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Clan Culture, Corporate Governance and Sustainable Performance in African Aviation Authorities

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Abstract:

Sustainability remains a critical challenge for public institutions in Africa, particularly in sectors such as aviation where regulatory complexity and resource constraints hinder long-term performance. Despite growing emphasis on governance reforms, limited attention has been given to how organizational culture interacts with governance structures to influence sustainability outcomes. This study investigated the direct and mediating relationships between clan culture, corporate governance, and sustainability performance—covering economic, environmental, and social dimensions—within African Civil Aviation Authorities (ACAAs). Grounded in the Resource-Based View (RBV) theory, a quantitative, cross-sectional research design was employed, drawing data from 371 managers across 54 aviation regulatory institutions. Data were collected through structured questionnaires and analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The results revealed that clan culture positively and significantly enhances all three dimensions of sustainability performance, underscoring its role in fostering collaboration, innovation, and accountability. However, corporate governance demonstrated mixed mediation effects, negatively mediating the relationship between clan culture and economic performance while showing no significant mediation for environmental and social performance. The study extends the RBV by emphasizing the contextual dynamics of internal resources and governance systems in African public institutions. It is therefore recommended that ACAAs strengthen governance frameworks that complement rather than constrain culturally driven sustainability initiatives to achieve long-term organizational resilience and performance.

Keywords:

Clan Culture, Sustainability Performance, Economic Sustainability Performance, Environmental Sustainability Performance, Social Sustainability Performance

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Introduction

In recent years, sustainability discourse in the African aviation industry has advanced considerably, driven by heightened awareness of economic, environmental, and social accountability (Okafor, 2022; Sorsa & Bona Sánchez, 2024). Despite this progress, limited research has examined corporate governance as a mediating variable between organizational culture and sustainability performance (Bandora, 2022; Aigbavboa et al., 2023). Much of the existing literature treats culture and governance as independent determinants of performance without examining the mechanisms through which governance translates cultural values into sustainability practices (Anene, 2021; Zia & Burton, 2023). This oversight is particularly significant for African Civil Aviation Authorities (ACAAs), where cultural norms and governance structures are closely intertwined and jointly shape decision making, accountability, and long-term strategic direction (Fregoni, 2025). Broader sustainability studies suggest that governance can act as a structural "bridge" that channels cultural norms into measurable outcomes through oversight, ethical guidance, and performance monitoring (Burger, 2025; Lazar et al., 2022). However, this mediating role remains under investigated in African aviation, where governance practices are often fragmented, compliance driven, and poorly integrated with cultural realities (Moganane, 2024; Suwannapirom & Pranee, 2023). This gap limits the institutionalization of sustainability as a systemic practice rather than a symbolic commitment (Thendu, 2023).

Within this limited research landscape, clan culture emerges as a particularly important yet complex organizational factor. Rooted in collectivism, mutual respect, and a shared sense of belonging, clan culture reflects the communal ethos prevalent in many African organizations (Opiyo, 2023; Sharma & Sharma, 2022). It emphasizes collaboration, trust, and participatory decision making, thereby strengthening employee identification with organizational goals (Watiri, 2022). Economically, clan culture promotes teamwork and shared accountability, which enhance productivity, creativity, and adaptive capacity which are key requirements in the dynamic aviation environment (Kimathi, 2024; Fregoni, 2025; Anene, 2021). Environmentally, clan culture can support sustainability by cultivating shared ecological responsibility among employees (Suwannapirom & Pranee, 2023). When stewardship becomes a collective value, employees are more likely to adopt eco-friendly behaviors such as waste reduction, energy conservation, and adherence to environmental standards (Thendu, 2023). Kenya Airways' employee driven sustainability efforts illustrate how cultural cohesion can reduce waste and emissions (Opiyo, 2023). Effective governance is essential to ensure that such cultural norms translate into consistent policy implementation and monitoring (Hussein, 2024). Socially, clan culture reinforces inclusivity, community engagement, and trust, which are central dimensions of corporate social responsibility (Watiri, 2022; Sharma & Sharma, 2022). Emphasis on empathy and belonging enhances internal cohesion and strengthens relations with external stakeholders, particularly communities

surrounding airports and passengers who rely on safety and service quality (Aigbavboa et al., 2023). Clan culture's alignment with stakeholder theory further promotes employee well being and organizational legitimacy (Freeman, 2010; Burger, 2025; Lazar et al., 2022).

However, clan culture's strengths can produce adverse effects when governance is weak. Loyalty driven norms may evolve into nepotism, favoritism, and reduced meritocracy in the absence of robust governance systems (Moganane, 2024; Bandora, 2022). Weak governance has historically contributed to inefficiencies and sustainability failures in African aviation, as seen in the oversight breakdowns at South African Airways (Moganane, 2024) and persistent operational challenges within the East African Community (Bandora, 2022). These cases highlight the need for governance systems that balance cultural cohesion with institutional accountability to advance sustainable outcomes (Fregoni, 2025). The limited empirical understanding of how corporate governance mediates the relationship between clan culture and sustainability performance remains a central challenge. Existing governance frameworks often operate independently of cultural realities, emphasizing compliance at the expense of leveraging cultural strengths (Zia & Burton, 2023). Consequently, aviation organizations struggle to translate the cooperative ethos of clan culture into improved sustainability performance across economic, environmental, and social dimensions (Suwannapirom & Pranee, 2023; Thendu, 2023; Lazar et al., 2022). Environmental initiatives remain reactive, economic inefficiencies persist, and social programs often lack meaningful stakeholder engagement (Kimathi, 2024; Burger, 2025; Watiri, 2022).

Understanding this mediating relationship is essential for strengthening both theory and practice. It clarifies how governance mechanisms—board oversight, ethical leadership, accountability systems—convert cultural values into structured sustainability outcomes (Aigbavboa et al., 2023; Bandora, 2022). It also contributes to wider debates on governance reform in African state-owned enterprises, where cultural dynamics and bureaucratic constraints often clash (Moganane, 2024; Burger, 2025). Finally, addressing this gap aligns with global calls for sustainable governance in aviation, particularly in regions confronting environmental pressures and regulatory complexity (Hussein, 2024; Suwannapirom & Pranee, 2023). Strengthening the alignment between governance and clan culture can enhance sustainability oriented identity, competitiveness, and long term resilience across African aviation systems (Thendu, 2023; Lazar et al., 2022; Burger, 2025).

The study therefore seeks to achieve the following research objectives:

1. To examine the effect of clan culture on economic sustainability performance among ACAAs.
2. To establish the effect of clan culture on environmental sustainability performance among ACAAs.
3. To examine the effect of clan culture on social sustainability performance among ACAAs.

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4. To assess the mediating role of corporate governance on the relationships between clan culture and sustainability performance dimensions (economic, environmental, social).

Literature Review

Theoretical Framework: Resource Based View Theory

The Resource-Based View (RBV) theory, advanced by scholars such as Penrose (1959), Wernerfelt (1984), Rumelt (1984), and later refined by Barney (1991), emphasizes that an organization's sustained competitive advantage depends on its unique internal resources and capabilities. The theory posits that firms achieve long-term success when they effectively utilize resources that are Valuable, Rare, Inimitable, and Non-substitutable (VRIN) (Barney, 1991; Peteraf, 1993). These resources include tangible assets such as infrastructure and finance, as well as intangible ones such as corporate culture, leadership, and governance systems. Within the African Civil Aviation Authorities (ACAAs), clan culture—characterized by collaboration, loyalty, and shared values—can be seen as a unique intangible resource that promotes teamwork, innovation, and sustainability-oriented behaviors (Opiyo, 2023; Sharma & Sharma, 2022). When properly leveraged, such cultural capital can strengthen organizational learning and adaptability, ultimately enhancing economic, environmental, and social performance.

