# Social Sustainability Practices and Performance of Approved Aircraft Maintenance Organizations in Kenya

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#### **Abstract**

The study sought to examine the role played by social sustainability practices among employees on performance of approved aircraft maintenance organizations in Kenya. The independent variables of the study were; employee development, employee safety, management support and employee cooperation whereas the dependent variable is firm performance. Underpinning theory is Resource Based View Theory. Explanatory research design was used, the target population comprised of 164 aircraft engineers working for the 41 AMOs in Kenya, four respondents per organization attached to different maintenance sections were purposively selected. Structured questionnaires were used to collect data, they were administered in person. Descriptive and inferential statistical analysis techniques was used for data analysis. The findings from the study revealed that employee development had a significant influence on performance of approved aircraft maintenance organizations in Kenya ( $\beta = 0.281$ ; P=0.000<0.05). Further, employee safety was found to significantly influence the performance of approved aircraft maintenance organizations in Kenya  $(\beta = 0.189; P=0.000 < 0.05)$ . Management support also had a significant influence on the performance of approved aircraft maintenance organizations in Kenya ( $\beta = 0.338$ ; P=0.000<0.05). Finally, employee collaboration was found to significantly influence the performance of approved aircraft maintenance organizations in Kenya ( $\beta = 0.187$ ; P=0.000<0.05). The study concluded that failure to fully embrace social sustainability practices had a hand on the declining performance of approved aircraft maintenance organizations in Kenya. The study recommends the need for management to uphold employee development and employee safety as a way of promoting employee performance thus steering organizational performance.

**Keywords:** Social Sustainability, Organizational Performance, Aviation Industry, Kenya Civil Aviation Authority, Approved Aircraft Maintenance Organizations





## Introduction

Globally, organizations intend to strengthen their performance through focusing on key internal and external processes that can generate them more revenue (Ali, Danish, & Asrar-ul-Haq, 2020). One of these internal prospects that highly drive performance is employee satisfaction and commitment. Enhancing employee satisfaction and commitment to the organizational goals is highly correlated to continued organizational performance. Mohd (2020) expounds this in the context of airline companies where he indicates that just as the pilots and other crew members invest their time and knowledge, and so is the investment of capital by the shareholders. All these stakeholders require a return on their investment, and this can be achieved through attaining superior performance for the organization. Their assessment mainly focuses on financial dimension of performance, where monetary aspects are the key measure of success and better performance.

Sustainability is often categorized into three dimensions: economic, environmental, and social. Despite this classification, the social sustainability dimension is commonly perceived as the weakest pillar. While sustainability predominantly centers on human concerns (Widarni & Bawono, 2022), the concept of social sustainability lacks clarity and maturity in terms of definition, content (dimensions, criteria, indicators), and measurement tools. Research acknowledges the definitional ambiguity surrounding social sustainability but consistently identifies basic needs and equity as fundamental themes (Landorf, 2011). Additionally, the organization's relationships with its stakeholders, especially employees, are highlighted.

Considering employees as the primary asset of organizations, focusing on their perception of the social impact caused by the organization becomes a key challenge in implementing socially sustainable actions (Widarni & Bawono, 2022). While businesses commit to sustainability and incorporate it into decision-making, tools and measures are necessary to evaluate decisions from a sustainability perspective. Environmental sustainability assessment methodologies are more developed than those for social or economic sustainability (Veldhuizen et al., 2015). While previous work has expanded understanding on social sustainability measurement, the employee perspective in measuring social sustainability within organizations has been largely overlooked. Despite this, dealing with employees in a socially sustainable manner is crucial for organizations to address labor market challenges such as workforce shortages or an aging society (Ehnert, 2014).

The airline industry, being highly interactive with customers at various levels and stages, is particularly sensitive. Increased competition has shifted attention to airline service quality. Existing social sustainability studies in the airline industry often focus on external stakeholders, with limited attention given to internal stakeholders, specifically employees. This may be attributed to the profit-driven nature of the industry, emphasizing external customer satisfaction over internal stakeholder concerns. However, factors crucial for industry sustainability, such as recognizing employee contributions, effective communication, proper training, and strategic goal development, revolve around the implementation of an effective and sustainable Human Resource Management (HRM) system (Hvass and Torfadottir, 2014).

