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## **Moderating Effect of Organizational Culture on the Relationship between Sustainability Disclosures and Strategy Implementation in Non-Governmental Organizations in the Environment Sector in Kenya**

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## **Abstract**

Despite sustainability reporting becoming widespread in Non-Governmental Organizations, the translation of disclosed commitments into executed strategy remains uneven, which suggests that disclosure alone is an incomplete explanation of implementation effectiveness. This paper therefore examined the moderating effect of organizational culture on the relationship between sustainability disclosures and strategy implementation in non-governmental organizations in the environment sector in Kenya. The paper tested the null hypothesis that organizational culture has no statistically significant moderating effect on the relationship between sustainability disclosures and strategy implementation. It was anchored in Organizational Culture Theory, which holds that shared assumptions, values and norms determine the extent to which formal systems and disclosures are translated into action. A positivist paradigm and a quantitative cross-sectional survey design were adopted. A stratified random sample of 150 organizations was drawn from the 217 registered environmental NGOs in Kenya, and data were collected from one key informant in each organization using a structured five-point Likert scale questionnaire. A total of 138 questionnaires were completed and returned, giving a response rate of 92 percent. Cronbach alpha for the organizational culture scale was 0.779, confirming instrument reliability. Descriptive analysis established a positive perception of organizational culture, with an overall average mean of 3.80 and average standard deviation of 0.93, against 3.64 for strategy implementation. Correlation analysis established a strong, positive and significant association between organizational culture and strategy implementation ( $r = 0.712$ ,  $p < 0.01$ ). Hierarchical moderated regression established that the interaction between sustainability disclosures and organizational culture was positive

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and statistically significant ( $\beta = 0.099$ ,  $B = 0.148$ ,  $t = 4.945$ ,  $p < 0.001$ ), raising the coefficient of determination from 0.938 to 0.948. The null hypothesis was rejected. The paper concludes that culture conditions rather than merely accompany the disclosure-implementation relationship, and recommends that leadership pair investment in disclosure systems with deliberate culture development programmes.

**Keywords:** *Organizational Culture, Sustainability Disclosures, Strategy Implementation, Moderation, Environmental Non-Governmental Organizations, Kenya*

## 1.1 Introduction

Sustainability disclosure has become a settled feature of organizational reporting, encompassing the communication of governance arrangements, social engagement, environmental impact and ethical conduct to the constituencies on whose support the organization depends. The available literature has established with reasonable consistency that such disclosure is positively associated with organizational performance across sectors and jurisdictions (Al Hawaj & Buallay, 2022; Zhou et al., 2024). What the literature has established less securely is, why organizations with comparable disclosure practices achieve markedly different implementation outcomes? This variation points beyond the content of disclosure towards the internal conditions under which disclosed commitments are interpreted, internalized and acted upon within the organization.

Organizational culture offers the most developed explanation of those internal conditions. Culture is the shared assumptions, espoused values, and observable artefacts that help an organization process information, make decisions and coordinate action (Schein, 2010; Cameron & Quinn, 2011). If culture is present, disclosure is used as a learning tool and as a means of connecting with stakeholders, not just a compliance tool (Chatman & O'Reilly, 2016). Even if thorough reporting is done, if they are not available, it may not affect operational behaviour, as the organisation has no communicative and adaptive capacity that translates reported commitments into operational practice (Denison et al., 2014).

The evidence is that culture should be viewed as a conditioning variable, and not as a background feature, globally and regionally. Collaborative culture organizations have been identified as benefiting significantly more from the same disclosure practices, and organizations with values that are in line with sustainability commitments have been found to more reliably implement disclosure into action, than organizations whose values are misaligned (Ens et al., 2021). This conditioning function becomes even more significant in African and developing economy contexts where organisations are faced with scarce resources and rely on informal means of ensuring execution through internal cohesion. Environmental non-governmental organisations (NGOs) provide a arena in Kenya where this question can be examined with a degree of precision. Around 65 per cent of NGOs do include sustainability considerations in their annual reporting, but only some 54 per cent are able to implement their strategies (NGO Coordination Board of Kenya, 2023). There is a disconnect between reporting and doing and the Kenyan literature has been largely limited to direct-effects models that relate management practice to performance (Odhiambo & Njuguna, 2021; Mailu & Kariuki, 2022). This paper contributes to that literature by formally testing the moderating effect of organizational culture in the relationship between sustainability disclosures and strategy implementation.

## 1.2 Problem Statement

Non-governmental organizations (NGOs) in Kenya's environment sector face a constant struggle in implementing strategies, especially in regard to mission alignment, resource allocation, performance monitoring and risk management (Thuranira & Munene, 2018; Nini & Kihara, 2023). Despite the ubiquity of sustainability reporting, about half of organizations are not able to successfully implement their sustainability strategy. 72 percent of environmental NGOs find it challenging to balance donor expectations, regulatory requirements and community priorities during implementation, and the gap between stated strategic priorities and expenditure patterns is at 68 percent of the sector (Kenya Institute of Management, 2023).

There is another gap in the capacity to monitor performance, with only 63 percent of environmental NGOs having systems to monitor and review strategy execution (National Environment Management Authority, 2023). While 78% of these organizations collect some type of performance data, only 41% use the data for strategic decision making (Kenya Community Development Foundation, 2022). This gap between information collected and information utilized is telling, as it shows that the problem is not so much a lack of information reported, but a lack of organizational conditions that would lead to uptake. A similar picture emerges for risk management, with 57 per cent of organisations stating that it is hard to convert risk identification into effective day to day mitigation, although they have the information to do so.