However, as the RBV acknowledges, the mere possession of valuable resources does not automatically lead to superior performance; their effective utilization depends on governance mechanisms that manage and align them with organizational goals (Teece et al., 1997). Corporate governance therefore acts as a mediating capability that transforms cultural resources into measurable sustainability outcomes by institutionalizing accountability, transparency, and ethical conduct (Aigbavboa et al., 2025). Despite its relevance, the RBV has limitations. It has been criticized for overlooking external environmental factors (Priem & Butler, 2001), adopting a static view of resources (Newbert, 2007), and presenting challenges in measuring intangible assets such as culture and governance (Kraaijenbrink et al., 2010). Nonetheless, its focus on internal resources offers valuable insights into how African aviation authorities can strategically harness their cultural strengths through governance structures to achieve sustainable competitive advantage. In this study, RBV provides the theoretical basis for examining how clan culture, mediated by corporate governance, drives sustainability performance across the economic, environmental, and social dimensions (Lazar, Bocean, & Nicolescu, 2022; Zia & Burton, 2023).

Clan Culture

Clan culture, defined by a family like atmosphere, collaboration, and employee participation, strengthens trust, communication, and cohesion (Raziq et al., 2024). In aviation, such teamwork is vital for ensuring safety and operational efficiency (Watiri, 2022). By prioritizing employee satisfaction, personal development, and recognition, clan oriented organizations experience higher job satisfaction and

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reduced turnover (Elnagar et al., 2022). This supportive environment also enhances safety management, as employees feel empowered to report risks and engage in safety protocols (Thendu, 2023). Consequently, clan culture promotes morale, teamwork, and proactive safety behavior, protecting both staff and passengers (Fakhri et al., 2021; Suifan, 2021).

Economic Sustainability Performance

Economic sustainability performance in aviation emphasizes long term financial viability by integrating profitability with environmental constraints (Asker & Kiracı, 2022). Stakeholder engagement further strengthens economic outcomes by promoting trust, transparency, and alignment between organizational goals and societal expectations (Al Sarrah et al., 2021). Circular economy principles also enhance sustainability by improving resource efficiency and reducing waste, including investments in sustainable aviation fuels that support decarbonization (Dias et al., 2022; Barke et al., 2022). Overall, economic sustainability in aviation requires a multidimensional approach that balances profitability, innovation, and environmental stewardship to ensure long term sectoral resilience (Leal Filho et al., 2023; Sai, 2024).

Environmental Sustainability Performance

Environmental sustainability performance in aviation can be understood through resource efficiency, regulatory compliance, and stakeholder engagement. Resource efficiency minimizes waste and emissions while balancing environmental protection with economic progress (Leal Filho et al., 2023). Regulatory compliance ensures adherence to standards, reducing legal and reputational risks (Abdi, Li, & Càmara Turull, 2022). Stakeholder engagement integrates community, government, and customer perspectives, fostering shared accountability (Al Sarrah, Ajmal, & Mertzanis, 2021). Innovations such as hydrogen fuel technology demonstrate progress in reducing emissions (Yusaf et al., 2022), while sustainability disclosures enhance transparency and legitimacy, despite ongoing economic ecological trade offs (L'Abate et al., 2023; Balli & Caliskan, 2021).

Social Sustainability Performance

Social sustainability performance in aviation encompasses social equity, corporate social responsibility, and stakeholder engagement. Social equity promotes fairness, inclusivity, and equitable employment while strengthening community relations (Heyes et al., 2023). Corporate social responsibility emphasizes ethical conduct, transparent operations, and sustainability disclosures that build stakeholder trust (Arian, Sands, & Tooley, 2023; L'Abate et al., 2023). Stakeholder engagement fosters dialogue with employees, customers, and communities to enhance collaboration, service quality, and sustainable innovation (Al Sarrah, Ajmal, & Mertzanis, 2021). Advancing social sustainability requires

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stronger alignment with ESG standards and coordinated frameworks, improving accountability and supporting long term development (Abdi, Li, & Càmara Turull, 2022; Raimundo, Baltazar, & Cruz, 2023).

Empirical Literature

Effect of clan culture on economic sustainability performance

Empirical studies demonstrate that clan culture plays a pivotal role in fostering trust, collaboration, and shared values that significantly enhance organizational effectiveness and economic sustainability (Iqbal & Parray, 2025). Li et al. (2025) found that trust cultivated within clan-oriented environments positively influences audit quality and overall financial performance. Tang et al. (2024) further revealed that clan culture promotes natural resource disclosure, encouraging transparency and responsible resource management. Similarly, Aslam et al. (2025) observed that clan culture enhances knowledge sharing among SMEs, leading to innovative practices that strengthen sustainable performance. Wang and Huang (2022) also confirmed a strong correlation between corporate culture and sustainability in Chinese SMEs, while Woo and Kang (2021) emphasized the role of employee environmental capability as a cultural outcome that advances sustainability initiatives. In addition, Medina-Álvarez and Sánchez-Medina (2023) demonstrated that clan culture positively shapes sustainability practices in ecotourism enterprises. Based on studies conducted by Li et al. (2025), Tang et al. (2024), Aslam et al. (2025), Woo and Kang (2021) and Wang and Huang (2022), the study hypothesizes that:

H1: Clan culture significantly and positively influences economic sustainability performance

Effect of clan culture on environmental sustainability performance

Mohamed et al. (2025) demonstrated that clan-oriented environments strengthen employee environmental capabilities, thereby improving corporate sustainability initiatives. Similarly, Zhang (2025) revealed that organizations with strong clan cultures are more likely to disclose natural resource information transparently, fostering accountability and responsible environmental management. Shuliang et al. (2024) highlighted that clan culture facilitates eco-innovation by creating an atmosphere where employees are empowered to develop sustainable solutions. In Nigeria, Adebayo et al. (2020) found that integrating sustainability-focused cultural values enhances environmental performance, while Medina-Álvarez and Sánchez-Medina (2023) emphasized that shared values in ecotourism businesses reinforce collective environmental commitment. Furthermore, Deirmentzoglou et al. (2020) and Abdulrahim et al. (2020) identified collaborative and strategic postures as mediating mechanisms linking clan culture to sustainability outcomes. Based on studies conducted by Mohamed et al. (2025), Zhang (2025), Shuliang et al. (2024), Medina-Álvarez and Sánchez-Medina (2023), Adebayo et al. (2020), Deirmentzoglou et al. (2020) and Abdulrahim et al. (2020), the study hypothesizes that:

H2: Clan culture significantly and positively influences environmental sustainability performance

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Effect of clan culture on social sustainability performance

Empirical evidence indicates that clan culture promotes trust, employee engagement, and social responsibility, thereby enhancing overall sustainability outcomes (Tuan & Ferasso, 2025). Irfan et al. (2024) established a strong positive relationship between organizational culture and social sustainability within the construction industry, highlighting that collaborative cultures effectively promote sustainable practices. Similarly, Bhuiyan et al. (2020) found that organizations with robust clan cultures outperform others in corporate social responsibility (CSR) and overall organizational performance, particularly in emerging economies. Li et al. (2025) demonstrated that trust, cultivated through clan-oriented structures, improves audit outcomes and strengthens sustainability reporting. Woo and Kang (2021) reinforced this by showing that employee environmental capabilities are significantly influenced by supportive corporate cultures. Tang et al. (2024) further revealed that clan culture encourages greater natural resource disclosure, reflecting transparency and accountability. Ali et al. (2023) noted that organic, clan-based cultures strengthen CSR outcomes through enhanced employee citizenship behavior. Based on studies conducted by Irfan et al. (2024), Li et al. (2025), Bhuiyan et al. (2020), Woo and Kang (2021), Tang et al. (2024) and Ali et al. (2023), the study hypothesizes that:

H3: Clan culture significantly and positively influences social sustainability performance within organizations