The social sustainability indicator incorporates information from the Worldwide Governance Indicators (WGI) project (2013), encompassing various aspects for each country. The social sustainability index consists of eight sub-indicators, covering location, supply chain, social innovations, labor practices, training





and education, reporting, safety, and legal-social aspects (Husgafvel et al., 2015). In the face of transformative trends such as an aging population, changing labor markets, and technological advancements, companies are under increasing pressure to radically change their operations (Chand & Tung, 2014). The growing importance of managing social sustainability, conceptualized as the social component impacting and impacted by business practices, is evident in politics, society, and the economy as a fundamental approach to addressing global challenges (Sachs, 2012). Stakeholders, including customers, business partners, analysts, and potential employees, increasingly demand activities and measurable parameters related to social sustainability.

According to Amrutha and Geetha (2020), employee social sustainability practices include the practices taken in place by organizations to support the employees and make them more committed, confident and productive in performing their daily duties. These are the key inputs that an organization invests in employees to enhance their overall contribution to organizational success. Schönborn et al. (2019) addressed employee social sustainability through employee development and employee cooperation and engagement. To Sarya, Arief, Saroso, and Bandur (2023), the main social sustainability aspect that an organization can put in employees is developing them to become better through training. Additionally, Abid, Ahmed, Elahi, and Ilyas (2020) alluded that employee social sustainability practices focus on how engaged an employee is in terms of their contribution to the organization. This incorporates making the employees part of the organization through consultations and seeking their opinions in decision-making. According to Staniškienė and Stankevičiūtė (2018, this does not only make the employees feel part of the organization, but also grows them to be better leaders and promote their overall contribution to the organizational success.

Sajjad and Shahbaz (2020) on the other hand considered employee social sustainability as the deliberate commitment by organizational management to grow more resourceful employees through providing them with the safety they require and through providing them support. To Lin, Efranto, and Santoso (2021), employees require the adequate assurance of their safety when working, and this should increase their confidence and commitment. Moreover, the ability to support the employees as the top management ensures that they gain more confidence, while feeling part of the organization. Based on these assertions, the study therefore chose to focus on the four key practices of employee social sustainability which included employee development, management support, employee safety and employee cooperation. These were the independent variables for the study.

The study focused on aviation sector, and specifically on the aircraft maintenance companies in Kenya. The aircraft maintenance function is performed by maintenance and repair engineering companies. It can be owned by the airline, air-force, or constitute an independent company. Aircraft maintenance has always played an important role in aviation industry. This importance becomes more critical because of current and future developments. Aircraft maintenance is based on reliability centered maintenance. The goal is to have maximum safety and reliability with minimization of costs (Gerdes et al. 2016). Tasks are selected in a hierarchy of difficulty and cost, from lowest to highest. Each task must also pass the applicability and effectiveness criteria.

The ability of aircraft maintenance companies to offer services that are of the desired quality to their customers is the basis of a more sustainable performance (Mathiyazhagan et al., 2021). As defined by





Shrader and Siegal (2016), organizational performance is the extent to which businesses becomes more profitable and strengthen their ability to generate sustainable revenue to their owners. Additionally, Sun, Shahzad, and Razzaq (2022) define organizational performance as the ability of organizations to attain their long-term and short-term goals using the available resources. The level of compliance was another crucial measure of performance utilized in the study. A firm complying with the set policies and legal framework is more likely to be doing well in the market than one that is not complying. Overall, organizational performance among aircraft maintenance companies is about meeting the expectations of key stakeholders including the regulators, the general public, the shareholders, employees among others.

#### **Problem Statement**

Aircraft maintenance organizations (AMO's) face intense scrutiny on the sustainability of their economic, social and environmental performance. Interested parties range from employees, customers and trade associations to government agencies. According to (Fernandes et al., 2022), a strong focus on social sustainability may contribute to firms' relations with internal stakeholders (e.g. employees), external stakeholders (e.g. communities) and customers. The airline industry is a major contributor to the global economy that is continually expanding, with services extending to around 3.5 billion passengers and over 50 million tons of cargo (IATA, 2015). Aircraft maintenance is based on reliability centered maintenance which is aimed at enhancing safety and reliability of the aircrafts. Besides loss of business as a result of grounded aircraft around the world, periodic inspection and audits carried out by the regulator (KCAA) on AMO's found out rampant cases of non-compliance with the Specific Operating Provisions (SOPs) on Aircraft Maintenance. Further, there has been an upsurge in Aircraft Incidences and Accidents attributed to Mechanical and Technical Hitches owing to compromised maintenance process. Database by Aviation Safety Network (2023) documents 3646 occurrences of aircraft incidence and accidents globally from January 2023 to January 2024. Most aircraft accidents and incidences in Kenya have been mainly attributed to technical hitches, which lays blame to the aircraft maintenance companies. Empirical evidence has revealed the essence of employee social sustainability practices on employees performance. A study by Lin et al. (2021) for instance sought to evaluate the role played by social sustainability of employees on performance of state banks in Malaysia. The study found out that social sustainability through employee development and employee engagement/cooperation played an essential role in promoting organizational performance. A study by Wang et al. (2022) on the role played by employee social sustainability practices on employee performance revealed that social sustainability was integral for enhanced employee performance. Amrutha and Geetha (2020) while analyzing the relationship between employee safety and management support on performance revealed that organizational performance relied upon the commitment by the employees through their engagement and management support. Based on these studies, it is clear that employee social sustainability practices are fundamental to the modern organizations. Additionally, it is substantial that employees are critical to organizational performance, particularly the maintenance organizations. However, the previous studies have shown the need for a study in a local context, and focusing on different concepts to examine the role played by employee social sustainability on the performance of aircraft maintenance organization in Kenya.





