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CORPORATE SOCIAL RESPONSIBILITY AND ORGANIZATIONAL PERFORMANCE IN KENYA'S TELECOMMUNICATIONS SECTOR: A SIXTEEN-YEAR PANEL ANALYSIS

BY

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Abstract

Although, there are still limited firm level studies that correlate CSR with a firm's real business performance within the telecoms of Africa, the practice is becoming more of a strategy execution approach than a choice of doing good for its own sake. This study was based on Schein's Organizational Culture Theory which sought to determine how CSR affects organizational performance among telecoms in Kenya. An explanatory longitudinal data design was preferred in the positivist approach based on panel data from the three mobile providers of Safaricom, Airtel Kenya and Telkom Kenya for 2010-2025. After data was treated, the number of firm-years composing the analytical panel was equal to 45. Environmental, social and organizational impact was used to measure CSR using z-standardized metrics; CSR component scores were averaged to obtain z-standardized scores. Similarly market share, subscriber growth and product value addition were used to measure organizational success, and CSR component scores were averaged to form z-standardized scores. Descriptive statistics, diagnostic tests, Pearson correlation and simple regression were used. CSR was substantially linked with performance ($r = 0.620$, $p < 0.001$) and explained 38.5% of its variation ($R^2 = 0.385$; $F(1, 43) = 26.91$, $p < 0.001$), rejecting the null hypothesis. CSR is a 1st order factor of performing, where it is at the highest level on the organizational and social dimensions and at the lowest level on the environment.

Keywords: Competency in the concept of organizational culture, telecommunication, panel data, Kenya, corporate social responsibility.

Introduction

The telecommunications industry plays a vital role in the country's economic development, providing connectivity, promoting financial inclusion and enabling innovation across all other businesses. While the overall performance of the ICT sector has improved, it has been noted that there are disaggregated trends that certain players have performed better than others; both in Kenya and historically so, as illustrated by the statistics from International Trade Administration (2024) and Ogindo et al. (2024). The market is highly concentrated, with Safaricom PLC accounting for around two-thirds of mobile subscribers, while Airtel Kenya and Telkom Kenya compete for a share of the balance – and the traditional voice and messaging revenue is in downward trend (Communications Authority of Kenya 2024, 2025, Katila 2025). Corporate social responsibility (CSR) has become a key strategic move by corporations under these climatic conditions, as demonstrated through environmental stewardship, community development, digital inclusiveness and employee welfare and not as acts of voluntary performing of duties (Carroll 1991). However, its effect on the quantitative performance of an organisation is still inadequately demonstrated in the Kenyan telecoms spectrum, with previous research being mostly perception-based, and limited to specific periods. This research aims to observe the relationship between corporate social responsibility and organizational performance of the three main operators in Kenya using objective, audited, firm level panel data for the period 16 years: 2010-2025. The study has one general research question which is whether the corporate social responsibility affects the efficiency of the Telecomm industry in Kenya. This also confirms that there is null hypothesis relationship between CSR and that performance. Continuing the body of work developed in this article, the institutionalization of responsible conduct was assessed through longitudinally gathered secondary data and anchored in Schein's Organizational Culture Theory, in order to provide evidence to show whether it is indeed a good indicator of performance in a network industry in a developing economy.

Literature Review

Theoretical Framework: Organizational Culture Theory

This research is based on Edgar Schein's Organizational Culture Theory. Based on the research of Schein (2010), an organization's culture consists of that which the organization has learned and shares via "basic assumptions" by which it explains and guides its perceptions, thoughts, and feelings, and by which it acts to adapt to its external environment and to handle internal integration. According to Schein there are three levels of culture which are interrelated. Artifacts, the first category, comprise the visible and tangible expression of the organization's culture, specifically the organization's structures, procedures, published reports and obvious behaviors. The second set of principles is what the organization openly promotes and includes the stated strategies, goals, and philosophies. The third and most fundamental level of assumptions are the beliefs that are assumed and the standards that people use to assess how the company should behave (Cotter-Lockard 2016; Schein 2010).

With this model, your CSR can be one that's the expression of your culture in all three tiers and not an add-on or addendum. Corporate social responsibility appears at the artifact level as the sustainability statements, community engagements and environment programs of companies. At the espoused value level, firm commitments to responsible practice are provided in mission statements, codes of conduct and strategy documents. Most fundamentally, CSR conveys a set of beliefs held by a company regarding its responsibility towards society, employees and undoubtedly the environment. Where they are related to value creation, CSR is not added onto the firm's identity for reputation management purposes, but becomes a part of its identity and its routine, and is maintained over time in ways that impact on its performance (Carroll 1991; Schein 2010). In an industry as dynamic, competitive and strategically unpredictable as telecom, robust culture and good leadership are required to help keep the business on track despite the temblors.