In this context, the literature available does not investigate the role of culture in conditioning. In the context of strategic management, studies conducted on strategic management in Kenyan NGOs have been based on direct-effects assumptions without testing for interactions (Mailu & Kariuki, 2022; Odhiambo & Njuguna, 2021). Conceptually, previous studies have viewed organizational culture as a descriptive variable instead of a variable that can enhance or weaken the relationship between disclosure and implementation (Mutua & Ibembe, 2020; Leonard, 2024). From a methodological point of view, the studies in the sector have been predominantly qualitative and have failed to produce the quantitative results needed for moderation testing in the form of formal tests (Ebenezer et al., 2020), a gap that is also echoed in the broader literature on sustainability disclosure in developing economies (Taurigana, 2021). The answer to this is to test organizational culture as a moderator in this paper.

## 1.3 Research Objective

To determine the moderating effect of organizational culture on the relationship between sustainability disclosures and strategy implementation in non-governmental organizations in the environment sector in Kenya.

## 1.4 Research Hypothesis

H01: Organizational culture has no statistically significant moderating effect on the relationship between sustainability disclosures and strategy implementation in non-governmental organizations in the environment sector in Kenya.

## 2.1 Theoretical Framework

This paper is theoretically grounded in Organizational Culture Theory (OCT) which was developed by Schein (1985) and further elaborated by Schein (2010) and Schein and Schein (2017). The theory is about relationships between shared assumptions, values, beliefs and artefacts and organizational behaviour and the successful implementation of strategic

initiatives. It is based on the understanding that culture exists at three levels: basic underlying assumptions, espoused values, and artefacts (Cameron & Quinn, 2011). These levels combine to define the reaction of an organization to external pressures and internal demands.

Adapted to environmental NGO, the theory is used to understand how cultural dimensions can help to translate sustainability disclosures into action, as culture is used as an interpretive lens for processing information, decision making and action alignment. The theory suggests that when there is a congruence between sustainability values and organizational practice, synergies are created that further enhance the link between disclosure and implementation effectiveness, while a cultural mismatch can have a negative impact on this relationship even if the reporting is extensive (Denison et al., 2014). On this view culture is not a residual explanation that is used when other variables fail to explain, but a specifiable condition that affects the productivity of formal systems.

The theory determines the specific cultural characteristics through which this conditioning takes place. Sustainability reporting is a tool for learning, engaging and improving, not just for compliance, in organizations with cultures that support transparency, collaboration and environmental care (Chatman & O'Reilly, 2016). By contrast, organizations with short-term or top-down cultures may not be aware of the implementation benefits of comprehensive reporting, as these cultures do not encourage the communicative openness, receptiveness to change and responsiveness to stakeholder demand that is essential for effective strategic change. Thus, disclosure does not ensure success of implementation – culture dictates the internal flow and application of disclosed information.

The theory also emphasizes the dynamic nature of culture, suggesting that sustainability disclosures can also impact and shape the development of culture, with feedback loops that reinforce or change existing patterns. If environmental NGOs are involved in comprehensive reporting, the disclosure process can lead to cultural change, because the disclosure process involves more transparency, more involvement of stakeholders, and methodical reconsideration of established practice. This disclosure can confirm cultures that are already geared towards sustainability values or jolt cultures that are structured around other values, like efficiency, growth or operational independence. The cultural change on this account is an ongoing process and needs to be reinforced through leadership action, organizational structure and shared experience.

It has been criticized as being a rather static theory of culture and not taking sufficient account of subcultures, power relations and internal cultural contradictions (Greenwood et al., 2008). Some critics argue that it is a very simplistic approach to the complex cultural processes, and that it may not be able to accommodate competing cultures within a single organization, which has some implications for environmental NGOs that operate in diverse cultural contexts with varied stakeholders. The focus on shared values can also be a slight understatement of the influence of conflict, resistance and power in the formation of organizational behaviour. Despite these objections, the main claim of the theory, that the strength of the connection between formal systems and implementation outcomes depends on culture, is testable and is the basis for the hypothesis tested here.

## 2.2 Empirical Literature

Smallwood et al. (2021) examined how organizational culture can help integrate sustainability by conducting a study of companies from various industries, using the Competing Values Framework and structural equation modelling to determine the cultural dimensions that moderate the relationship between sustainability disclosures and effectiveness of the

implementation. They used both quantitative culture assessment instruments and interviews to determine the impact of team collaboration, communication style and decision-making norms on the translation of expressed intentions into action. Organizations with collaborative cultures showed significantly higher correlation between disclosure and implementation success as compared to hierarchical organizations ( $b = 0.428$ ,  $p < 0.05$ ), and team collaboration had a positive effect on disclosure. The results of the study showed that culture is the lens that sustainability information is perceived through and used. The shortcomings are its narrow focus on cross-organizational cultural difference and the specific way in which the culture-disclosure interaction works in environmental NGO's.

Muydinov and Mamazhonov (2021) conducted a mixed-methods research on environmental organizations, in which they measured the results of their projects and conducted a cultural assessment survey to determine the effect of collaborative culture on the effectiveness of disclosure. They designed it to include longitudinal observation of team interaction, as well as quantitative analysis of implementation success in organizations with various cultural traits over the course of three years. The results showed that team collaboration was an important moderator on the disclosure-implementation relationship (interaction effect = 0.341,  $r = 0.69$ ,  $p < 0.05$ ) and that highly collaborative organizations achieved much higher levels of implementation outcomes from their disclosure activities than individualistic organizations. The authors concluded that collaborative cultures increase disclosure effectiveness through knowledge transfer and cross functional problem solving. The gap relates to its focus on team level processes rather than organisation level cultural factors.