## **Objectives**

- To examine the effect of employee development on performance of approved aircraft maintenance organizations in Kenya
- To assess the effect of employee safety on performance of approved aircraft maintenance organizations in Kenya
- To establish the effect of management support on performance of approved aircraft maintenance organizations in Kenya
- To determine the effect of employee cooperation on performance of approved aircraft maintenance organizations in Kenya

# **Hypotheses**

 $\mathbf{H}_{01}$ : Employee Development has no significant effect on performance of approved aircraft maintenance organizations in Kenya

 $\mathbf{H}_{02}$ : Employee safety has no significant effect on performance of approved aircraft maintenance organizations in Kenya

 $\mathbf{H}_{03}$ : Management Support has no significant effect on performance of approved aircraft maintenance organizations in Kenya

 $\mathbf{H}_{04}$ : Employee Cooperation has no significant effect on performance of approved aircraft maintenance organizations in Kenya

#### **Literature Review**

# **Theoretical Underpinning**

The study was anchored on the Resource-based view theory. The theory as proposed by Penrose (1959) and advanced by Barney (1991) upholds the need for organizations to focus on unique resources for them to be competitive. These resources are mainly the human resources or the employee skills and competencies. To enhance these resources and their uniqueness, Barney (1991) alludes that they ought to be developed through training and engaged through strong cooperation. Additionally, Barney (2003) indicated that the effectiveness of employees towards contributing to organizational performance can be strengthened through management support and assuring the employees of their safety while on duty. A sustainable firm rests on four pillars: social, physical, ethical, and business. Human resources, considered a strength of the firm, can be harnessed for formulating and executing strategies aimed at achieving organizational goals (Wiegel and Bamford, 2015). It is acknowledged that internal resources can be a potential source of competitive advantage. Golicic, Lenk, and Hazen (2020) studied the RBV of a firm and concluded that stakeholders themselves serve as a crucial resource for the company. In the aviation sector, developing a competitive advantage involves leveraging the creative potential of internal stakeholders such as workers, operators, and managers.





# **Empirical Review**

## Social Sustainability Practices

Sustainability has several definitions however one central concept is Elkington's (1998) triple bottom line (TBL), which combines environmental, social, and economic performance, which places social sustainability as a component of the TBL that deals with the management of human and societal capital. Sustainability is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their needs" (WECD, p. 8). Social sustainability is concerned with the human side of sustainability, including human rights (e.g. child labour and freedom of association), health and safety (e.g. safe working conditions and training), and community (e.g. charitable, philanthropic initiatives) (Hug et al 2013). Social failures represent aspects that can have detrimental impact on the wellbeing of employees, local communities or customers (Huq et al., 2016; Alghababsheh & Gallear, 2022)

## Employee Development

Employee development has been increasingly viewed as an investment in the future of organizations (Eglė & Živilė, 2018). To ensure sustainability and navigate diverse challenges, organizations must foster an environment that allows employees to continually learn (Harry, 2014). Given the focus on long-term considerations in sustainability, it is crucial to identify and cultivate the future skills and capabilities of employees. Examples of employee development include training programs, mentoring, and the promotion of lifelong learning practices (Ehnert, 2014). Training and knowledge enhancement through learning play a pivotal role in employee social sustainability (Husgafvel et al., 2015). Training stands out as one of the most effective HR practices contributing to high organizational performance and productivity, being a common element in any effective HR system. Linking training to employee social sustainability is rooted in the idea that supporting employee growth and development sustains a high-performing workforce (Husgafvel et al., 2015). Moreover, employees are typically perceived as creative, proactive, and deserving of continuous development.