In this study, the concept of corporate social responsibility (CSR) is interpreted according to Carroll's (1991) well accepted definition that holds organizations are obligated to perform their economic, legal, ethical and discretionary duties towards their various stakeholders. Carrolls approach to responsibility posits that it is multi-dimensional and cumulative, and provides easy means for operationalizing the environmental, social and organizational factors. Carroll's content model can be conflated with Schein's cultural mechanism to obtain a coherent picture. Carroll outlines what responsible behavior looks like and Schein addresses the fact that some business entities always do and some don't; the difference is how strongly the notion of responsibility is embedded in the corporate culture.

In the case of the telecoms sector, which applies to Kenya, there are some limitations of the rules. It may also underestimate the power of external factors, including regulation, spectrum policy, and technological revolution, by focusing almost entirely on the internal aspects of culture; disregard culture in a rapidly changing, disruptive industry; and oversimplify culture for a multinational workforce with multiple cultural backgrounds (Cotter-Lockard 2016). Despite these warnings, the Organizational Culture Theory, which provides the direct connection between the embedding of responsible practice internally and the results in performance, is the most suitable anchor for the current question of what effects Responsible Practice internally had on the results of this study, rather than merely corporate social responsibility as part of public relations.

Conceptualizing CSR and Organizational Performance

The concept of CSR has evolved conceptually from an isolated approach of “corporate giving” to a broader vision of CSR as fully embedded in company strategies. Along Carroll's (1991) pyramid, what is currently prevailing is the image of a set of interrelated responsibilities – the economic, legal, ethical and discretionary responsibilities – as forming part of good corporate citizenship. This contrasts with the earlier treatments which considered CSR as distinct from the firm's business and as similar to giving for pure pleasure. As opposed to considering CSR as philanthropy, this work focuses on thinking of CSR as incorporated as a whole range of practices of environmental, social and organizational character and a distinction continues to exist between disclosure and implementation; it is also a choice of strategy that a company makes to gain a competitive edge. This positioning of the CSR construct is important from a measurement standpoint as it places all the actions and disclosures of firms within the uniform criteria outlined by Schein (2010) and is no longer a one-off gesture.

Performance of an organization is not viewed as an accountancy figure, but rather, an interrelated set of factors. The study considers three complementary aspects, especially relevant in a network industry in which customers are the key, namely: market share, which reflects the company's competitiveness in a concentrated market; customer satisfaction, measured by subscriber base growth from one year to the next; and product value addition, which reflects the fact that the business offers innovative and differentiated products. All of these factors (and more) will be combined as elements of a single standardized composite and thus the study will not be driven primarily by financial data, but will be measured in a more balanced way suited to the strategic (and not only financial) context. In line with the multidimensional approach of the studies undertaken by Gitonga et al., (2025), and Ogindo et al., (2024) both focus on analysing the performance of enterprises in Kenya from a strategic management perspective).

Empirical Evidence on CSR and Performance

A body of positive research exists and spans all across the world—the good shows a correlation between good corporate social performance and financial and organizational good performance. At a preliminary, but often cited, study, Orlitzky et al. (2003) concluded that there is a positive and statistically significant relationship between corporate social performance and financial performance. Association was transcultural and partially mediated by reputation and managerial skills. Fifty-two studies were included in the meta-analysis. After more than 10 years of debate, in a second-order meta-analysis (pooled meta-analysis results) Busch and Friede (2018) revisited this issue focusing on more over 200 studies, and their findings were inconclusive, indicating a positive relationship between CSR and financial performance that was bidirectional in nature and remained so irrespective of the methods used or the time period investigated. All of these recaps refer to the fact that there is a strong opinion that the right conduct and performance are linked. Their limitation for our purposes is that both studies draw from a range of evidence mostly in developed economies, and neither of these studies specifically delves into the relationship as it pertains to the African telecoms industry which poses a number of structural, regulatory and reporting differences.

The study is similar to Nyeadi et al. (2018), the only similarity is that it is in-depth at the regional level. Using listed enterprises in South Africa as their panel secondary data, they found that CSR positively impacted on financial performance and was statistically significant. The more CSR was infused in the main activity, the greater the impact. They find that being integrated has a larger impact on CSR, thus supporting the theory of cultural embedding that was presented herein. Competing firms (from various sectors) were included in the sample, making this study unsuitable for the analysis of the dynamics of a concentrated network industry like mobile telecommunications.