Schultz et al. (2021) explored communication patterns and their impact on the implementation of sustainability strategies using the social network analysis and communication audit approach to identify the moderating effect of information flows on disclosure effectiveness. Their methodology included a formal and informal communication structure as well as measures of the association between disclosure practice and implementation outcomes, across organizations distinguished by communication culture. Organizations with open and bilateral communication patterns showed significantly higher relationship between sustainability disclosure and success in sustainability implementation than organizations with restrictive top-down communication patterns (Cohen's  $d = 0.67$ , 95% CI [0.44, 0.90]). The study validated the moderating role of communication culture on disclosure effectiveness, as it shapes the disclosure of sustainability information across the organization in terms of its release, interpretation and enactment. The gap is because it focuses on the structure of communication and not on the culture values and beliefs which are the foundation of the communication structure.

Bayne et al. (2021) conducted a five-year longitudinal study on environmental organizations to investigate the link between innovation orientation and sustainability performance, using innovation culture assessment tools and regression analysis to determine the moderation effect of innovation-oriented cultures on the disclosure-implementation effectiveness relationship. They used a quantitative measure of innovation culture and a qualitative measure of implementation flexibility to assess the impact of an organization's openness to new approaches on disclosure use for strategic action. Innovation-oriented organizations were much more successful in turning disclosed commitments into creative ways of implementing them ( $F(2,115) = 18.94$ ,  $p < 0.05$ ,  $R^2 = 0.247$ ) and an innovation culture expanded the organization's ability to do so. The gap is its focus on technological and procedural innovation but lack of focus on social and institutional innovation that might be more important in the environmental advocacy context.

Kend and Nguyen (2022) explored decision-making norms and the impact of these norms on the effectiveness of sustainability reporting, using decision-making style assessment and

implementation outcome scoring to determine the moderating role of participatory and centralized decision cultures between disclosure and implementation. Their approach included taking into account governance structures and decision processes as well as the impact of different decision cultures on the translation of disclosure into strategic implementation. Organisations with participatory cultures of decision making had significantly higher relationships between disclosure and implementation success than organisations with centralized cultures of decision making ( $M = 82.4$ ,  $SD = 12.8$  vs.  $M = 64.7$ ,  $SD = 17.3$ ;  $t(132) = 6.89$ ,  $p < 0.05$ ), with participative decision making leading to ownership and commitment to announced sustainability goals. The difference is that it does not focus enough on the effectiveness of decision making in the diverse stakeholder and power dynamics of environmental NGOs.

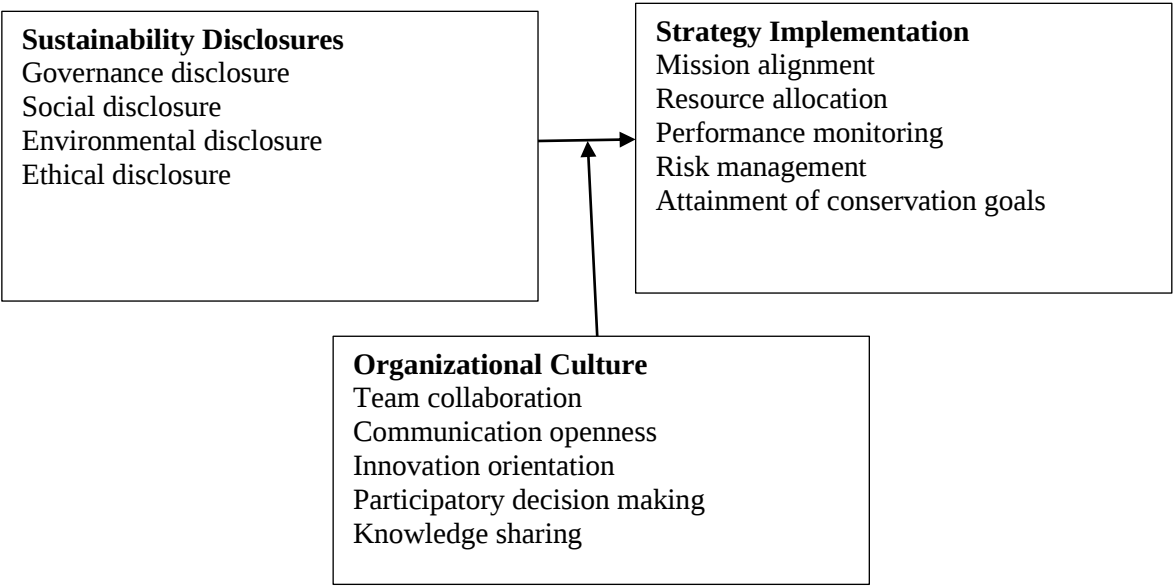
Using values assessment instruments and cross-cultural analysis in organizations in several countries, Ens et al. (2021) investigated the moderating effect of cultural alignment to sustainability values on the link between disclosures and strategy implementation. They used a combination of organizational culture measurement and assessment of national culture with the aim of determining the influence of the various cultural layers on disclosure effectiveness in implementing sustainability strategy. Organizations that were highly congruent with sustainability values showed significantly higher relationships between disclosure practice and implementation effectiveness than organizations that were less congruent (interaction effect = 0.523,  $p < 0.05$ ), and value congruence was a basic condition that influenced the usefulness of disclosure. The results indicated that there was interplay between disclosures and cultural values, adding up to synergetic effects, where disclosures acted as a stimulus to the cultural values and the cultural values provided the motivational impetus to act on the disclosed commitments. The gap relates to its cultural scope in relation to the particular attributes pertinent to environmental organisations.