Mediating role of corporate governance

The interaction between clan culture, corporate governance, and economic sustainability performance has become an important area of focus in contemporary organizational research. Clan culture, defined by collaboration, shared values, and a family-like atmosphere, is known to enhance innovation, trust, and employee commitment—factors that drive organizational performance and long-term viability (Silwal, 2022). However, the effectiveness of clan culture in achieving economic sustainability depends heavily on the presence of sound corporate governance frameworks. Wang et al. (2022) found that corporate governance reforms within clan culture contexts improve management practices, leading to stronger financial outcomes and sustainable growth. Furthermore, Huynh (2020) emphasized that human resource management acts as a mediating mechanism between organizational culture and performance, reinforcing the importance of governance systems in aligning cultural values with economic objectives. Ethical leadership also serves as a vital governance component, shaping corporate social responsibility and performance outcomes (Alkhadra et al., 2023). Based on studies conducted by Silwal (2022), Wang et al. (2022), Huynh (2020) and Alkhadra et al. (2023), the study hypothesizes that:

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H4: Corporate governance mediates the relationship between clan culture and economic sustainability performance

The interconnection between clan culture, corporate governance, and environmental sustainability performance has emerged as a critical focus in organizational and sustainability research. Wendry et al. (2023) assert that effective governance frameworks reinforce the positive influence of clan culture on firm sustainability by improving coordination, planning, and accountability mechanisms. Shahwan and Fathalla (2020) emphasized that governance promotes transparency and accountability, serving as a conduit for improved sustainability performance. Abdelwahed and Soomro (2024) further illustrated how governance and organizational culture operate synergistically to enhance sustainability-driven behaviors. Moreover, Abdulrahim et al. (2020) revealed that strategic posture acts as a mediator linking organizational culture to sustainability performance, strengthening the governance–culture interface. Silwal (2022) highlighted the role of innovation shaped by both governance and clan culture as a driver of sustainability-oriented financial outcomes. Based on studies conducted by Wendry et al. (2023), Shahwan and Fathala (2020), Abdelwahed and Soomro (2024), Abdulrahim et al. (2020) and Silwal (2022), the study hypothesizes that:

H5: Corporate governance mediates the relationship between clan culture and environmental sustainability performance

The relationship between clan culture and social sustainability performance is multifaceted, with corporate governance serving as a crucial mediating mechanism that aligns organizational culture with sustainable outcomes Tang et al. (2024) revealed that organizations exhibiting strong clan culture tendencies demonstrate higher levels of corporate natural resource disclosure, reflecting an intrinsic commitment to social accountability and transparency. Similarly, Alkhadra et al. (2023) emphasized that ethical leadership embedded within clan-oriented cultures strengthens corporate governance and supports sustainable performance through corporate social responsibility initiatives. Chandrakant and Rajesh (2023) further confirmed a direct link between effective governance frameworks and social sustainability, illustrating how governance mediates the influence of clan culture. Wang et al. (2022) highlighted that succession planning enhances governance reform in clan-based organizations, reinforcing sustainability through continuity and accountability. Zhao and Zhou (2025) also demonstrated that socioemotional wealth drives family firms to pursue socially responsible practices, underscoring the synergy between clan culture, governance, and social sustainability. Based on studies conducted by Tang et al. (2024), Alkhadra et al. (2023), Chandrakant and Rajesh (2023), Wang et al. (2022) and Zhao and Zhou (2025), the study hypothesizes that:

H6: Corporate governance mediates the relationship between clan culture and social sustainability performance

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Conceptual Framework

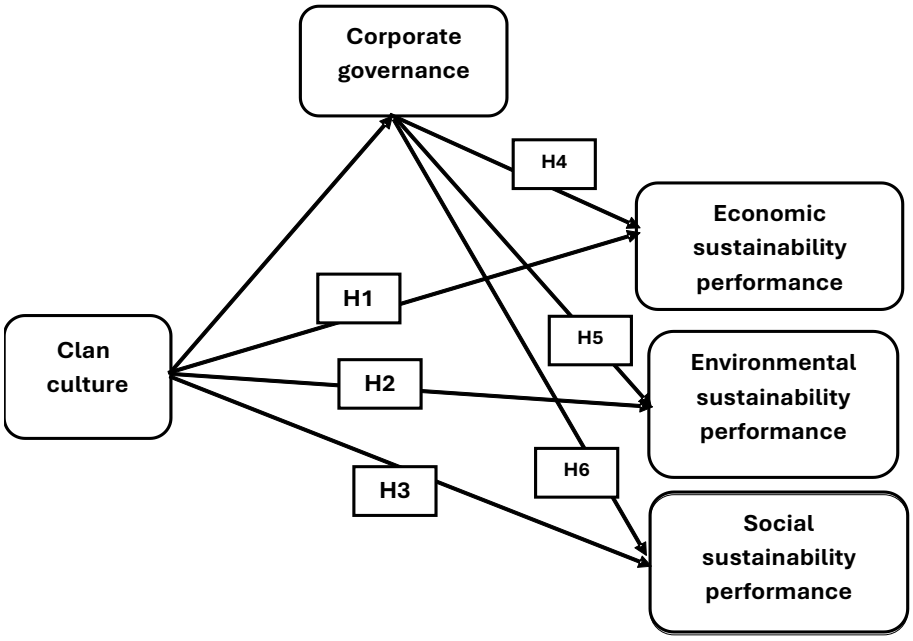


Figure 1: Conceptual framework of the study; Source: Author's construct based on empirical literature

Methods and Data

Research Approach and Design

This study adopted a quantitative approach, consistent with its aim of explaining the predictive relationship between clan culture and sustainability performance dimensions (economic, environmental and social sustainability performance) of African Civil Aviation Authorities (ACAA). The adoption of the quantitative research approach enabled the researchers to gather numerical data and apply statistical techniques to test for hypotheses for both direct and mediating relationships among the variables (Saunders, Lewis & Thornhill, 2019). The study adopted the cross-sectional design, since data was collected within a specific timeframe among ACAAs.

Target Population and Sampling Frame

The target population consisted of 2,061 senior and junior managers from 54 civil aviation regulatory authorities across Africa, each with at least two years of experience. These managers were distributed across three regions: Western and Central Africa (WACAF) with 1,031 managers, Eastern and Southern Africa (ESAF) with 824 managers, and North Africa (NA) with 176 managers (AFCAC, 2019). Lower-level employees were excluded from the study because they were assumed to lack adequate knowledge

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of organisational culture and sustainability issues. The sampling frame comprised Contracting States to the Convention on International Civil Aviation (ICAO, 2023) within these regions.

Sample Size and Sampling Techniques

Using Yamane's (1967) formula with a 95% confidence level and 3% margin of error, the study determined a final sample size of 371 managers. A multistage sampling design was used, combining probability and non-probability techniques to ensure a representative and informative sample. In the first stage, stratified random sampling was applied to divide the population into three strata based on the regional groupings of civil aviation institutions, ensuring that each stratum was proportionally represented. In the second stage, purposive sampling was used to target top, middle, and operational managers directly responsible for sustainability initiatives, capitalising on their knowledge and experience. This approach allowed the study to benefit from the strengths of both probability sampling, ensuring statistical representativeness and purposive sampling, which focused on gathering insights from key decision-makers.

Data Collection Instrument and Piloting

Data was collected using a structured questionnaire based on the Organisational Culture Assessment Instrument (OCAI) by Cameron and Quinn (2006), which was used for questionnaire items on clan culture. Questionnaire items for measuring sustainability performance indicators of economic, environmental and social performance were adopted from (Gupta et al., 2020), while items for measuring corporate governance were adopted from (Karaman et al., 2018). The questionnaire was reviewed by human resource practitioners and industry experts in ACAAs to ensure content validity, clarity, and alignment with industry standards.

A pilot test was conducted with 75 postgraduate students of Human Resource Management at the University of Ghana to assess reliability. Using Cronbach's alpha, the internal consistency of the measurement items was evaluated, and adjustments were made to improve clarity and remove ambiguities.

Ethical Considerations and Data Collection Procedures

Ethical clearance was obtained from the heads of the participating organisations to ensure compliance with ethical standards and to safeguard participant privacy. Consent was sought from participants, and email and phone contacts were collected to facilitate questionnaire distribution and follow-up. Questionnaires were distributed electronically, and reminder calls helped improve response rates and adherence to deadlines. Data collection process was done within two (2) months.