Some encouraging yet methodologically impoverished evidence is available relating to Kenya's telecoms. Contrary to the view that CSR is a form of charity, Mogaka (2016) in his study on CSR programmes in the Kenyan telecoms industry regarded CSR as a strategic investment. They comprised of education sponsorship, environmental conservation, and community empowerment sponsorship. Another positive correlation found by Mogaka is related to financial variables. Unfortunately, the one study only examined one period of time and thus did not provide any indication of how that relationship changed over the years. The findings of Mwania (2023) might be biased by the perceptual and social-desirability bias as provided by the questionnaires filled by the corporate personnel but nevertheless, his results indicated that

CSR practices significantly contributed to enhancing the levels of customer satisfaction, service quality ratings, brand equity and financial stability of telecommunications corporations in Kenya. The recent study conducted by Madzengo and Kising'u (2025) shows that the relationship between CSR and the performance of Kenyan telecommunication companies is supported and confirmed using cross sectional and partially perceptual measurement.

In Kenya, there is supplementary evidence from the financial sector. Muchiri et al., (2022) and Onyango and Moronge, (2017) found that commercial banks' performance was improved through a CSR strategy, and that CSR responded positively to financial institutions' performance in Kenya. The studies are valuable in that they take Kenya data for the studies and consistently come up with positive correlation between CSR and performance, showing that the relationship between CSR and performance is not peculiar to the telecoms alone, despite the fact that Kenya data was sourced from banking. Past studies from other strategies like the CSR (Product development and competitive advantage in Kenyan telecommunication companies by Gitonga et al., 2025), situate CSR in a wider family of practices – the company's practice – implemented by firms to achieve performance. That means, CSR is not to be viewed in isolation, but along with these other levers.

These findings are quite robust: a study in Kenya on banks and telecommunications, a panel of African firms, as well as metastudies in developed economies all show positive evidence of a relationship between CSR and performance. It's methodological quality that fluctuates. These studies are most rigorously inferential when they are outside Africa and are outside of the range of telecommunications, and studies nearer to the present context are largely of single period and perceptual. This is the context (a strong and stable expected direction and thin context-specific inferential evidence) in which this study is situated.

Two additional items of observations further hone in on the motivation for the present design. First, the studies that find the largest and most confident effects are those designs that measure CSR objectively and span across time, while perceptual and single time designs (as consistent in direction as they are) and estimates are less defendable vis-à-vis objections of method bias. Second, none of these previous studies of CSR in Kenya has separated CSR from other practices co-occurring in the implementation of strategies, and until now the specific contribution of CSR practices to performance in this sector has not been objectively measurable from data. The present study aims to provide just that estimate.

Research Gaps

According to this review, there are three holes. First, there needs to be a longitudinal design to capture the relationship between CSR and the company's performance over a period of time as strategic decisions build up, and their effects take place. This is not evident in most studies in Kenyan telecommunications where data was taken at a single time slice at a cross section. Second, a reporting based approach using independent and audited and regulatory information, circumvents common method bias and social-desirability bias which arises when CSR is operationalised as dependent on subjective managerial perception as has happened in the Kenyan literature. This way it will be easier to compare it to hard performance data. Third, the developed-market meta-analyses and multi-sector regional panels—the best inferential evidence—are not focussed specifically on African telecommunications. This certainly begs the question as to whether the general relationship that has been well-grounded does apply to the concentrated and regulated network industry in East Africa. This study is developed as a sixteen-year firm-level panel with correlation and regression inference to be able to fill all the three gaps, it operationalizes CSR as objective, reporting-based measures of environmental, social and organizational impact and exclusively includes the three biggest operators in Kenya. In the process it moves a body of evidence that has been largely perceptual and cross-sectional in the Kenyan context to an objective, longitudinal test and it does so within a theoretical framework that provides a theoretical mechanism, cultural embedding, for any relationship that is observed.