Hvidberg et al. (2023) examined decentralised decision making and community engagement in conservation NGOs, using an organisational structure evaluation and community relationship assessment to determine how decentralised cultures moderate disclosure effectiveness in community-based environmental projects. They are the ones who have designed a comparison of centralized and decentralized organizational models to implementation success measures and community satisfaction indicators over 4 years. Cultures of decentralised decision-making had significantly better implementation outcomes from their disclosure practices, including on community engagement and local ownership metrics; decentralisation allowed for greater responsiveness to local context and stakeholder need. The authors identified decentralized cultures as a moderating factor of disclosure effectiveness, enabling organizations to disclose sustainability commitments differently in different contexts while keeping them accountable by consolidated reporting. The difference is that it does not look at the effectiveness of decentralisation in relation to the type of environmental work being done, but just at conservation organisations.

### 2.3 Conceptual Framework

The conceptual framework shows that sustainability disclosures are the independent variable, strategy implementation is the dependent variable and organizational culture is the moderating variable. Sustainability disclosures include governance, social, environmental and ethical disclosure (combined into a composite score for the purposes of the moderation analysis). Organizational culture manifests itself through cross-departmental cooperation, open communication, attitude towards innovation, participatory decision-making, sharing of knowledge and consistency with sustainability values. The theory assumes that the relationship

between sustainability disclosures and strategy implementation is dependent on the strength of the organizational culture, such that the impact of disclosure on strategy implementation is stronger in more supportive cultures.



**Figure 1: Conceptual Framework**

**3.1 Methodology**

The study used the positivist research paradigm that assumes reality is independent of human perception and can be measured objectively, through scientific enquiry (Creswell & Creswell, 2023). The paradigm was appropriate for the study as the aim was to examine a specified interaction hypothesis by quantitative measurement and statistical estimation, variables were operationally defined and measured in a standardised form and the analysis was carried out by standardised procedures (Saunders et al., 2023). A cross-sectional survey design was used as it allowed data to be collected from a number of respondents at a specific point in time, and disclosure practice, cultural attributes and effectiveness of implementation to be assessed in one temporal context (Bryman & Bell, 2023).

The target population was the 217 registered environmental non-governmental organizations (NGOs) in Kenya listed by the NGO Coordination Board (2023), covering climate change mitigation and adaptation, biodiversity conservation, water resource management, waste management and recycling, environmental education and advocacy in all the 47 counties. The sampling method used was stratified random sampling and the sample size was determined using the Yamane's (1967) formula for finite population with a 95 percent confidence level and a 5 percent margin of error, resulting in a sample of 140 organizations, with a non-response allowance added to make 150 organizations. In each of the sampled organisations, one key informant was selected, either the Programme Manager or the Sustainability Officer, based on the premise that such officers possess a combination of disclosure practice and cultural awareness of the organisation, and are directly involved in the execution of the strategy (Sekaran & Bougie, 2020).

The data collection instrument was a structured self-administered questionnaire that was divided into four sections: Demographic characteristics, 4 disclosure dimensions, and organizational culture and strategy implementation, with each item rated on a five-point Likert scale from strongly disagree to strongly agree (Hair et al., 2021). To check clarity and

appropriateness of the response scale and to get a preliminary idea about the reliability of the instrument, a pilot test was conducted on 15 environmental NGOs which were not included in the main sample. The Cronbach alpha test results showed that the value for organizational culture was 0.779, for strategy implementation was 0.834, and for the four scales of disclosure ranged from 0.798 to 0.843, all of which were above 0.7. A mixed-mode survey using face-to-face administration in urban centres and online administration to remote organizations was used to administer questionnaires over a four-week period with weekly follow-up reminders.

Descriptive and inferential statistics were used to analyze the data in SPSS. Descriptive analysis was performed to determine the frequencies, percentages, means and standard deviations, where a mean score of 1.0 to 2.4 was considered negative perception, 2.5 to 3.4 inconclusive and 3.5 to 5.0 positive perception. Moderation was assessed according to Baron and Kenny's (1986) suggested procedure. The four disclosure dimensions were combined to create a composite sustainability disclosures score which was then interacted with organizational culture to create an interaction term, and the analysis was conducted hierarchically, with the composite disclosure score and organizational culture entered as predictors in the first model, and the interaction term entered in the second. Moderation would be confirmed if there was a significant interaction and a significant increase in the coefficient of determination. Estimation was preceded by diagnostic tests and ethical clearance was obtained.

#### **4.1 Results and Findings**

A total of 150 structured questionnaires were given to targeted key informants in the sampled environmental NGO's. Of these, 138 were completed and returned, and 12 were either not returned or returned incomplete and not included in the analysis (a response rate of 92 percent). According to Mugenda and Mugenda (2003) and Kothari (2022), 50 percent of response rate is sufficient for analysis and reporting, 60 percent is good and 70 percent and above is very good, while Babbie (2004) states that return rates above 70 percent are excellent for the analysis and reporting of social science survey research. Thus, the rate obtained was higher than the recommended rates. This is due to the mixed-mode approach to data collection, the efforts of the organizations to be involved through introduction letters and follow-up calls, and the targeting of senior officers directly involved in reporting and implementation.