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Data Analysis Techniques

Data were entered, cleaned, and processed using SPSS and Microsoft Excel for descriptive statistical analysis, summarising data through frequencies and percentages. Inferential analysis was conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS version 4. PLS-SEM was selected for its ability to handle complex models with both formative and reflective constructs. This approach allowed the researcher to model and test the direct and mediating relationships among clan culture, corporate governance, and sustainability performance among ACAAs.

Results

Data gathered from questionnaires was analyzed using Statistical Package for Social Sciences (SPSS) version 28 and Smart PLS 4. Demographic data was analyzed using descriptive statistics such as frequencies and percentages. However, Partial Least Squares (PLS) Structural Equation Modelling (SEM) was used to test for the direct and mediating relationships among the variables.

Demographic Profile of Respondents

The demographic profile of the 371 respondents shows that males (72%) outnumber females (28%). The age distribution indicates that the majority are in their mid-career stages, with 36–40 years (31%) and 41–45 years (32.3%) dominating, reflecting a relatively experienced workforce. In terms of positions, Air Navigation Services Managers (24.3%), Aviation Safety Inspectors (21.6%), and Flight Operations Managers (19.1%) make up the majority, suggesting representation from key operational and safety functions. Tenure analysis shows most respondents have worked between 4–6 years (35%) and 7–10 years (32.4%), highlighting stability and significant professional experience within the aviation regulatory and operational environment.

Construct Validity

Construct validity refers to the extent to which a set of indicators accurately measures the theoretical construct it is intended to represent. It assesses how well observed variables (items) reflect their underlying latent variables. High construct validity ensures that measurement items are both conceptually and statistically appropriate for their constructs. In Table 2 (See Appendix), all factor loadings exceed the recommended threshold of 0.70, indicating strong indicator reliability and confirming that each item correlates well with its respective construct. Clan Culture (0.706–0.878), Corporate Governance (0.805–0.888), Economic Sustainability Performance (0.795–0.903), Environmental Sustainability Performance (0.837–0.895), and Social Sustainability Performance (0.720–0.907) all demonstrate high loadings. These results confirm that the constructs exhibit strong convergent validity,

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meaning the items effectively represent their underlying dimensions, thereby establishing good construct validity across the measurement model.

R-Square Statistics

R-square (R^2) represents the proportion of variance in the dependent variable explained by the independent variable(s) in a model. It indicates the model's explanatory power, showing how well the predictors account for observed outcomes. Higher R^2 values signify stronger predictive accuracy and model fit. In this model, with Clan Culture as the independent variable, the R^2 values show substantial explanatory power across constructs. Clan Culture explains 58.2% of the variance in Corporate Governance, indicating a moderate relationship. It accounts for 72.5% of Economic Sustainability Performance and 71.6% of Environmental Sustainability Performance, reflecting strong predictive influence. The highest R^2 value, 88.8% for Social Sustainability Performance, demonstrates that Clan Culture and Corporate Governance together explain a very large portion of variance in social outcomes

Reliability and Convergent Validity

Reliability refers to the consistency and stability of a measurement instrument in assessing a construct, indicating how consistently items measure the same underlying concept without random error. It is commonly assessed using Cronbach's alpha and Composite Reliability (CR), with values above 0.70 reflecting acceptable internal consistency. Convergent validity measures the extent to which indicators of the same construct are correlated, confirming that they collectively represent a single theoretical concept. It is evaluated through Average Variance Extracted (AVE), where values above 0.50 indicate strong construct representation. Table 4 demonstrates the reliability and convergent validity of the constructs, confirming their measurement consistency and accuracy. Cronbach's alpha values indicate strong internal reliability, with all constructs exceeding the 0.70 benchmark except Environmental Sustainability Performance (EnSP), which recorded 0.671—a value still acceptable for exploratory research. Composite reliability values (rho_a and rho_c) also surpassed 0.70, confirming internal consistency across items. The Average Variance Extracted (AVE) values, all above 0.50, establish good convergent validity, meaning each construct explains a substantial portion of variance in its indicators. Specifically, Clan Culture ($\alpha = 0.933$; AVE = 0.652) and Corporate Governance ($\alpha = 0.951$; AVE = 0.746) show excellent reliability and validity. Economic ($\alpha = 0.810$; AVE = 0.726) and Social Sustainability Performance ($\alpha = 0.930$; AVE = 0.709) also meet high standards, while EnSP ($\alpha = 0.671$; AVE = 0.751) remains acceptable.

Discriminant Validity Using Fornell-Larcker Criterion

Discriminant validity refers to the extent to which a construct is truly distinct from other constructs within a model. It ensures that each construct measures a unique concept rather than overlapping with others.

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The Fornell–Larcker criterion is used to assess discriminant validity by comparing the square root of the Average Variance Extracted (AVE) (diagonal values) with the inter-construct correlations (off-diagonal values). Discriminant validity is achieved when the diagonal values are higher than the corresponding correlations in the same row or column. In Table 5, the diagonal values (e.g., Clan Culture = 0.808, Corporate Governance = 0.863, EcSP = 0.852, EnSP = 0.866, and SoSP = 0.842) all exceed their inter-construct correlations. This confirms that each construct is statistically distinct from the others. Therefore, the model demonstrates satisfactory discriminant validity, indicating that Clan Culture, Corporate Governance, and the three sustainability dimensions represent conceptually and empirically separate constructs.

Direct and Mediating Effects

The study found that a significant positive relationship exists between clan culture and economic sustainability performance (B=0.968, p<.05). Hypothesis 1 was supported. The study also found that a significant positive relationship exists between clan culture and environmental performance (B=0.789, p<.05). Hypothesis 2 was therefore supported. A significant positive relationship exists between clan culture and social sustainability performance (B=0.981, p<.05). Hypothesis 3 was supported. For indirect effects, the study found that corporate governance negatively mediates the relationship between clan culture and economic sustainability performance (B=-0.123, p<.05). Hypothesis 4 was supported. However, hypothesis 5 was not supported as corporate governance did not mediate the relationship between clan culture and environmental sustainability performance (B=0.056, p>.05). The study also found that corporate governance does not mediate the relationship between clan culture and social sustainability performance (B=-0.040, p>.05). Hypothesis 6 was therefore not supported.