Methods

Research Design and Philosophy

The study was based on the rules of the positivist movement in science in that the researcher's role in investigating and studying social phenomena is to search for and look for quantitative evidence, and that order and patterns of assumed relationships between variables are detectable, testable and generalizable even without the participation of the researcher (Gamage 2025, Park et al. 2020). This philosophy is suitable for this context because the relationship between CSR and the organization's performance is considered as an objective regularity which can be evaluated by the use of secondary data and not restrict to socially created meaning that needs understanding as stated by Creswell and Creswell (2018) and Saunders et al. (2023). The use of an explanatory longitudinal design was in line with this position. The same firms can be followed over the 2010-25 period and measurements for the same variables have been available annually for these firms. It is explanatory design as it aims to test a formulated hypothesis to explain organisational performance as closely related to CSR. Econometric models of product market dynamics are longitudinal since they observe the same firms over period of time. The study's main addition is its longitudinal design, which allows for the monitoring of the connection over an extended period of time instead of at a single moment in time.

Population and Sampling

The target audience were all the mobile telecommunications carriers with valid licenses in Kenya. The Communications Authority of Kenya (CAK) has outlined five operators in the market, namely, Safaricom PLC, Airtel Kenya, Telkom Kenya, Finserve Africa (Equitel) and Jamii Telecommunications. During the observation period, the study compared the three carriers—namely, Safaricom PLC, Airtel Kenya and Telkom Kenya—which were the only carriers with available public secondary data. Principles exclusion: 2 operators. We did not include Finserve Africa (Equitel) because we are not interested in double counting the strategy and network activities of Airtel as Equitel is a Mobile Virtual Network Operator (MVNO) in Kenya operating on Airtel Kenya's network. Jamii Telecommunications was excluded from the research due to it not being publicly owned and so does not produce the publicly released audited financial and sustainability report, integrated or governance report which are used as metrics. As it relates to mobile subscribers, the three retained carriers accounted for the entire market. All operators who are included in the design have similar objective data, meaning it is more like a census of these operators. This eliminates the need to extrapolate from a subset to a frame and any sampling error across the entire population that could be analyzed.

Data and Operationalization of Variables

Data for this analysis was collected from the following sources: Communications Authority of Kenya (CA) published sector statistics; year-end audited reports and integrated and sustainability reports for the period 2010 -2025. In this study, the independent variable was operationalized using three indicators, which are based on reporting, namely corporate social responsibility. Environmental and CSR disclosure – indices captured the presence of environmental initiatives, community-development disclosure – indices captured the presence of community-development initiatives, organisational disclosure in integrated annual reports – indices captured signs of CSR being integrated in the corporate strategy and internal CSR outcomes. Organizational performance was measured in terms of three indicators namely market share (the share of the number of subscriptions that the company has in the industry); customer satisfaction (the percentage of increase in a year's subscription base); and product value addition (the documented evidence of the added value of products). The indicators for each concept can not be simply combined into an average, as they are expressed on various scales based on a percentage, a growth, and the presence or not (dichotomous). This resulted in the standardization of the z-scores with regard to all indicators and the creation of constructs through the calculation of a mean z-score. The general steps of forming a composite for formative indicators (in which no common metric is shared) are as follows: standardization of each indicator to the same scale with a mean of zero and a standard deviation of one. In that way, the composite mirrors the contribution that all the indicators make and not the size of one indicator which is expressed by the largest units. This construction intentionally places both composites at zero and is very important for the accompanying regression results.

In order to make the measure objective, replicable from public records, we classified presence indicators in the three dimensions of CSR from the disclosures by businesses. For any company, if there was any significant large increase in the value of a dimension in a particular year, then it was assigned the value of one; if there was no significant large increase in that dimension value for that year, it's value was set to zero. Customer satisfaction was calculated as the percent increase in subscribers compared to prior year and market share was calculated as the percentage of total industry subscribers that were the firm's subscribers. The z-scores of each indicator were calculated as the difference of the mean of the indicators and the observed value and then divided by the standard deviation across the panel for each indicator, and used to calculate the CSR and performance composites. The researchers decided not to use multiple regression model but only simple regression model for the study in order to check the influences of CSR on performance in isolation. Details of the more comprehensive multivariate model (model that included all of the strategy-implementation practices) are provided in the thesis and will be discussed later on. This decision makes the claimed coefficient also a total effect, given that the quantity of interest for the study is a total effect.