#### Employee Safety

The failure to maintain the necessary safety conditions in the workplace can result in legal procedures. However, conventional and limited perspectives on safety have impeded improvements in employee wellbeing. HRM's core activities, aiming to support social sustainability in the workplace, involve fostering ergonomic conditions and promoting a healthy lifestyle and working style. Every organization is responsible for providing a working environment for employees that is free from risks, hazards, and diseases. Apart from the obvious ethical responsibility underpinning this stance, there is a belief that the way a firm treats its employees influences how employees, in turn, treat customers. Various interrelated choices exist to promote the integration of health and safety issues in the workplace. Health and safety encompass practices, decisions, or actions concerning the safety, health, and welfare of people in the workplace. Establishing a safety culture and climate involving hazard reporting, active communication, management commitment and leadership, employee participation, and training can effectively integrate H&S issues (Zohar, 2010). The use of suitable equipment and tools, along with the promotion of independent audits, represents critical choices for integrating H&S issues (Sadiq, 2012). Lastly, designing





and employing dedicated control mechanisms are additional ways to promote healthy workplaces (Bouten and Hoozee, 2016).

## Management Support

Top management commitment to support employees is important to achieving sustainable development (Ilyas et al., 2020; Sharari et al. 2024). Top management needs to visualize and envision and implement systems that are productive and sustainable, with a focus on social equity (Van Dametal., 2016; Sharari et al. 2024). This means ensuring that employees are the focal point, in that their interests and values are respected (McDonald and Hite, 2018). As a result, organizations can be able to strengthen their relationships with local stakeholders, giving them an advantage over their competitors (Sharari et al. 2024). The foundation of every organizational success story lies in the support and commitment of its management. Establishing a friendly and supportive organizational environment is crucial for building effective teams and boosting employee performance (Danish et al., 2014). An open and supportive workplace is essential for fostering a sense of security among employees, encouraging deep engagement with their responsibilities. This, in turn, promotes cohesion within the organization and enables employees to recognize their value within the organizational structure. Supportive leaders play a pivotal role in influencing employee engagement, leading to increased involvement, satisfaction, and passion for their work. Support within organizations manifests in various forms depending on the situation, ranging from direct regulatory assistance to indirect psychological support, each with varying degrees of importance and impact. Different forms of support have been linked to various outcomes such as job stress, turnover intention, job satisfaction, and extra-role behaviors (Wang et al., 2022). These attitudinal and behavioral outcomes serve as indicators of the extent to which employees experience social sustainability and can be utilized as assessment tools for organizational outcomes. Such efforts contribute to enhancing employees' perception of management support as value-adding and foster increased commitment to the organization. Therefore, in this paper, management support will be regarded as a critical element enabling employee social sustainability.

## Employee Cooperation

Employee cooperation stands in contrast to employee competition, offering the potential for a synergy effect. Through teamwork and the sharing of experiences, cooperation fosters knowledge sharing and enhances overall performance. The literature, particularly in the linkage of Human Resource Management (HRM) and sustainability, emphasizes the significance of cooperation in employee relations, development, and well-being (Ehnert, 2014). Despite the long-standing focus on employee engagement in research, a universal definition of employee cooperation remains elusive. Cooperation can manifest as a trait, a psychological state (e.g., contentment or commitment), or a pattern of behavior (e.g., personal initiative). Employees possessing proactive personality traits, along with personal resources such as hope, resilience, and self-efficacy, tend to experience lower work stress, higher motivation, and greater engagement (Bakker & de Vries, 2021). In a mobile workplace setting, employee cooperation has been shown to enhance personal performance, thereby contributing to improved organizational performance (Wang et al., 2021).





## **Conceptual Framework**

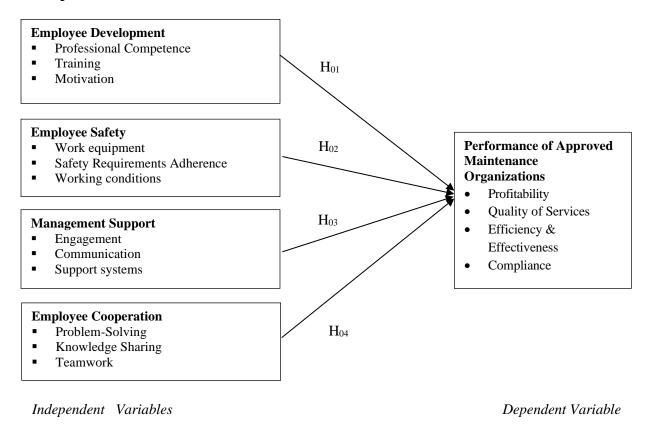


Figure 1: Conceptual Framework

# Methodology

## Research Design, Population, and Sampling

The study utilized explanatory research design, the study aims to assess the extent of association between the variables, considering the impact of one variable on another. This design was supported by the positivism research philosophy used in the study, where emphasize empirical data and observable phenomena was upheld as stipulated in positivism paradigm. The target population for this study comprised of 41 active approved Aircraft Maintenance Organizations in Kenya. The unit of observation was maintenance engineers who are responsible for aircraft maintenance, they were deemed to be suitable in the context of employee social sustainability practices with respect to organizational performance. A total of 164 respondents participated in the study, representing four respondents per organization.