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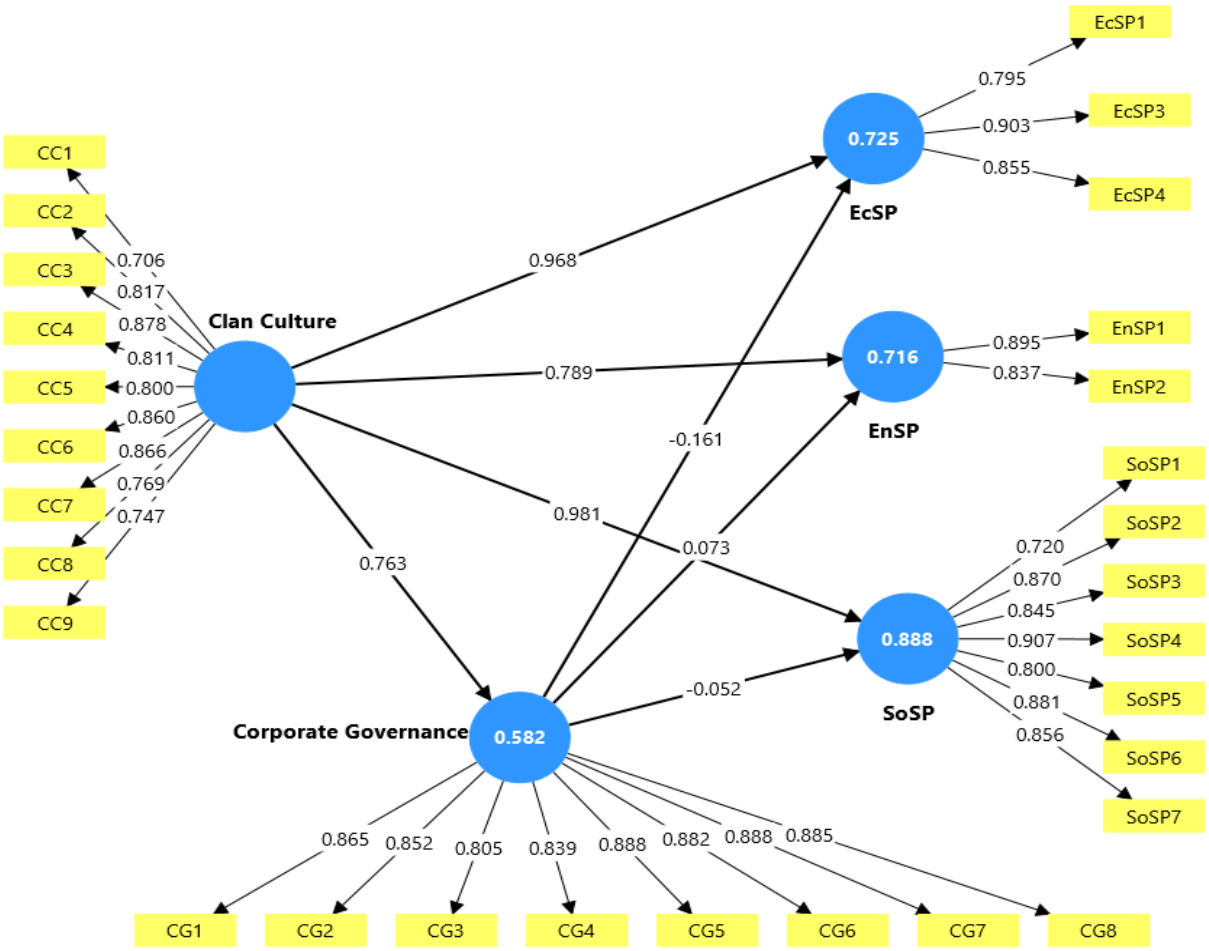


Figure 2: Structural equation result for direct and mediating effects

Discussion

The finding that clan culture positively influences economic sustainability performance (B=0.968, p<.05) aligns with extensive empirical evidence underscoring the economic value of collaborative and trust-based organizational cultures. Iqbal and Parray (2025) emphasized that clan culture fosters shared values and cooperation that enhance economic efficiency, while Li et al. (2025) and Tang et al. (2024) linked such cultures to improved audit quality, transparency, and responsible resource use. Aslam et al. (2025) and Wang and Huang (2022) further demonstrated that knowledge sharing and innovation within clan-oriented environments boost firms' financial and competitive performance. From the Resource-Based View (RBV) perspective, clan culture constitutes a valuable and inimitable resource that drives superior economic outcomes by mobilizing collective learning and resource integration (Barney, 1991; Teece et al., 1997). The uniqueness of this finding lies in validating RBV within African Civil Aviation Authorities, illustrating how internal cultural synergy translates into tangible economic sustainability in a regulated service sector.

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The finding that clan culture positively influences environmental performance (B=0.789, p<.05) aligns with empirical evidence emphasizing the role of shared values and teamwork in fostering sustainable outcomes. Mohamed et al. (2025) and Zhang (2025) noted that clan-oriented environments enhance environmental capabilities and transparency, while Shuliang et al. (2024) linked such cultures to eco-innovation. Similarly, Adebayo et al. (2020) and Medina-Álvarez and Sánchez-Medina (2023) observed that collective cultural commitment promotes environmental responsibility. From the Resource-Based View (RBV) perspective, clan culture represents a valuable and inimitable resource that, when effectively managed, enhances sustainability performance through resource integration and knowledge sharing (Barney, 1991; Teece et al., 1997). The uniqueness of this study lies in its empirical validation within African Civil Aviation Authorities, illustrating how internal cultural cohesion can drive environmental sustainability—an area underexplored in aviation governance literature. This expands RBV's applicability to institutional contexts in emerging economies.

The finding that clan culture positively influences social sustainability performance (B=0.981, p<.05) corroborates prior empirical studies emphasizing its role in fostering trust, engagement, and social responsibility. Tuan and Ferasso (2025) and Irfan et al. (2024) found that collaborative, clan-oriented environments enhance social sustainability by promoting inclusion and ethical conduct. Similarly, Bhuiyan et al. (2020) and Ali et al. (2023) observed that such cultures strengthen CSR outcomes through employee citizenship behavior, while Li et al. (2025) linked trust-driven cultures to improved sustainability reporting. From the Resource-Based View (RBV) perspective, clan culture serves as an inimitable intangible asset that creates social capital—facilitating long-term stakeholder relationships and collective learning (Barney, 1991; Teece et al., 1997). The uniqueness of this finding lies in extending RBV's logic to African Civil Aviation Authorities, showing that internal cultural cohesion and trust can significantly enhance social sustainability within highly regulated institutional contexts.

The finding that corporate governance negatively mediates the relationship between clan culture and economic sustainability performance (B = −0.123, p < .05) presents an intriguing contrast to conventional expectations. Empirically, previous studies have largely emphasized the complementary role of governance and culture in advancing financial sustainability. For instance, Wang et al. (2022) observed that governance reforms enhance management efficiency and profitability, while Huynh (2020) noted that effective governance aligns cultural norms with economic objectives through structured HRM systems. Similarly, Alkhadra et al. (2023) linked ethical governance to improved corporate responsibility and performance outcomes. From the Resource-Based View (RBV), both clan culture and governance are considered internal resources; however, when overly bureaucratic governance mechanisms constrain the flexibility inherent in clan cultures, the synergy between them may weaken (Barney, 1991; Teece et al., 1997). This explains the negative mediation effect. The uniqueness of this finding lies in

revealing that excessive formalization or rigid oversight can undermine the cultural advantages of collaboration and trust, a dynamic rarely documented in African Civil Aviation Authorities.

The finding that corporate governance did not mediate the relationship between clan culture and environmental sustainability performance (B = 0.056, p > .05) suggests that governance structures within the studied context may not effectively translate cultural cohesion into environmental outcomes. Empirically, prior studies have shown that well-structured governance systems reinforce the positive effects of clan culture on sustainability through enhanced coordination, accountability, and transparency (Wendry et al., 2023; Shahwan & Fathalla, 2020). Similarly, Abdelwahed and Soomro (2024) and Abdulrahim et al. (2020) demonstrated that governance mechanisms can strengthen the culture–sustainability nexus when strategic alignment and innovative postures are present. From the Resource-Based View (RBV) standpoint, both clan culture and governance are internal resources whose effectiveness depends on their integration and complementarity (Barney, 1991). However, the insignificant mediation observed implies a possible misalignment between governance processes and environmental goals. The uniqueness of this finding lies in revealing that formal governance controls may not always enhance the environmental potential of clan-oriented cultures, particularly in highly regulated institutions like African Civil Aviation Authorities.

The finding that corporate governance did not mediate the relationship between clan culture and social sustainability performance (B = −0.040, p > .05) indicates that governance mechanisms within the studied organizations may not effectively channel the collaborative and trust-based attributes of clan culture into socially sustainable outcomes. Empirical studies have shown that clan-oriented environments promote accountability and transparency through shared values and ethical leadership (Tang et al., 2024; Alkhadra et al., 2023). Chandrakant and Rajesh (2023) and Wang et al. (2022) emphasized that robust governance frameworks and succession planning can align cultural values with social responsibility, while Zhao and Zhou (2025) found that socioemotional wealth in family-like institutions fosters socially responsible behavior. From the Resource-Based View (RBV) perspective, both governance and culture are internal resources whose combined effects depend on alignment and synergy (Barney, 1991; Teece et al., 1997). The insignificant mediation observed suggests that governance structures in African Civil Aviation Authorities may be too procedural or compliance-driven, limiting their capacity to harness clan culture's relational strengths. The uniqueness of this finding lies in demonstrating that cultural cohesion alone can drive social sustainability, even when governance mediation is weak or ineffective.