#### **4.2 Descriptive Statistics**

Organizational culture was assessed by a five-point Likert scale that included respondents' degree of agreement with statements about cross-departmental collaboration, openness of communication, innovation orientation, participatory decision making, sharing of knowledge, and alignment with sustainability values. The mean score for the statement about cross-departmental collaboration was 3.80 with a 62.4 percent agreement and 6.5 percent disagreement, and the mean score for the statement about open and transparent communication at all levels was 3.78 with a 64.5 percent agreement and 6.5 percent disagreement. The statement encouraging innovation and new ways of addressing environmental issues had a mean of 3.81 and 64.5 percent agreement. The statement on participatory decision making with multiple stakeholders had the lowest mean in the construct (3.77) and 62.3 percent agreement.

Sixty-four and a half percent agreed and gave a mean of 3.81 with regard to the statement on a culture promoting knowledge sharing; 61.6 percent agreed and gave the highest mean in the construct of 3.82 with regard to the statement on communication patterns supporting effective strategy implementation; and 59.4 percent agreed and gave a mean of 3.80 with regard to the

statement on cultural alignment with sustainability values and environmental stewardship. The descriptive results of organizational culture are shown in Table 1.

*Table 1: Descriptive Statistics for Organizational Culture*

| Statements                                                                                  | SD  | D   | N    | A    | SA   | Mean        | Std. Dev.   |
|---------------------------------------------------------------------------------------------|-----|-----|------|------|------|-------------|-------------|
| Team members in our organization work collaboratively across departments.                   | 1.4 | 5.1 | 31.2 | 37.0 | 25.4 | 3.80        | 0.93        |
| There is open and transparent communication at all levels in our organization.              | 0.7 | 7.2 | 27.5 | 42.0 | 22.5 | 3.78        | 0.90        |
| Our organization encourages innovation and new approaches to environmental challenges.      | 0.7 | 6.5 | 28.3 | 39.9 | 24.6 | 3.81        | 0.91        |
| Decision-making in our organization involves participation from multiple stakeholders.      | 1.4 | 7.2 | 29.0 | 37.7 | 24.6 | 3.77        | 0.95        |
| Our organizational culture promotes knowledge sharing.                                      | 0.7 | 7.2 | 27.5 | 39.1 | 25.4 | 3.81        | 0.92        |
| Communication patterns in our organization support effective strategy implementation.       | 0.7 | 7.2 | 30.4 | 32.6 | 29.0 | 3.82        | 0.96        |
| Our organization's culture aligns with sustainability values and environmental stewardship. | 0.7 | 5.8 | 34.1 | 31.9 | 27.5 | 3.80        | 0.94        |
| <b>Average</b>                                                                              |     |     |      |      |      | <b>3.80</b> | <b>0.93</b> |

Source: Research Data (2026)

The respondents had positive perception of organizational culture with the means of the statements ranging between 3.77 and 3.82, and the variable mean being 3.80 with the average standard deviation of 0.93. Each of the seven statements was within the range that indicated a positive perception and the results were the most consistently positive of the study constructs. These findings suggest that the interviewees felt their organisational cultures were supportive, collaborative and values based around sustainability. This finding supports the Organizational Culture Theory (Schein, 2010; Cameron & Quinn, 2011) that shared values and norms are key to understanding the extent to which formal systems and disclosures are translated into action and it supports Denison et al. (2014) and Engert and Baumgartner (2016) that the culture plays a significant role in linking formulation and implementation.

The same scale was used to measure the implementation of the strategy, including agreement with statements about mission alignment, allocation of resources, monitoring of performance, identification of risks, turning plans into on-the-ground activity, risk management frameworks, and achieving conservation goals. The statement about aligning operational activities with the environmental mission received 52.9 percent agreement with a high 37.7 percent neutral share and a mean of 3.64, and efficient allocation of financial resources received 55.8 percent agreement and a mean of 3.64. The highest agreement in the construct was 57.3 percent in the robust performance monitoring systems and the highest mean was 3.67 in the robust performance monitoring systems. The remaining statements averaged from 3.63 to 3.66 with neutral shares from 32.6 to 39.1 percent. The descriptive results are shown in Table 2.

*Table 2: Descriptive Statistics for Strategy Implementation*

| Statements                                                                                  | SD  | D    | N    | A    | SA   | Mean        | Std. Dev.   |
|---------------------------------------------------------------------------------------------|-----|------|------|------|------|-------------|-------------|
| Our organization effectively aligns operational activities with our environmental mission.  | 0.7 | 8.7  | 37.7 | 31.2 | 21.7 | 3.64        | 0.94        |
| We efficiently allocate financial resources to achieve strategic objectives.                | 0.0 | 9.4  | 34.8 | 37.7 | 18.1 | 3.64        | 0.89        |
| Our organization has robust performance monitoring systems for tracking strategic progress. | 0.0 | 10.1 | 32.6 | 37.7 | 19.6 | 3.67        | 0.91        |
| Our organization systematically identifies potential risks to strategy implementation.      | 0.0 | 9.4  | 38.4 | 31.9 | 20.3 | 3.63        | 0.91        |
| Our strategic plans are successfully translated into actionable operational activities.     | 0.7 | 8.7  | 37.7 | 31.9 | 21.0 | 3.64        | 0.94        |
| We have effective risk management frameworks to mitigate implementation challenges.         | 1.4 | 7.2  | 39.1 | 31.2 | 21.0 | 3.63        | 0.94        |
| Our organization achieves its stated environmental conservation goals.                      | 0.0 | 10.1 | 32.6 | 38.4 | 18.8 | 3.66        | 0.90        |
| <b>Average</b>                                                                              |     |      |      |      |      | <b>3.64</b> | <b>0.92</b> |