Data Treatment and Analysis

Screening the raw indicators for missing data and verifying the assumptions of linear regression were done before inferential analysis. Three of the larger set of ancillary indicators were not included in the screening process because: operational strategies (52.1% systematic missingness), network coverage (41.7% missingness; most observations would have required extrapolation rather than interpolation), and digital inclusion (zero variability across all observations, and therefore completely colinear with the constant). For the calculation of Telkom Kenya's performance composite, two missing market-share estimates are considered – one for 2010 (loss of only 4.2% of observations) and one for 2017 (for interior gap) and assumed using linear interpolation. There will always be insufficient information on customer happiness for the first year a business observes it because the figure in that year is always re-operationalized as the year-on-year change in the number of subscribers. As such, 2010 was dropped, and an analysis panel of forty-five firm-years was undertaken from 2011 to 2025. Data were then analyzed in Stata in 4-step sequential process. Descriptive statistics were used to provide a summary of the level of CSR practice and the performance indicators. The regression assumptions were tested by diagnostic tests. Pearson product-moment correlation was used to investigate the nature (strength and direction) of the bivariate association between CSR and organizational performance. Lastly the predictive relationship of CSR with organizational performance, simple linear regression was estimated. The regression model was $Y = \beta_1 X + \varepsilon$, where Y is the organizational performance, X is the corporate social responsibility, β_1 indicates the regression coefficient, and ε indicates the error term.

Ethical Considerations

No human subjects were included in the study nor did it involve the collection or disclosure of any personal or confidential information. All the sources are publicly available firm-specific and corporate documents and the use of aggregation was done in all firm-level figures. The study was carried out under the Academic and Ethics Supervision of School of Business and Economics at The Catholic University of Eastern Africa. Data analysed was from the companies' annual, integrated and sustainability reports, and from the Communications Authority of Kenya (CA) for sector statistics.

Results

This section provides a summary of the results in the sequence in which they were generated: to profile the description of CSR; to examine the correlation result to verify the research hypothesis; to diagnose the structure of analytical sample and to treat data through the analysis described below. Stata was used to calculate all statistics on the 45-firm-year analytical panel.

The initial concept of the study was to observe 48 firm years, three firm years per year for the period 2010 to 2025. Customer happiness is re-operationalized as the annual change in the number of subscribers; thus, business in the first year observed for each company is excluded, to provide an analytical sample of forty-five firm-year observations from 2011 to 2025 (Table 1). All three operators are not only of equal size but also contribute the same level as it ensures balancing of the estimation in the entire observation window, eliminating any one firm having a bigger influence.

Table 1: Analytic Sample Structure After Data Treatment

Firm	Panel Years Used	Firm-Year Observations
Safaricom PLC	2011 to 2025	15
Airtel Kenya	2011 to 2025	15
Telkom Kenya	2011 to 2025	15
Total	15 years × 3 firms	45

Note. Source: Authors' computation (2026). N = 45.

The descriptive statistics of the three CSR indicators of the combined sample are shown in Table 2. CSR activity was rather widely observed, though distribution was not even between dimensions. Organizational-impact reporting was the most frequent one, and the studies revealed that companies consistently included CSR in their organizational strategies and internal reporting. Social-impact reporting was second-most common, as community-development efforts continued. Environmental dimension had the lowest average (0.44) and standard deviation (0.50) score. This gradient – strong at the organizational and social levels; weaker at the environmental level – is a significant finding that is repeated during the discussion because it provides information regarding the specific levels where CSR can be implemented.

Table 2: Descriptive Statistics: Corporate Social Responsibility

CSR Dimension	Mean	SD	Min	Max
Organizational impact	0.85	0.36	0.00	1.00
Social impact	0.65	0.48	0.00	1.00
Environmental impact	0.44	0.50	0.00	1.00

Note. Dimension means computed on the pooled sample (48 firm-years, 2010 to 2025). The composite CSR variable used in the correlation and regression is the mean of the z-standardized indicators and is therefore centered at zero by construction. Source: Authors' computation (2026).

Prior to performing the inferential analysis, all the raw indicators were screened for missing information, and the treatment options which were important to the CSR and performance composites were identified (Table 3). There was no need for imputation since all three CSR dimensions were filled out for all firm-years. In terms of performance, we took care with respect to the minority of missing market-share figures, we re-operationalised customer satisfaction and trimmed back the number of firm-years to 48 from 45. The analytical panel accurately portrays the underlying data since the total amount of treatment was minimal, impacting a tiny proportion of observations.

Table 3: Summary of Data-Treatment Decisions

Indicator	% Missing	Decision	Rationale
Market Share (%)	4.2%	Imputed	2017 by linear interpolation (interior); 2010 by nearest forward observation (edge).
Customer Satisfaction	—	Re-operationalized	Recast as year-on-year subscriber growth; first year (2010) dropped for each firm, giving N = 45.
Environmental / Social / Organizational impact	0%	Retained	Complete for all firm-years; standardized and averaged to form

Indicator	% Missing	Decision	Rationale
			the CSR composite.