Conclusion

The study established that clan culture, built on collaboration, shared decision-making, and mutual trust, fosters innovation, inclusivity, and accountability—core ingredients for sustainable organizational

success. It enhances economic, environmental, and social performance by promoting teamwork and shared responsibility. However, the mediating role of corporate governance was limited and, in some cases, counterproductive. Overly rigid governance structures sometimes weakened the positive effects of clan culture, emphasizing the need for governance frameworks that encourage flexibility and support participatory management. The findings highlight that sustainability should not merely be treated as a compliance exercise but as a cultural and strategic imperative embedded within governance and operational processes. Theoretically, the study contributes to the Resource-Based View (RBV) as it:

- Extends the Resource Based View by demonstrating that intangible assets such as culture and governance are essential drivers of sustainable performance in public aviation institutions.
- Shows that internal resources generate value only when aligned with contextual and institutional realities, challenging RBV's assumption that resources naturally complement each other.
- Reveals that misaligned governance can constrain cultural strengths, highlighting the need to integrate RBV with Dynamic Capabilities Theory and Institutional Theory for a more comprehensive explanation of sustainability outcomes.
- Expands the relevance of RBV to regulated public sector organizations by illustrating how culture and governance jointly shape long term sustainability under institutional pressures.

Practically, the study offers actionable insights for aviation authorities, policymakers, and institutional leaders seeking to improve sustainability outcomes as it:

- Encourages aviation authorities to design governance systems that support rather than restrict cultural strengths through ethical leadership, transparent decision making, and participatory oversight.
- Underscores the importance of strengthening clan culture through inclusive leadership, collaboration, and shared decision making to enhance employee commitment and innovation.
- Emphasizes the need to integrate economic, environmental, and social sustainability indicators into governance performance evaluations to institutionalize sustainability as a strategic priority.
- Recommends adopting adaptive governance models that balance accountability with flexibility and reduce bureaucratic rigidity that inhibits innovation.
- Highlights the value of leadership development, staff training, and communication initiatives that reinforce inclusivity, collective responsibility, and creativity across aviation organizations.

- Calls for embedding eco innovation and environmentally responsible practices, including energy efficiency and waste reduction, into daily operations.
- Advocates for improved social sustainability through diversity programs, employee well being initiatives, and meaningful community engagement.
- Suggests implementing incentive and recognition systems that reward sustainable practices and collaborative problem solving.
- Stresses the importance of continuous learning and feedback mechanisms that allow governance and culture to evolve alongside emerging sustainability challenges and global industry standards.

The study acknowledges certain limitations, including its cross-sectional design, reliance on quantitative and self-reported data, and context-specific focus on ACAAs, which limit the depth of understanding and generalizability of findings. Future research should therefore adopt longitudinal and mixed-method designs to capture evolving interactions between culture, governance, and sustainability performance. Expanding the scope beyond aviation to include other industries and conducting cross-country comparative studies could enhance generalization and reveal context-specific nuances. Integrating RBV with complementary frameworks such as Dynamic Capabilities and Institutional Theory will also provide richer theoretical insights into how internal resources and external pressures jointly drive sustainable organizational performance.

In conclusion, sustainability within ACAAs depends on the strategic integration of governance and culture. When governance frameworks complement clan culture rather than constrain it, organizations can achieve higher levels of innovation, resilience, and trust. Aligning cultural and governance systems with sustainability objectives will enable African Civil Aviation Authorities to become models of culture-driven governance and sustainable development in Africa's public sector.

References

Abdelwahed, N. A. A., & Soomro, B. A. 2024. Enhancing organizational behaviour through corporate governance: The crucial role of organizational culture and sustainability. *Corporate Governance and Organizational Behavior Review, 8*(1), 94–104.

Abdi, Y., Li, X., & Càmara-Turull, X. (2022). Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: the moderating role of size and age. Environment, Development and Sustainability, 24(4), 5052-5079. https://link.springer.com/article/10.1007/s10668-021-01649-w

Abdulrahim, M., Sukoharsono, E. G., Saraswati, E., & Subekti, I. 2020. The mediating effect of strategic posture on the link between organizational culture and sustainability performance. *OISR Journal of Business and Management, 22*(6), 1–18.

Adebayo, O. P., Worlu, R. E., Moses, C. L., & Ogunnaike, O. O. 2020. An integrated organisational culture for sustainable environmental performance in the Nigerian context. *Sustainability, 12*(20), 8323.

Al Sarrah, M., Ajmal, M. M., & Mertzanis, C. (2021). Identification of sustainability indicators in the civil aviation sector in Dubai: a stakeholders' perspective. Social Responsibility Journal, 17(5), 648-668. https://www.emerald.com/insight/content/doi/10.1108/srj-06-2019-0203/full/html

Ali, A. N. (2024). A Qualitative Study on Security Challenges of Somali Civil Aviation Industry in the Post-conflict Era. https://docs.neu.edu.tr/library/9726016426.pdf

Ali, H., Yin, J., Manzoor, F., & An, M. 2023. The impact of corporate social responsibility on firm reputation and organizational citizenship behavior: The mediation of organic organizational cultures. *Frontiers in Psychology, 13*, 1100448.

Alkhadra, W. A., Khawaldeh, S., & Aldehayyat, J. 2023. Relationship of ethical leadership, organizational culture, corporate social responsibility and organizational performance: A test of two mediation models. *International Journal of Ethics and Systems, 39*(4), 737–760.

Anene, E. B. (2021). Determinants of Strategy Implementation on Performance of the Aviation Industry in Kenya (Doctoral dissertation, JKUAT-COHRED). http://ir.jkuat.ac.ke/handle/123456789/5633

Arian, A., Sands, J., & Tooley, S. (2023). Industry and stakeholder impacts on corporate social responsibility (CSR) and financial performance: Consumer vs. industrial sectors. Sustainability, 15(16), 12254. https://www.mdpi.com/2071-1050/15/16/12254

Asker, V., & Kiracı, K. (2022). Sustainability and Financial Performance: Examining the Airline Industry. In Corporate Governance, Sustainability, and Information Systems in the Aviation Sector, Volume I (pp. 73-92). Singapore: Springer Nature Singapore. https://link.springer.com/chapter/10.1007/978-981-16-9276-5_5

Aslam, A., Amjad, A., Zainab, S. S., & Hafeez, M. 2025. Unpacking the influence of clan culture on knowledge sharing in small and medium enterprises: Antecedents and outcomes. *Journal of Management & Social Science, 2*(2), 387–415.

Balli, O., & Caliskan, H. (2021). On-design and off-design operation performance assessments of an aero turboprop engine used on unmanned aerial vehicles (UAVs) in terms of aviation, thermodynamic, environmental and sustainability perspectives. *Energy Conversion and Management,* 243, 114403. https://www.sciencedirect.com/science/article/pii/S0196890421005793

Bandora, A. (2022). *The role of corporate Governance in the promotion of business in East African Community: A Case Study of Rwanda* (Doctoral dissertation, University of Rwanda). http://dr.ur.ac.rw/handle/123456789/1864

Barke, A., Bley, T., Thies, C., Weckenborg, C., & Spengler, T. S. (2022). Are sustainable aviation fuels a viable option for decarbonizing air transport in Europe? An environmental and economic sustainability assessment. *Applied Sciences*, 12(2), 597. https://www.mdpi.com/2076-3417/12/2/597

Bhuiyan, F., Baird, K., & Munir, R. 2020. The association between organisational culture, CSR practices and organisational performance in an emerging economy. *Meditari Accountancy Research, 28*(6), 977–1011.