#### **Data Collection Instruments and Procedures**

Primary data was collected from respondents using structured questionnaires. The questions were developed, rephrased and selected to suit the context of the study to represent the variables in the research, moreover the questionnaire is calibrated using a five-point Likert scale with anchors ranging from 'strongly agree' (SA=5) to 'strongly disagree' (SD=1). All the measurement items in the study are adapted from the relevant literature, with minor modifications and re-wording to ensure contextual consistencies. The





questionnaire was administered both physically and online through Google forms. This was so as to enhance response rate by ensuring that the respondents participated even when unreachable physically. To effectively administer the questionnaire, two trained research assistants were utilized.

#### **Ethical Considerations**

The study upheld ethical considerations where informed consent was highly regarded. The respondents were informed of the intended use of the study's findings, thus enabling them to participate with the intention of the study in mind. The study further upheld confidentiality where the respondents were asked not to indicate any personal information. The information provided was also held with utmost confidentiality.

## **Data Analysis**

The data was analyzed using descriptive and inferential statistical techniques. Descriptive statistics give the profile of the respondents i.e. frequencies and their percentages whereas Inferential statistics makes use of Linear Multiple Regression Model to determine the effect of explanatory variables. Multiple Regression Analysis studies the relationship between a dependent (response) variable and independent variable (predictor variables). The regression model was given by the equation below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$
, (i=1, 2, 3, 4,)

Where:

Y: Represent: Performance of Approved Aircraft Maintenance Organizations

X<sub>1</sub>: Represent: Employee Development

X<sub>2</sub>: Represent: Employee safetyX<sub>3</sub>: Represent: Management SupportX<sub>4</sub>: Represent: Employee Cooperation

 $\beta_0$ : Represent: Constant

 $\beta_1 - \beta_4$ : Represent: Regression coefficients

ε: Represent: Error term

# **Findings and Discussions**

#### **Response Rate of the Study**

The questionnaires were administered to all the 164 sampled respondents. Out of the 164 questionnaires issued, 133 were dully filled and returned for analysis. This represented a response rate of 81.1%, with none response of 18.9%. According to Saunders (2019), a response rate of between 50% and 70% is adequate to represent the sampled respondents. This implies that the study's response rate of 81.1% was within the threshold and considered adequate for the study.





## **Reliability and Validity**

## Reliability Test Results

Given that the study's data were produced using responses at many scales, it was considered essential to assess its dependability (Agus, 2010). Cronbach's alpha was used to assess the internal consistency of each factor. The reliability analysis was performed by computing the Cronbach's alphas for the primary constructs in the study. Nonessential items were removed to enhance simplicity and efficiency. The outcome of the results presented in table 1 revealed that the Cronbach's alpha coefficients for the three primary constructs surpassed the recommended level of 0.70 proposed by Nunnally (1994).

Table 1: Reliability Statistics

Variable	Cronbach's Alpha	N of Items
Employee Development	.953	8
Employee Safety	.924	9
Management Support	.903	6
Employee Cooperation	.919	8
Performance	.906	7

# Validity Test

Validity of the obtained results was established using KMO and Bartlett's test as shown in Table 4.3. As the results portray, the KMO value was 0.694 which was higher than the 0.4 threshold, implying that the data was valid. Moreover, the Chi-square for Bartlett's test of sphericity was 72.416 at a level of significance of 0.000<0.05. This implies that the data was valid thus the analysis would have yielded adequate and valid results for hypothesis testing.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		
Bartlett's Test of Sphericity	Approx. Chi-Square	72.416
	df	27
	Sig.	.000

#### **Diagnostic Test Results**

## Normality Test

Normality test was carried out to establish whether the obtained data was normally distributed. The 19 results 19 in 19 Table 19 319 showed 19 that 19 the 19 significant 19 values 19 of 19 all 19 the 19 variables 19 were 19 greater 19 than 19 0.05 19 which 19 imply 19 that 19 the 19 data 19 was 19 normally 19 distributed.