Note. Source: Authors' computation (2026).

Table 4 presents the outcome of the tests that confirmed the appropriateness of the linear regression model to the assumptions. Shapiro-Wilk test showed that the data of the residuals was normally distributed (W = 0.962, p = 0.146) therefore no changes require the data. This was because the standard standard errors were suitable and not the robust standard errors, which were unnecessary, because the Breusch-Pagan test indicated homoscedasticity (LM = 3.042, p = 0.551; F = 0.725, p = 0.580). The error independence notion is supported by the Durbin-Watson statistic (2.206) which is in the preferred range between 1.5 and 2.5 and is close to the preferred value of 2.0. Multicollinearity is not an issue and no variance-inflation component is noted as there is 1 predictor in the model. The results taken together demonstrate the validity of the regression estimate and corresponding standard errors.

Table 4: Diagnostic Test Results

Test	Statistic	p-value	Decision
Shapiro-Wilk (normality of residuals)	W = 0.962	0.146	Fail to reject H0 (residuals normal)
Breusch-Pagan (homoscedasticity)	LM = 3.042	0.551	Fail to reject H0 (constant variance)
Durbin-Watson (autocorrelation)	DW = 2.206	—	No first-order autocorrelation

Note. Source: Authors' computation in Stata (2026). N = 45.

Upon finishing the diagnostic tests, the bivariate correlation of CSR with organizational performance was explored using Pearson product-moment correlation (Table 5). The preliminary analysis indicated that there is high positive correlation between CSR and organizational performance at 1% significant level with r value 0.620 and p value < 0.001. The relationship is found to be bi-directional and of the right order of magnitude based on Orlitzky et al. (2003), Busch and Friede (2018) and the Kenyan studies by Mogaka (2016) and Mwania (2023).

Table 5: Pearson Correlation Matrix

Variable	CSR	Organizational Performance
Corporate Social Responsibility (CSR)	1.000	—
Organizational Performance (OP)	0.620**	1.000

*Note. ** Correlation is significant at the 0.01 level (2-tailed). N = 45.*

Using simple linear regression, we then computed the predictive power of CSR of organizational performance. The model summary as shown in table 6 has a R2 value of 0.385 and a R value of 0.620, showing that the model has a significant positive linear relationship. This implies that CSR is responsible for the 38.5% of the variation in the performance of the three operators during the time frame under observation. This is because when the effect of the only predictor is removed—the corrected R2 keeps giving the same positive result as the non-corrected R2 of 0.371. The standard error of the estimate Equation was 0.489.

Table 6: Model Summary

R	R^2	Adjusted R^2	Std. Error of Estimate
0.620	0.385	0.371	0.489

Note. Predictor: Corporate Social Responsibility. Dependent Variable: Organizational Performance. N = 45.

The analysis of variance in the model (Table 7) indicates that overall the regression is statistically significant and that CSR is not a spurious association between the two variables. The f-statistic was 26.91 with 1 and 43 degrees of freedom, the p-value was less than 0.001.

Table 7: ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.424	1	6.424	26.91	0.000
Residual	10.268	43	0.239	—	—
Total	16.692	44	—	—	—

Note. Dependent Variable: Organizational Performance. Predictor: Corporate Social Responsibility. Source: Authors' computation (2026).

In Table 8, you can see the regression coefficients. B = 0.462 (SE = 0.089) was the unstandardized slope for CSR, while $\beta = 0.620$ ($t = 5.19$, $p < 0.001$) was the standardized coefficient. The fit constant is almost zero ($B_0 = 0.000$) as the dependent-variable composite and the CSR composite are both means of z-standardized indicators, with each one centered at zero. The value of the number $\gamma = 0.620$ is consistent with the number given by the correlation presented in Table 5, and also serves as an internal validation for the estimate in simple linear regression, as the standardized beta value is the same as the Pearson correlation coefficient.

Table 8: Regression Coefficients

Variable	B	SE(B)	Standardized β	t	Sig.
(Constant)	0.000	0.073	—	0.00	1.000
Corporate Social Responsibility	0.462	0.089	0.620	5.19	0.000

Note. Dependent Variable: Organizational Performance. Predictor: Corporate Social Responsibility. Source: Authors' computation (2026).