Burger, A. J. (2025). Institutional Performance: By the measured actions of public value leaders and managers. *African Sun Media.* https://books.google.com/books?hl=en&lr=&id=hwRLEQAAQBAJ&oi=fnd&pg=PA5&dq=Clan+culture,+corporate+governance,+sustainability,+African+civil+aviation+authorities+performance+indicators&ots=P2bso6Q8XW&sig=SvP4LEeDD4bF0EmpHYWVj17mZ5c

Chandrakant, R., & Rajesh, R. 2023. Social sustainability, corporate governance, and sustainability performances: An empirical study of the effects. *Journal of Ambient Intelligence and Humanized Computing, 14*(7), 9131–9143.

Deirmentzoglou, G. A., Agoraki, K. K., & Fousteris, A. E. 2020. Organizational culture and corporate sustainable development: Evidence from Greece. *International Journal of Business and Social Science, 11*(5), 92–98.

Dias, V. M. R., Jugend, D., de Camargo Fiorini, P., do Amaral Razzino, C., & Pinheiro, M. A. P. (2022). Possibilities for applying the circular economy in the aerospace industry: Practices, opportunities and challenges. Journal of Air Transport Management, 102, 102227. https://www.sciencedirect.com/science/article/pii/S0969699722000485

Elnagar, A., Abdelkawi, A., Elshaer, I., & Salama, S. (2022). The effect of organizational culture on financial performance: based on Cameron and Quinn model (CVF). *Journal of Management and Economics Research*, 4(1), 38-53. https://asjp.cerist.dz/en/article/181831

Fakhri, M., Syarifuddin, S., Winarno, A., Nurnida, I., & Hanum, S. (2021). Democratic leadership practice to construct clan organizational culture in family companies. The journal of Asian finance, economics and business, 8(1), 803-811.

Fregoni, S. (2025). *Can ESG Culture Be Acquired? Essays on Corporate Culture, Governance, and Sustainability Transformation* (Doctoral dissertation, UC Berkeley). https://escholarship.org/uc/item/7h2750w1

Heyes, G., Urquhart, C., Hooper, P., & Thomas, C. (2023). Comprehensive strategic analysis for sustainability: An aviation industry case study. *Sustainability,* 15(11), 8806. https://www.mdpi.com/2071-1050/15/11/8806

Hussein, A. S. (2024). The *Assessment of Safety Performance in the Civil Aviation Industry in Somalia*. https://docs.neu.edu.tr/library/9728151585.pdf

Huynh, Q. L. 2020. Mediation of human resource management in the linkage between performance and culture in an emerging economy. *Problems and Perspectives in Management, 18*(3), 438–451.

Idowu, S. O., Schmidpeter, R., Capaldi, N., Zu, L., Del Baldo, M., & Abreu, R. (Eds.). (2023). Encyclopedia of sustainable management. Cham: Springer International Publishing. https://link.springer.com/content/pdf/10.1007/978-3-031-25984-5_301807.pdf

Iqbal, J., & Parray, Z. A. (2025). Striking the balance: unraveling the influence of organizational culture on organization citizenship behavior with corporate social responsibility as the bridge. *International Journal of Productivity and Performance Management*, *74*(6), 2091-2112.

Irfan, M., Alaloul, W. S., Ghufran, M., Yaseen, G., Thaheem, M. J., Qureshi, A. H., & Bilal, M. 2024. Analyzing the impact of organizational culture on social sustainability: A perspective of the construction industry. *Environment, Development and Sustainability, 26*(1), 1103–1133.

Kimathi, T. W. (2024). Leadership, Corporate Social Responsibility, and Sustainability in Airlines: Case Study for Kenya Airways. https://www.uniselinus.education/sites/default/files/2024-05/Tracey%20Wangechi%20Kimathi.pdf

L'Abate, V., Vitolla, F., Esposito, P., & Raimo, N. (2023). The drivers of sustainability disclosure practices in the airport industry: A legitimacy theory perspective. *Corporate Social Responsibility and Environmental Managemen*t, 30(4), 1903-1916. https://onlinelibrary.wiley.com/doi/abs/10.1002/csr.2462

Lazar, S., Potočan, V., Klimecka-Tatar, D., & Obrecht, M. (2022). Boosting sustainable operations with sustainable supply chain modeling: a case of organizational culture and normative commitment. *International Journal of Environmental Research and Public Health,* 19(17), 11131. https://www.mdpi.com/1660-4601/19/17/11131

Leal Filho, W., Ng, A. W., Sharifi, A., Janová, J., Özuyar, P. G., Hemani, C., ... & Rampasso, I. (2023). Global tourism, climate change and energy sustainability: assessing carbon reduction mitigating

measures from the aviation industry. *Sustainability Science,* 18(2), 983-996. https://link.springer.com/article/10.1007/s11625-022-01207-x?mf_ct_campaign=yahoo-synd-feed

Li, Y., Xue, S., Yi, X., Zou, B., & Sindakis, S. 2025. The clan effect: Exploring the nexus between organizational culture, trust, and audit economics. *Journal of the Knowledge Economy, 16*(1), 3175–3213.

Macahilig, C. E. O., Dura, A. P., & DPA, R. L. G. (2023). Religiosity and Credibility of the Bids and Awards Committee (BAC) of the Civil Aviation Authority of The Philippines (CAAP). *International Journal of Scientific Research and Management*, 11(08), 90-108. https://www.academia.edu/download/118229348/2941.pdf

Medina-Álvarez, E., & Sánchez-Medina, P. S. 2023. Types of organizational culture and sustainability in ecotourism businesses in southern Mexico. *Journal of Economics, Finance and Administrative Science, 28*(56), 386–403.

Moganane, K. (2024). Flawed corporate governance of state-owned entities (SAA) in South Africa: lessons from Rwandair and Ethiopian airlines (Doctoral dissertation, University of the Western Cape). https://uwcscholar.uwc.ac.za/items/2f085a6f-e77a-4e63-950c-dc3f3adcf317

Mohamed, H. M., Saleh, M. S. M., Attia, N. M., Abdelaziz, M. M. A., & Ata, A. A. (2025). Exploring the role of clan culture in promoting nurses' green behaviors: paternalistic leadership as a mediator and workplace loneliness as a moderator. *BMC nursing*, *24*(1), 436.

Nkabinde, S. W. (2024). *The Strategy Implementation Challenges at a South African Air Navigation Services Provider* (Master's thesis, University of the Witwatersrand, Johannesburg (South Africa)). https://search.proquest.com/openview/6177eccc45165dbc52c4533d254f0769/1?pq-origsite=gscholar&cbl=2026366&diss=y

Okafor, U. I. (2022). Ethical Approach to Sustainability Accounting Practices and Financial Performance of Aviation Companies in Nigeria: A Conceptual Model. *Society & Sustainability*, *4*(1), 25-42.

Opiyo, S. A. (2023). *Culture, Competitive Strategy, Innovations and Performance of the Airline Companies in Kenya* (Doctoral dissertation, University of Nairobi). https://erepository.uonbi.ac.ke/handle/11295/166638

Raimundo, R. J., Baltazar, M. E., & Cruz, S. P. (2023). Sustainability in the airports ecosystem: A literature review. *Sustainability,* 15(16), 12325. https://www.mdpi.com/2071-1050/15/16/12325

Raziq, M. M., Jabeen, Q., Saleem, S., Shamout, M. D., & Bashir, S. (2024). Organizational culture, knowledge sharing and organizational performance: a multi-country study. *Business Process*

Management Journal, 30(2), 586-611. https://www.emerald.com/insight/content/doi/10.1108/BPMJ-07-2023-0549/full/html

Sai, Y. (2024). *Developing Key Sustainability Indicators for Aviation*. https://www.diva-portal.org/smash/record.jsf?pid=diva2:1905625

Shahwan, T. M., & Fathalla, M. M. 2020. The mediating role of intellectual capital in corporate governance and the corporate performance relationship. *International Journal of Ethics and Systems, 36*(4), 531–561.