Source: Research Data (2026)

The lowest mean of the study variables was the mean of Strategy implementation with an overall average mean of 3.64 and an average standard deviation of 0.92 with the highest proportions of neutral responses. It is instructive to compare the two constructs. The results show that both organizational culture and the four dimensions of disclosure have a higher mean than the dependent variable, indicating that environmental NGOs in Kenya have progressed further in institutionalizing supportive culture and transparent disclosure practices than in implementing them. This is in line with the findings of Engert and Baumgartner (2016) that implementation is often the most challenging phase of the strategy process and it creates an empirical context in which the possibility of a moderating effect can be explored.

### 4.3 Correlation Analysis

Correlation analysis was used to determine the relationships between the four disclosure dimensions and organizational culture and strategy implementation, in terms of their strength and direction. Pearson's product-moment correlation coefficient was calculated and significance was tested at 0.05 level; correlation coefficients were considered as weak (0.1-0.3), moderate (0.3-0.5) and strong (>0.5) without taking the sign into consideration. The analysis was done as a preliminary test of the hypothesized relationships and initial test of multicollinearity risk. The output of the correlation is presented in Table 3.

Table 3: Correlation Analysis Outputs

|                                | Strategy<br>Implementati<br>on | Governan<br>ce<br>Disclosur<br>e | Social<br>Disclosu<br>re | Environmen<br>tal<br>Disclosure | Ethical<br>Disclosu<br>re | Organizatio<br>nal Culture |
|--------------------------------|--------------------------------|----------------------------------|--------------------------|---------------------------------|---------------------------|----------------------------|
| Strategy<br>Implementati<br>on | 1.000                          |                                  |                          |                                 |                           |                            |
| Governance<br>Disclosure       | 0.734**                        | 1.000                            |                          |                                 |                           |                            |
| Social<br>Disclosure           | 0.718**                        | 0.485                            | 1.000                    |                                 |                           |                            |
| Environment<br>al Disclosure   | 0.747**                        | 0.475                            | 0.449                    | 1.000                           |                           |                            |
| Ethical<br>Disclosure          | 0.715**                        | 0.426                            | 0.438                    | 0.440                           | 1.000                     |                            |
| Organization<br>al Culture     | 0.712**                        | 0.440                            | 0.427                    | 0.485                           | 0.446                     | 1.000                      |

Correlation is significant at the 0.01 level (2-tailed). Source: Research Data (2026)

There were strong, positive and statistically significant relationships between strategy implementation and all four disclosure dimensions and organizational culture. The environmental disclosure had the highest correlation with the others ( $r = 0.747$ ,  $p < 0.01$ ), followed by governance disclosure ( $r = 0.734$ ), social disclosure ( $r = 0.718$ ), ethical disclosure ( $r = 0.715$ ) and organizational culture ( $r = 0.712$ ). Inter-correlations between the predictors themselves were only moderate (between 0.426 and 0.485), which is well below the 0.80 threshold at which multicollinearity is typically considered problematic (Hair et al., 2021), confirming that the predictors were sufficiently distinct to be included together in the models. The relative high correlation of organizational culture with strategy implementation suggests that the results of the moderation analysis, as culture is not merely a setting or background condition but an active correlate of effectiveness in strategy implementation.

#### 4.4 Moderation Analysis

Moderation analysis was done as suggested by Baron and Kenny (1986). An interaction term between the combined sustainability disclosures score (from the four disclosure dimensions) and organizational culture was created. The analysis was then done hierarchically, first Model 1 that includes the combined disclosure score and organizational culture as predictors of strategy implementation and then Model 2 that includes the interaction term. The variance of strategy implementation was accounted for by Model 1 (93.8%). The addition of the interaction term to Model 2 increased the coefficient of determination from 0.938 to 0.948 (an increase of 0.010) and the analysis of variance for Model 2 produced an F-statistic of 813.081 with a p-value of 0.000. The moderation results are shown in Table 4.

Table 4: Moderation Analysis Outputs

| Model                           | R                | R Square   | R Square Change   | Std. Error |       |
|---------------------------------|------------------|------------|-------------------|------------|-------|
| 1 (SD, OC)                      | 0.969            | 0.938      | 0.938             | 0.213      |       |
| 2 (+ SD × OC)                   | 0.974            | 0.948      | 0.010             | 0.196      |       |
| Model                           | Unstandardized B | Std. Error | Standardized Beta | t          | Sig.  |
| (Constant)                      | 3.597            | 0.019      |                   | 185.958    | 0.000 |
| Sustainability Disclosures (SD) | 1.073            | 0.032      | 0.826             | 33.666     | 0.000 |
| Organizational Culture (OC)     | 0.241            | 0.024      | 0.241             | 9.901      | 0.000 |
| SD × Organizational Culture     | 0.148            | 0.030      | 0.099             | 4.945      | 0.000 |

a. Dependent Variable: Strategy Implementation. Model 2 ANOVA:  $F = 813.081, p = 0.000$ .