Table 3: Normality Test Results

	Kolmogorov-Smirnova			Shapiro-V	Shapiro-Wilk	
	Statistic	df	Sig.	Statistic	df	Sig.
Employee Development	0.373	133	0.986	0.611	133	0.067
Employee Safety	0.288	133	0.089	0.599	133	0.073
Management Support	0.26	133	0.156	0.618	133	0.214
Employee Cooperation	0.316	133	0.425	0.475	133	0.329
Performance	0.212	133	0.372	0.756	133	0.413

## Linearity Test

Linearity test was carried out to establish whether there was a linear relationship between predicted variable and the predictor variables. The results as shown in Figure 2 revealed that the regression line cut across the residuals, which on the other hand had a positive gradient. This is an indication that linearity was observed in the data, thus being fit for regression analysis.

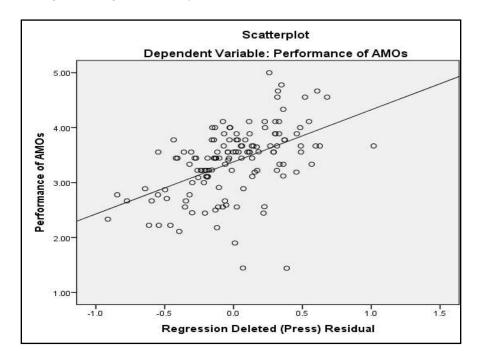


Figure 2: Scatter plot for linearity test

#### Multicollinearity Test

Results19 in19 the19 Table19 49 shows19 that19 the19 data19 has19 no19 serious19 multicollinearity.19 All19 the19 variables19 had9 average19 tolerance values19 above19 0.1019 while19 the19 variance19 inflated19 factors19 for19 all19 the19 variables19 is19 less19 than19 10.19 This19 shows19 absence19 of19 multicollinearity19 and19 is19 in19 concurrence19 with19 Boateng19 and19 Abaye19 (2019)19





assertion19 that19 VIF19 less19 than19 1019 is19 considered19 devoid19 of19 multicollinearity.19 Tolerance19 below19 0.219 signifies19 a19 potential19 problem.19 Little19 multicollinearity19 is19 implied19 when19 tolerance19 is19 close19 to19 1.

Table 4: Multicollinearity Test Results

Variables	Tolerance	VIF
Employee Development	.503	1.987
Employee Safety	.514	1.946
Management Support	.522	1.917
Employee Cooperation	.530	1.885

Correlation Analysis Results

As the results on Table 5 portray, the Pearson Correlation (R) between Employee Development and Performance was 0.735 at a P-value of 0.000<0.01 implying that Employee Development has a strong correlation of 73.5% with the Performance. The Pearson correlation coefficient for the Employee Safety was 0.706 at a significant level of 0.000<0.01. This implies that Employee Safety has a strong (70.6%) and significant correlation with Performance. Management Support had a Pearson correlation (R) of 0.754 implying that there is a 75.4% correlation between management support and Performance. Moreover, employee cooperation had Pearson correlation coefficient (R) of 0.672 implying that employee cooperation had a strong correlation with Performance of approved aircraft maintenance organizations in Kenya.

Table 5: Correlation Analysis Results

	Perfo	ormance of AMOs	Employee	Employee	Management	Employee
			Development	Safety	Support	Cooperation
Performance of	R	1				
AMOs	Sig.					
	N	133				
Employee	R	.735**	1			
Development	Sig.	.000				
	N	133	133			
Employee Safety	R	.706**	.584**	1		
	Sig.	.000	.000			
	N	133	133	133		
Management	R	.754**	.607**	.601**	1	
Support	Sig.	.000	.000	.000		
	N	133	133	133	133	
Employee	R	.672**	.602**	.594**	.554**	1
Cooperation	Sig.	.000	.000	.000	.000	
	N	133	133	133	133	133
**. Correlation is s	ignific	ant at the 0.01 level	(2-tailed).			



# **Hypotheses Testing**

A multiple linear regression model was carried out to establish the individual relationship between each of the social sustainability practices and Performance of approved aircraft maintenance organizations in Kenya. The findings as shown in Table 6 revealed that the R<sup>2</sup> for the model was 0.750, an indication that 75.0% variation in performance of approved aircraft maintenance organizations in Kenya is as a result of combined effect of the employee social sustainability practices considered in this study (Employee Development, Employee Safety, Management Support, and Employee Cooperation). The ANOVA results on the other hand revealed that the F-value for the model was 95.880 at a significant level of 0.000<0.05. This is an indication that the model could significantly predict the relationship between employee social sustainability practices and Performance of approved aircraft maintenance organizations in Kenya.