Sharma, M. K., & Sharma, S. (2022). Role of Organizational Culture as an Internal Business Factor in Successful Strategy Execution: A Review. *IUP Journal of Management Research*, 21(2). https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=09725342&AN=158321757&h=6agOsDjmI0giZcDsefCUmdcQQSUKYmeejiG6BUiX12eCE3amc6mX11pNYGSHHRwredkYXLPQxlp8D0My%2Bh9qBQ%3D%3D&crl=c

Shuliang, Z., Rui, Z., & Qingjun, L. 2024. How does organizational culture affect eco-innovation? Empirical evidence from the individual and organizational perspective. *Corporate Social Responsibility and Environmental Management, 31*(6), 5466–5481.

Silwal, P. P. 2022. Corporate cultures and financial performance: The mediating role of firm innovation. *Cogent Business & Management, 9*(1), 2010480.

Sorsa, K., & Bona-Sánchez, C. (2024). Corporate social responsibility trends in the airline industry: A bibliometric analysis. *Sustainability*, *16*(7), 2709.

Suifan, T. (2021). How innovativeness mediates the effects of organizational culture and leadership on performance. *International Journal of Innovation Management*, 25(02), 2150016. https://www.worldscientific.com/doi/abs/10.1142/S136391962150016X

Suwannapirom, C., & Pranee, S. (2023). A structural equation model of organizational performance of airports of Thailand public company limited. *Asian Political Science Review,* 7(2). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4606755

Tang, Y., Li, Q., Zhou, F., & Sun, M. (2024). Does clan culture promote corporate natural resource disclosure? Evidence from Chinese natural resource-based listed companies. *Journal of Business Ethics, 192*(1), 167–190.

Thendu, B. K. (2023). *Strategic Firm Level Dimensions and Performance of Safety Management System in the Aviation Industry in Kenya* (Doctoral dissertation, JKUAT-COHRED). http://ir.jkuat.ac.ke/handle/123456789/6049

Tribe, J., & Paddison, B. (2023). Critical tourism strategy. *Annals of Tourism Research*, 98, 103511. https://www.sciencedirect.com/science/article/pii/S0160738322001621

Tuan, V. K., & Ferasso, M. (2025). Corporate social responsibility influence on organizational culture: fostering citizenship and enthusiastic behavior in Vietnamese enterprises. *International Journal of Organization Theory & Behavior*. https://doi.org/10.1108/IJOTB-01-2024-0012

Wainaina, G. M., & Kariuki, P. (2022). Assessment of Antecedents Affecting Implementation of Maintenance Policy in Aviation Schools in Kenya. *Journal of International Business, Innovation and Strategic Management,* 6(1), 146-164. https://www.jibism.org/core_files/index.php/JIBISM/article/view/184

Wang, L., Gao, Q., & Wu, C. (2022). The effect of succession on corporate governance reform under the Chinese clan culture context. *Cross Cultural & Strategic Management, 29*(4), 761–797.

Wang, S., & Huang, L. (2022). A study of the relationship between corporate culture and corporate sustainable performance: Evidence from Chinese SMEs. *Sustainability, 14*(13), 7527.

Watiri, C. (2022). *Influence of Selected Organizational Factors on Performance of International Airlines in Kenya* (Doctoral dissertation, KeMU). http://41.89.31.5/handle/123456789/1527

Wendry, B., Nimran, U., Utami, H. N., & Afrianty, T. W. (2023). The role of good corporate governance in mediating the effect of planning, coordination, supervision, and organizational culture on firm performance and firm sustainability. *Environment, Development and Sustainability, 25*(3), 2509–2521.

Woo, E. J., & Kang, E. (2021). Employee environmental capability and its relationship with corporate culture. *Sustainability, 13*(16), 8684.

Yusaf, T., Fernandes, L., Abu Talib, A. R., Altarazi, Y. S., Alrefae, W., Kadirgama, K., ... & Laimon, M. (2022). Sustainable aviation—Hydrogen is the future. *Sustainability,* 14(1), 548. https://www.mdpi.com/2071-1050/14/1/548

Zhang, Y. (2025). Bridging the Gap to Sustainability: How Culture and Context Shape Green Transparency in Chinese Firms. *Sustainability*, *17*(3), 1157.

Zhao, Y., & Zhou, R. 2025. Clan culture, socioemotional wealth and family business social responsibility. *American Journal of Economics and Sociology.* https://doi.org/10.1111/ajes.12622

Zia, N., & Burton, B. (2023). *Corporate Governance Challenges in Pakistan: Perceptions and Potential Routes Forward* (Vol. 5). Walter de Gruyter GmbH & Co KG.

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APPENDIX

Variable	Category	Frequency	Percentage
Gender	Male	267	72.0%
	Female	104	28.0%
	Total	371	100%
Age	Less than 35 years	50	13.5%
	36–40 years	115	31.0%
	41–45 years	120	32.3%
	46–50 years	51	13.7%
	More than 50 years	35	9.5%
	Total	371	100%
Position	Safety Regulation Officers	35	9.4%
	Aviation Safety Inspectors	80	21.6%
	Personnel License Officers	25	6.7%
	Aerodrome & Ground Aid Managers	40	10.8%
	Air Navigation Services Managers	90	24.3%
	Flight Operations Managers	71	19.1%
	Airworthiness Inspectors	30	8.1%
	Total	371	100%
Tenure	1–3 years	60	16.2%
	4–6 years	130	35.0%
	7–10 years	120	32.4%
	More than 10 years	61	16.4%
	Total	371	100%

Table 1: Demographic Characteristics of Respondents

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	Clan Culture	Corporate Governance	EcSP	EnSP	SoSP
CC1	0.706				
CC2	0.817				
CC3	0.878				
CC4	0.811				
CC5	0.800				
CC6	0.860				
CC7	0.866				
CC8	0.769				
CC9	0.747				
CG1		0.865			
CG2		0.852			
CG3		0.805			
CG4		0.839			
CG5		0.888			
CG6		0.882			
CG7		0.888			
CG8		0.885			
EcSP1			0.795		
EcSP3			0.903		
EcSP4			0.855		
EnSP1				0.895	
EnSP2				0.837	
SoSP1					0.720
SoSP2					0.870

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SoSP3					0.845
SoSP4					0.907
SoSP5					0.800
SoSP6					0.881
SoSP7					0.856

Table 2: Construct validity

	R-square	R-square adjusted
Corporate Governance	0.582	0.581
EcSP	0.725	0.724
EnSP	0.716	0.715
SoSP	0.888	0.887

Table 3: R-Square statistics

	Cronbach's alpha	**Composite reliability (rho_a)**	**Composite reliability (rho_c)**	**Average variance extracted (AVE)**
Clan Culture	0.933	0.934	0.944	0.652
Corporate Governance	0.951	0.955	0.959	0.746
EcSP	0.810	0.811	0.888	0.726
EnSP	0.671	0.690	0.857	0.751
SoSP	0.930	0.932	0.944	0.709

Table 4: Reliability and convergent validity

	Clan Culture	**Corporate Governance**	**EcSP**	**EnSP**	**SoSP**
Clan Culture	0.808				
Corporate Governance	0.763	0.863			

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EcSP	0.845	0.578	0.852		
EnSP	0.845	0.675	0.726	0.866	
SoSP	0.941	0.697	0.887	0.825	0.842

Table 5: Discriminant validity using Fornell-Larcker Criterion

Direct effects	B-value	t-statistics	p-values	Decision
H1: Clan Culture -> EcSP	0.968	25.077	0.000	Supported
H2: Clan Culture -> EnSP	0.789	17.798	0.000	Supported
H3: Clan Culture -> SoSP	0.981	42.569	0.000	Supported
Mediating effects	B-value	t-statistics	p-values	Decision
H4: Clan Culture -> Corporate Governance -> EcSP	-0.123	3.508	0.000	Supported
H5: Clan Culture -> Corporate Governance -> EnSP	0.056	1.349	0.177	Not supported
H6: Clan Culture -> Corporate Governance -> SoSP	-0.040	1.551	0.121	Not supported

Table 6: Direct and mediating effects