The coefficient is the initial basis to begin the hypothesis test. The standardized coefficient $\beta=0.620$ ($t=5.19$, $p<0.001$) reveals that a 1-SD increase in CSR is related to a 0.620-SD increase in organizational performance. This impact is statistically significant, above the 5% barrier. Based on the results from this study, we are able to reject the null as CSR has a statistically significant effect on the efficiency and effectiveness of Kenya's telecom industry. The regression equation is Organizational performance (Y) = 0.000 + 0.462(X) and CSR (X) and the standardized regression equation ($Z_\gamma = 0.620(Z_x)$) are the factors used.

The results, when analysing from the order presented, gives a good body of evidence. This association is confirmed to be significant by using regression as a predictor where it is verified by the adjustment of the single predictor and passes every diagnostic; reality of the data is verified by the fulfillment of conditions for valid inference and CSR practice helps proving its reality because it seems real in spite of the uneven distribution of firms and dimensions; and a strong bivariate association between CSR and performance is corroborated by the fact that CSR practice is real but its distribution is not. The stable internal consistency is guaranteed by the correlation and standardized regression coefficients' proximity: 0.620. The results of the F-test and t-test on the same value mean that there is little doubt that the relationship is systematic and that it is incidental within this panel.

Discussion

Our findings indicate that the corporate social responsibility (CSR) positively relates the performance of the telecommunication companies in Kenya in answering the research question, and this relationship was both statistically significant and practically meaningful. CSR explains 38.5% of the variation in organizational performance ($r = 0.620$; $\beta = 0.620$, $p < 0.001$). There are a series of stages that people expect organizations to go through, as described in Schein's Organizational Culture Theory. The descriptive profile is an indication that good practice can impact upon an organisation's 'outside footprint' if it is adopted as a component of the organisation; a 'way of thinking' and a 'way of working'. CSR is most deep at the organizational level (M = 0.85) and social level (M = 0.65) which are most strongly related to internal strategy and culture. The embedding of the environment level was the lowest (M = 0.44) in contrast. Based on this data, it can be inferred that operators that have always made organization and social responsibility as their priority have consistently created their own credibility and trust and thus become the operator lapped by their customers and continue to develop.

Our findings are consistent with previous ones at all of the analytic steps. To substantiate the above, MOGAKA, (2016), Mwanjia (2023) and Madzengo and Kising'u (2025) found that in the telecommunications sector in Kenya, companies with good corporate governance practices exhibited better financial and non-financial performance. Orlitzky et al. (2003) did a global meta-analysis based on several regions and concluded that firms having good corporate governance practices performed well compared to their less well-governed counterparts. Onyango and Moronge (2017) and Muchiri et al. (2022) found that in the banking industry in Kenya, well-governed banks performed better than poorly governed banks. Nyeadi et al. (2018) did a panel of South African firms in the telecommunication sector and confirmed that well-governed firms had better financial performance compared to poorly governed firms. While previous research in Kenya has been relied on subjective, one-time data, this study finds the same strong correlation using objective, audited, longitudinal data, thus its main contribution is not to turn the consensus on its head but to bolster its basis. Of itself, this is instructive, because it suggests that the relationship between recurrent results and results from concrete secondary indicators cannot be due to common-method bias and/or self-reports in the results of the surveys.

The cultural interpretation not only explains the existence of the effect, but can help explain its form. The stability of the relationship over a 16-year period is consistent with Schein's theory, in which entrenched principles and assumptions can result in consistent, long-term actions—such as CSR activity—rather than short-term actions once-upon-a-time, as would a hypothesis that the effect of CSR is a short-term reputational signal. According to this interpretation if the operators excel in the social and organization aspect they do, because they become aware about taking responsibility for what they do is part of a successful business. It's not about a single effort; rather, it's about consistency that gives these operators their edge. There is a missing measure – a gap – in the strategic space highlighted by the relatively weak environmental factor, which represents part of the culture not yet as fully 'asimilated'.

The scope constraint must be clearly written statements. CSR can explain 38.5% of the variation in the model's results and the remaining 61.5% due to other factors not specified in the model, including governance structure, resources capabilities, and product development, etc. When those other practices are controlled for, the contribution of CSR is actually demandingly smaller, and the multivariate model is a more complete statement of the thesis. This indicates that CSR should not be used alone, but in conjunction with strong corporate governance and strong product development, that is a configurational pattern. This is not a downgrade of the discovery, rather it's an identification of where things stand. CSR itself has a significant and large influence and it is the second among the strategy-implementation techniques studied from the bivariate level just behind product development. Information about CSR is best understood as a true first order lever, which achieves greater results when deployed in a coordinated strategical approach.