Model Summary Model Std. Error of the Estimate R R Square Adjusted R Square 1 .866a .750 .742 .32518 **ANOVA** Model Sum of Squares df Mean Square F Sig. 4 d000Regression 40.555 10.139 95.880 Residual 13.535 128 .106 Total 54.091 132 Regression Coefficients Model Unstandardized Standardized Sig. Coefficients Coefficients В Std. Error Beta 1 (Constant) .107 .571 .187 .569 .281 .061 .288 4.623 **Employee Development** .000 **Employee Safety** .189 .051 .227 3.678 .000 .338 .059 Management Support .348 5.686 .000 **Employee Cooperation** .187 .066 .171 2.823 .006 a. Dependent Variable: Performance of Approved Aircraft Maintenance Organizations

Table 6: Regression Model Results

Employee Development and Performance of Approved Aircraft Maintenance Organizations

The model results on Table 6 revealed that the Beta coefficient ( $\beta$ ) for employee development was 0.281 at a significant level of 0.000<0.05. This is an indication that a unit change in employee development would influence the performance of approved aircraft maintenance organizations by 28.1%. Moreover, the P-value implies that employee development significantly influences the performance of approved aircraft maintenance organizations. The findings are in line with those by Harasheh and Provasi (2023) who established that the ability of employee development had an instrumental role to play in steering efficient and effective operational success of modern organizations.





## Employee Safety and Performance of Approved Aircraft Maintenance Organizations

The study sought to establish the statistical relationship between employee safety and performance of approved aircraft maintenance organizations in Kenya. The model results as shown in Table 6 revealed that the Beta coefficient ( $\beta$ ) for the employee safety was 0.189. This is an implication that a unit change in employee safety would influence performance of approved aircraft maintenance organizations in Kenya by 0.189 units. The P-value for the variable was 0.000 which is less than the standard p-value of 0.05. This implies that there is a significant relationship between employee safety and performance of approved aircraft maintenance organizations in Kenya. The findings concur with those by Winarna *et al.* (2021) who established that employee safety significantly contributes to effective performance by steering employee productivity and commitment. Ndegwa and Mungai (2019) further noted that through employee safety, organizations were able to streamline their internal processes and be more effective in delivering their key mandates.

# Management Support and Performance of Approved Aircraft Maintenance Organizations

The regression model results for the relationship between management support and Performance of approved aircraft maintenance organizations are as shown in Table 6. As the results portray, the Beta coefficient for management support was 0.338, which is an indication that a unit change in management support would influence the performance of approved aircraft maintenance organizations in Kenya by 0.338 units equivalent to 33.8%. The P-value of 0.000<0.05 is an indication that there is a significant relationship between management support and Performance of approved aircraft maintenance organizations in Kenya. The findings concur with those by Budiana *et al.* (2019) who established that management support played an instrumental role in enhancing accountable workforce thus steering organization performance.

## Employee Cooperation and Performance of Approved Aircraft Maintenance Organizations

The regression model results for the relationship employee cooperation and Performance of approved aircraft maintenance organizations are as shown in Table 6. As the results portray, the Beta coefficient for employee cooperation was 0.187, which is an indication that a unit change in management support would influence the performance of approved aircraft maintenance organizations in Kenya by 0.187 units equivalent to 18.7%. The P-value of 0.006<0.05 is an indication that there is a significant relationship between employee cooperation and performance of approved aircraft maintenance organizations in Kenya. In conclusion, organizations that are committed to streamlining the cooperation and collaboration among employees stood a better chance to have a more learning and committed workforce thus strengthening their Performance.

# **Conclusion and Recommendations**

## Conclusion

The study concluded that employee development is an instrumental social sustainability practice that plays an integral role in enhancing organizational performance. From the findings, it was established that most of the organizations did not effectively carry out training and support skills development of the workforce,





and thus exposed them to a demotivated workforce. This explains why most of the surveyed approved aircraft maintenance organizations did not meet most of the performance metrics, an indication that the firms have failed to achieve the full benefits of their workforce due to ineffective embrace of employee development.

The study concluded that employee safety is instrumental in steering the performance of approved aircraft maintenance organizations in Kenya. As one of the employee social sustainability practices, employee safety ensures a healthier and more committed workforce thus promoting organizations performance. Most of the approved aircraft maintenance organizations have failed to achieve their full potential in terms of performance as a result of not effectively upholding employee safety.

The study further concluded that management support is a fundamental employee social sustainability practice that plays a significant role in steering the performance of approved aircraft maintenance organizations in Kenya. The support from the senior management brings the employees closer to the organization thus enabling them to effectively perform their duties.

Finally, the study concluded that employee cooperation is a significant employee social sustainability practice that plays an integral role in enhancing the performance of approved aircraft maintenance organizations. The approved aircraft maintenance organizations in Kenya therefore have failed to achieve their long-term and short-term goals through ineffective embrace of employee cooperation as one of the employee social sustainability practices.

