. Government Accountability Office (GAO, 2021), which emphasised that workforce forecasting is critical for managing shifts in business strategy, regulatory demands, and technological innovation. Similarly, Huselid and Becker (2019) contended that predictive human capital planning enhances organisational agility and competitive positioning by aligning talent availability with strategic objectives.

The study further revealed that auditing current human resource capabilities is central to long-term competitiveness in aviation organisations. Regular HR capability audits allow firms to evaluate existing competencies, identify emerging skill gaps, and implement succession planning strategies. This structured assessment process supports compliance with international safety standards and prepares organisations for future operational demands. Boxall and Purcell (2016) argued that such auditing mechanisms enhance strategic flexibility, which is essential in industries like aviation where demand cycles, regulatory requirements, and technological disruptions significantly influence workforce needs. By integrating workforce audits with forecasting and training initiatives, aviation firms are better positioned to mitigate future risks while strengthening their current human capital base.

Taken together, the findings reinforce the Resource-Based View by demonstrating that when human resource planning practices are strategically embedded, they evolve into valuable, rare, and difficult-to-imitate organisational capabilities. Strategic Human Resource Planning in Kenyan aviation is therefore not a peripheral support activity, but a core strategic asset that underpins operational reliability, safety performance, and sustainable competitive advantage.

### **Conclusion**

The study concludes that Strategic Human Resource Planning is a fundamental driver of sustainable competitive advantage among aviation companies in Kenya. By prioritising training and development, aviation organisations enhance employee competence, minimise human error, and improve operational efficiency. The findings further demonstrate that workforce planning practices, including gap analysis and supply-demand forecasting, enable firms to anticipate future skill requirements, address competency deficiencies, and maintain compliance with evolving industry and regulatory standards.

The study also concludes that regular auditing of human resource capabilities strengthens workforce readiness by supporting succession planning, continuous skills development, and alignment of human capital with strategic safety and operational objectives. When human resource planning is embedded at the strategic level, aviation companies are better positioned to adapt to technological change, regulatory scrutiny, and market dynamics. Collectively, these elements of Strategic Human Resource Planning enhance organisational agility, reinforce safety performance, and provide a durable foundation for achieving and sustaining competitive advantage in a highly regulated aviation environment.

The study recommends that aviation companies strengthen Strategic Human Resource Planning by investing in robust, competency-based training and development programs aligned with evolving operational and regulatory requirements. Continuous learning initiatives, including recurrent training, certification programs, and leadership development, should be institutionalised to enhance workforce competence and minimise human error.

Aviation firms should also adopt data-driven workforce gap analysis and advanced supply-demand forecasting tools to ensure optimal staffing levels and prevent skill shortages. Regular human resource capability audits are recommended to identify competency gaps, support succession planning, and



align workforce skills with safety and operational priorities. Additionally, organisations should promote employee engagement through mentorship programs, structured career development pathways, and performance-based incentives to enhance productivity and retention.

By implementing these measures, aviation companies can build a resilient, skilled, and adaptable workforce that supports regulatory compliance, operational excellence, and long-term sustainable competitive advantage.

### References

- Abate, M., Christidis, P., & Purwanto, A. J. (2020). Government support to airlines in the aftermath of the COVID-19 pandemic. *Journal of Air Transport Management*, 89, 101931. <https://doi.org/10.1016/j.jairtraman.2020.101931>
- Al-Hawary, S. I. S., & Al-Rasheedy, A. A. (2021). The effect of strategic learning for human resources on dynamic capabilities of airline companies. *Journal of Asian Finance, Economics and Business*, 8(3), 163–172. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0163>
- Alserhan, B. A., & Shbail, M. O. (2020). The role of organisational commitment in the relationship between human resource management practices and sustainable competitive advantage. *Management Science Letters*, 10(15), 3571–3580. <https://doi.org/10.5267/j.msl.2020.6.019>
- Airports Council International (ACI) World. (2025). *World airport traffic forecast 2024–2043*. ACI World.
- Anene, E. E. (2021). Determinants of strategy implementation on performance of the aviation industry in Kenya. *International Journal of Business and Management Research*, 9(2), 45–60.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Balaraman, G., & Kamalakannan, R. (2016). Skill gap analysis in aerospace and aviation sector. *International Journal of Engineering Research and Technology*, 5(6), 420–425.
- Boxall, P., & Purcell, J. (2016). *Strategy and human resource management* (4th ed.). Palgrave Macmillan.
- Huselid, M. A., & Becker, B. E. (2019). Bridging micro and macro domains: Workforce differentiation and strategic human resource management. *Journal of Management*, 45(2), 405–435. <https://doi.org/10.1177/0149206318777790>
- International Air Transport Association (IATA). (2025). *Economic performance of the airline industry*. IATA.
- Kenya Civil Aviation Authority (KCAA). (2024). *Civil aviation safety and licensing oversight report*. KCAA.
- Kimanthi, F. M. (2014). Strategic human resource management practices and organisational performance. *International Journal of Humanities and Social Science*, 4(11), 214–223.
- Mati, J. M., & Atikiya, R. (2022). Human resource strategy implementation practices and performance of the aviation industry in Kenya. *International Journal of Business and Management Review*, 10(3), 21–38.
- Mehta, S. (2017). Human resource planning and sustainable competitive advantage in aviation enterprises. *International Journal of Human Resource Studies*, 7(4), 78–92. <https://doi.org/10.5296/ijhrs.v7i4.12045>
- Molchanova, K., Trushkina, N., & Katerna, O. (2020). Human capital management in the aviation industry under digital transformation. *Journal of Transport and Supply Chain Management*, 14, 1–9. <https://doi.org/10.4102/jtscm.v14i0.512>
- Möller, K., Nenonen, S., & Storbacka, K. (2020). Networks, ecosystems, and digital transformation. *Industrial Marketing Management*, 90, 380–390.
- Mwikya, R., Sabina, K., & Mwaura, P. (2018). Determinants of operational performance of airlines in Kenya. *International Journal of Business and Management Studies*, 10(2), 112–128.



- 
- Newman, C., Rand, J., Tarp, F., & Trifkovic, N. (2020). Corporate social responsibility in a competitive business environment. *World Development*, 131, 104948.  
<https://doi.org/10.1016/j.worlddev.2020.104948>
- Njeru, J. W. (2019). Safety management systems and performance of aviation firms in Kenya. *Journal of Transport and Logistics*, 6(1), 55–69.
- Pereira, V., Lohmann, G., & Houghton, L. (2021). Strategic human resource management in aviation. *Journal of Air Transport Management*, 93, 102045.
- Singh, A., & Kumar, P. (2021). Human resource planning and sustainable competitive advantage in aviation enterprises. *Journal of Strategic Human Resource Management*, 10(2), 45–60.
- Thendu, M., Kariuki, P., Muturi, W., & Wanjohi, P. (2023). Disaggregating safety management systems and organisational performance in aviation. *International Journal of Aviation Management*, 7(3), 201–218.
- Wendel, S., Albers, S., & Dewulf, W. (2024). Operational resilience and workforce strategy in airline management. *Journal of Air Transport Management*, 112, 102387.  
<https://doi.org/10.1016/j.jairtraman.2023.102387>