The interaction between sustainability disclosures and organizational culture was positive and significant ( $\beta = 0.099, B = 0.148, t = 4.945, p < 0.001$ ). This provides evidence that organizational culture plays a significant role in the relationship between sustainability disclosures and strategy implementation, and that the positive impact of sustainability disclosures on strategy implementation is greater in organizations with more supportive cultures. The incremental variance accounted for by the interaction term is small (1.0 percent), but this size of interaction is typical and significant in moderation studies, as interaction effects often explain small but important incremental amounts of variance (Aguinis et al., 2005). On the strength of these findings the null hypothesis was rejected in favour of the alternative hypothesis.

The increase in the statistic is not the only substantive importance of the result. The result suggests that two environmental NGOs that disclose their sustainability in the same way can have very different levels of implementation, depending on the quality of their organisational culture. A culture of collaboration, communication and sustainability seems to act as the driver that internalises and implements the disclosed commitments, making the act of disclosing a reality of applying. This is in line with the resource-based logic proposed by AlDhaheri et al. (2020), and with the culture-strategy alignment thesis of Denison et al. (2014), and is consistent with the direct effect of organizational culture in the model ( $\beta = 0.241, t = 9.901, p < 0.001$ ), which indicates that culture contributes to implementation independently of its conditioning role.

This finding is well supported by the Organizational Culture Theory (Schein, 2010; Cameron & Quinn, 2011), which suggests that the extent to which formal systems and disclosures are translated into action is driven by the shared values, beliefs and norms. It supports Engert and Baumgartner (2016) who suggested that culture plays a key role in linking the formulation and implementation of sustainability strategy, and Abdi et al. (2022) and Elmghamez et al. (2024) who found that organizational characteristics moderate the disclosure-performance relationship. The finding also aligns with the specific cultural mechanisms found in the empirical literature, which include collaboration (Smallwood et al., 2021; Muydinov & Mamazhonov, 2021), communication openness (Schultz et al., 2021), innovation orientation (Bayne et al., 2021), participatory decision making (Kend & Nguyen, 2022), and value congruence (Ens et al., 2021).

The finding is significant for the Kenyan literature as it transcends direct-effects modelling. While previous research on Kenyan NGOs has indicated that there is a correlation between management practices and organizational performance (Odhiambo & Njuguna, 2021; Mailu & Kariuki, 2022), the current analysis reveals that culture conditions, not just accompanies, the disclosure-implementation relationship, by using formal interaction testing. This distinction is of practical consequence. It suggests that investing in disclosure systems will reap the most strategic benefits if it is accompanied by conscious efforts to build a positive internal culture, and that organizations that invest in disclosure, without paying attention to culture, may not see a linear increase in execution with increases in disclosure.

## 5.1 Conclusions

Organizational culture significantly moderates the relationship between sustainability disclosures and strategy implementation in environmental non-governmental organizations in Kenya. The cultural dimensions of team collaboration, communication openness, innovation orientation, participatory decision making, knowledge sharing and alignment with sustainability values determine how effectively disclosure practices are transformed into strategic outcomes. Two organizations with comparable levels of disclosure may achieve markedly different implementation results according to the strength of their cultures, because it is through a supportive culture that disclosed commitments are internalised and enacted. It is therefore concluded that environmental NGOs cultivating cultures aligned with transparency, inclusivity, collaboration and continuous improvement derive substantially stronger implementation benefits from their disclosure efforts, and that culture is an active enabler of the disclosure-implementation relationship rather than a background condition.

The study was subject to several limitations that qualify these conclusions. It relied on self-reported data from a single key informant in each organization, which admits the possibility of social desirability effects and common-method variance, and captures an organizational perspective from one vantage point rather than triangulating across multiple respondents or documentary sources. The cross-sectional design captured the variables at a single point in time, which limits the ability to draw firm causal inferences or to observe how cultural conditions and disclosure practices co-evolve. The study was confined to registered environmental NGOs and did not account for unregistered civil society actors, and the treatment of culture as a unitary organizational attribute does not capture the subcultures and internal cultural inconsistencies that the theoretical literature identifies.

## 6.1 Recommendations

Leadership in environmental non-governmental organizations should deliberately cultivate organizational cultures that support sustainability disclosure practices, by promoting cross-departmental collaboration, establishing open communication channels, encouraging innovation in reporting practice and embedding participatory decision making at all operational levels. Because organizational culture was found to significantly strengthen the effect of disclosure on implementation, culture-change and culture-strengthening programmes should be incorporated into strategic capacity-building initiatives rather than treated as a separate human resource concern. Investment in disclosure systems will yield the greatest strategic returns where it is accompanied by deliberate efforts to build a collaborative, communicative and sustainability-aligned internal culture, and organizations should therefore sequence the two investments together rather than in isolation.

Further research should adopt longitudinal designs capable of establishing how cultural conditions and disclosure practices influence one another over multiple organizational cycles,

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thereby addressing the causal limitations of the present design and testing the feedback proposition advanced by Organizational Culture Theory. Qualitative studies exploring the mechanisms through which culture shapes the translation of disclosure into strategic action would complement the present quantitative findings and illuminate the processes underlying the moderating effect established here. Comparative studies across NGO sub-sectors, and mixed-methods designs triangulating perceptions with documentary evidence and multiple informants, would address the common-method and single-informant limitations and would establish whether the moderating effect varies with sector context.