#### Recommendations

The study recommends that there is need for the management of the approved aircraft maintenance organizations in Kenya to uphold employee development as a way of promoting employee performance thus steering their performance.

The management of the approved aircraft maintenance organizations in Kenya has a duty to play in ensuring that the safety of their workforce is achieved. It is necessary for the management to set clear policies on safety standards as well as support the safety of the employees through provision of safety gear and training on occupation safety.

The top management of the approved aircraft maintenance organizations in Kenya has a role to play in ensuring that their organizations' workforce is supported and enabled to achieve the organizational goals. Through actively participating in supporting the employees, the management would create a committed workforce that is instrumental for better organizational performance.

The study recommends that there is need for the management of approved aircraft maintenance organizations to be steadfast in promoting employee cooperation and collaboration. Promoting employee teamwork would be an essential move towards integrating a learning environment where people can share and learn from one another. This will grow a collective and focused team that can strongly foster organizational performance.





The aviation industry is an integral sector that the government regulates to steer its success and ensure it is run effectively. The aircraft maintenance companies play a crucial role in this sector as they hold the most important role of maintaining the aircrafts. The study therefore recommends the need for the government to enhance the policies to also include the employee welfare through social sustainability practices as a way of enhancing their commitment and continued performance.

The government is keen on the safety of the aircrafts operated in the country. This has been articulated in the Civil Aviation Act (Revised) 2012, and the National Aviation Safety Plan of 2022. However, these aircrafts are maintained by the employees in the approved aircraft maintenance companies, an indication that these employees are at the centre of the safety guaranteed by the aircrafts and other civil aviation stakeholders. It is therefore recommended that the government takes the initiative to have clear policies and guidelines on how the aircraft maintenance companies ought to take care of their employees to ensure they effectively deliver their mandates. The policies should emphasize on development of these employees, their safety as well as the support from the management. These measures are integral in achieving the collective mandate of ensuring a safe and efficient air transport sector in the country.

#### **Limitation and Future Direction**

The study faced several limitations which were controlled and mitigated to ensure the findings were obtained effectively. One of the limitations was the delays from the sampled respondents in giving back the filled questionnaires. However, constant reminders were embraced where the researcher constantly made site visits and calls. Additionally, the researcher was flexible by embracing an online questionnaire to enable the respondents fill and return their questionnaires from wherever they were. Another limitation was some respondents hesitating to give information on the basis of exposing internal information to outsiders. This was mitigated by assuring the respondents of confidentiality.

The study proposed the following areas for further studies. This study focused on the approved aircraft maintenance organizations in Kenya. It is recommended that a similar study focuses on other industries so as to establish the extent to which the industries have embraced employee social sustainability practices and their influence on the organizations' performance. Further, the study focused on employee social sustainability practices and their role in the performance of approved aircraft maintenance organizations in Kenya. It is recommended that a similar study addresses other aspects apart from the four employee-social sustainability practices (development, safety, management support and cooperation) that could as well determine the performance of approved aircraft maintenance organizations.





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# Appendix I: Approved Aircraft Maintenance Organizations in Kenya

No.	Aircraft Maintenance Organizations
1.	Bluebird Aviation (K) Ltd
2.	Rudufu Limited
3.	Standard Aero
4.	Hawk Aviation Kenya
5.	Aircare Avionics Communications Ltd
6.	NDT Support Services
7.	Blackbox Flight Data System
8.	Phoenix Aviation
9.	Aircraft Leasing Services
10.	Aircare Aero Services (K) Ltd
11.	Tailwind Solutions
12.	Pratt and Whitney Canada
13.	AirKenya Express
14.	Safarilink Aviation
15.	Aero Instrumentation
16.	Kenya Airways Ltd
17.	Mission Aviation Fellowship (MAF aviation)
18.	Africa Inland Mission (AIM Air)
19.	Bush Air Safaris
20.	Buff Air Services Limited
21.	Skyward Express Limited
22.	Airworks
23.	Kenya Police Airwing
24.	Lady Lori Kenya Limited
25.	Desert Locust Control Organization
26.	Kasas Limited
27.	Freedom Air Express
28.	Z.Boskovic Air Charters Ltd
29.	Penial Air Limited
30.	Kenya Wildlife Services
31.	Helint Aviation
32.	East African Air Charters
33.	Renegade Air
34.	Jetways Airline Limited
35.	Dragon Fly Aviation
36.	Planes for Africa Limited
37.	Air Traffic Limited
38.	Instrumentation Limited
39.	African Express Airways





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40.	Safari Aviation
41.	Propulsion Systems Limited

Source: KCAA (2023)