## References

- 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.
- Aguinis, H., Beaty, J. C., Boik, R. J., & Pierce, C. A. (2005). Effect size and power in assessing moderating effects of categorical variables using multiple regression. *Journal of Applied Psychology*, 90(1), 94-107.
- Al Hawaj, A. Y., & Buallay, A. M. (2022). A worldwide sectorial analysis of sustainability reporting and its impact on firm performance. *Journal of Sustainable Finance & Investment*, 12(1), 62-86.
- AlDhaheri, F., Ameen, A., & Isaac, O. (2020). The influence of strategy formulation (vision, mission, and goals) on the organizational operations. *Journal of Critical Reviews*, 7(17), 1932-1941.
- Babbie, E. R. (2004). *The practice of social research* (10th ed.). Wadsworth Publishing.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bayne, L., Purchase, S., & Tarca, A. (2021). Innovation orientation and sustainability performance in environmental organizations. *Journal of Environmental Management*, 286, 112-128.
- Bryman, A., & Bell, E. (2023). *Business research methods* (6th ed.). Oxford University Press.
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework* (3rd ed.). Jossey-Bass.
- Chatman, J. A., & O'Reilly, C. A. (2016). Paradigm lost: Reinvigorating the study of organizational culture. *Research in Organizational Behavior*, 36, 199-224.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). Sage Publications.
- Denison, D., Hooijberg, R., Lane, N., & Lief, C. (2014). *Leading culture change in global organizations*. Jossey-Bass.
- Ebenezer, A. A., Musah, A., & Ahmed, I. A. (2020). Determinants of sustainability reporting in developing economies. *Journal of Accounting and Finance in Emerging Economies*, 6(2), 401-412.

- Elmghaamez, I. K., Nwachukwu, J., & Ntim, C. G. (2024). ESG disclosure and financial performance of multinational enterprises. *International Journal of Finance & Economics*, 29(3), 3061-3084.
- Engert, S., & Baumgartner, R. J. (2016). Corporate sustainability strategy: Bridging the gap between formulation and implementation. *Journal of Cleaner Production*, 113, 822-834.
- Ens, N., Hukal, P., & Blegind Jensen, T. (2021). Cultural alignment with sustainability values and disclosure effectiveness. *Journal of Business Ethics*, 174(2), 289-307.
- Greenwood, R., Oliver, C., Sahlin, K., & Suddaby, R. (2008). *The Sage handbook of organizational institutionalism*. Sage Publications.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hvidberg, M., Jensen, S. R., & Olsen, K. B. (2023). Decentralised decision making and community engagement in conservation organizations. *Environmental Science & Policy*, 142, 78-91.
- Kend, M., & Nguyen, L. A. (2022). Decision-making norms and the effectiveness of sustainability reporting. *Meditari Accountancy Research*, 30(4), 918-940.
- Kenya Community Development Foundation. (2022). *Sustainability and performance report on environmental NGOs*.
- Kenya Institute of Management. (2023). *Demand for sustainable organizational practices in Kenya*.
- Kothari, C. R. (2022). *Research methodology: Methods and techniques* (4th ed.). New Age International.
- Leonard, M. (2024). Influence of strategy implementation practice on organizational performance. *International Journal of Strategic Management*, 3(1), 22-38.
- Lewis, D., Kanji, N., & Themudo, N. S. (2020). *Non-governmental organizations and development* (2nd ed.). Routledge.
- Mailu, R. M., & Kariuki, P. (2022). Influence of strategic leadership on performance of non-governmental organizations in Nairobi County. *Journal of Business and Strategic Management*, 7(2), 55-70.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. African Centre for Technology Studies.
- Mutua, A. M., & Ibembe, J. D. B. (2020). Risk management processes and performance of non-governmental organizations in Kenya. *International Journal of Business Management and Finance*, 4(1), 88-104.
- Muydinov, R., & Mamazhonov, A. (2021). Team collaboration dynamics in sustainable development projects. *International Journal of Sustainable Development and Planning*, 16(5), 843-856.
- National Environment Management Authority. (2023). *Annual environmental performance report*.
- NGO Coordination Board of Kenya. (2023). *Annual report on registered non-governmental organizations*.

- Nini, S. N., & Kihara, A. (2023). Factors influencing the implementation of strategic plans in non-governmental organizations. *Journal of Strategic Management*, 8(1), 12-29.
- Odhiambo, E., & Njuguna, R. (2021). Strategic management practices and performance of non-governmental organizations in Kenya. *International Journal of Business and Management*, 9(3), 44-61.
- Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research methods for business students* (9th ed.). Pearson Education.
- Schein, E. H. (1985). *Organizational culture and leadership*. Jossey-Bass.
- Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). Jossey-Bass.
- Schein, E. H., & Schein, P. (2017). *Organizational culture and leadership* (5th ed.). John Wiley & Sons.
- Schultz, F., Castelló, I., & Morsing, M. (2021). Communication patterns and sustainability strategy implementation. *Journal of Business Ethics*, 170(3), 511-528.
- Sekaran, U., & Bougie, R. (2020). *Research methods for business: A skill-building approach* (8th ed.). John Wiley & Sons.
- Smallwood, D., Lyon, T. P., & Delmas, M. A. (2021). Organizational culture and the integration of sustainability. *Business Strategy and the Environment*, 30(4), 1802-1818.
- Tauringana, V. (2021). Sustainability reporting adoption in developing countries. *Journal of Accounting in Emerging Economies*, 11(2), 194-215.
- Thuranira, M. K., & Munene, R. (2018). Critical success factors for strategy implementation in non-governmental organizations. *Strategic Journal of Business and Change Management*, 5(3), 101-118.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.
- Zhou, D., Saeed, U. F., & Agyemang, A. O. (2024). Assessing the role of sustainability disclosure on firms' financial performance. *Sustainability*, 16(4), 1512.