The thing that is most useful in practice is the lack of uniformity of the natural setting. Organizational and social reporting were virtually universal, with the environmental dimension being the least reported, thus indicating a very specific and correctable gap: companies in the sector already consider CSR as a strategic priority, but this is not reflected in their willingness to report on environmental issues. This indicates that managers need to pay attention to enhancing the regularity of environmental reporting and activities that can support their firm's CSR ranking and performance. The organizational and social aspects have reached their limits and cannot be enhanced so much more. Overall, Telco companies should consider CSR in a corresponding way with those practices that make the most difference along the governance lines, and those along the product-development lines—environmental, social, and organizational objectives should be made part of the product-development pipelines in addition to peripheral activities—operational planning should include these objectives.

The configurational finding has practical implication when it comes to the allocation of efforts of the businesses. Hence, in order to support their performance, the evidence indicates that it would be better for sector leaders to coordinate their investments in such a manner that credible CSR is complemented and complemented by good governance and a strong product pipeline, rather than to maximize performance by pitting CSR, governance and innovation against a finite investment envelope. However this bolsters the findings of Nyeadi et al. (2018) that CSR is best practiced when it forms part of the core business, likely since a stand-alone campaign would yield lesser results if the challenger is attempting to overcome a market leader.

Same should be used based on some limitations. While the three-operators cross-section depicts the structure of the Kenyan market more vividly, it is smaller than some other cross-sections available and cannot be used to estimate firm fixed effects or has the power to support more complicated models. Future measurements could also feature graded indicators and/or expenditure-based indicators if disclosure is available to enhance the CSR construct. This is because reported presence indicators are objective, but only reflect if a firm reports activity in a dimension, and not the depth or nature of the activity. Finally, as CSR is assumed to be a given independent variable, the impact reported here is a total impact that includes paths shared by associated activities. It has been taken throughout that this is the case. While these caveats do not in any way detract from the main conclusion, they do indicate some limits on its applicability and potential avenues for further research.

The results support the notion that regulation and policy should aim at regulatory frameworks to encourage consistent and trustworthy forms of CSR reporting by operators focusing on the environmental domain. What is needed as an industry as a whole is more level playing field and more comparable industry and a more equal contribution to performance based on some standard environmental, social and organisational reporting combined with incentives for verified CSR investing. There were, however, a number of limitations and gaps in the research which gave indications that further study is needed. Through its sixteen years it examines three operators, provides a thorough inventory of the enterprises where useful data is to be found but only represents a small snapshot of the market and relies on CSR as its sole predictor. Future research should include product development, resources capability and governance in an internally consistent multivariate panel framework for the relative and configurational contribution of CSR to be determined. Moderators should also be considered such as firm size, ownership, and length of leadership time. Lastly, they should broaden the panel to cover additional African markets to determine if this tendency, and weight, continues as disclosure evolves.

Conclusion

Both the results and the methodology of this research are important since they establish something. Based on objective and audited data rather than manager's perceptions, the study demonstrates that corporate social responsibility actually influences the performance of organisations in Kenya's telecommunications industry. CSR accounts for 38.5% of the variation in performance and has a notable positive impact ($\beta = 0.620$, $t = 5.19$, $p < 0.001$). The same relationship is found in the hard secondary indicators and refound in the study over sixteen years making an association plausible to defensible. This provides solid evidence on which managers, regulators and scholars can build actions as previously, the Kenyan evidence base has depended on single-period and perceptual studies which while consistent, were vulnerable to method bias.

One of the important theoretical contributions directed to the fact that it is a practical and at the same time evidence-based explanation from the Organizational Culture Theory for the influence of the CSR on performance. This theory holds that if a corporation continually engages in responsibility that is fundamental to its values and practices, it can impact on the competitive performance. This research has important practical implications since it shows that environmental factors are the weakest link in the industry. Such a finding can be leveraged by not only enterprises but also regulators to enhance their corporate social responsibility (CSR) approaches and levels all along their practices. The repeatable framework of the study, including objective metrics with reporting and standardized composites, and transparent diagnostics, could be utilized and developed further in future research on other dynamic sectors of developing economies.

Despite the study recognising that CSR alone is not enough, it concludes that CSR is most efficient when complemented with good governance and product development. This certificate isn't regarded as magic bullets but is viewed as part of a carefully designed strategy framework. In that light, it's an obvious message Kenya's telecom companies: After this research has found that there is an environmental gap, the industry now has a golden opportunity to overcome it by altering its culture and behavior to be responsible while also being credible. It is not viewed as a cost to be cut down but rather as an asset to performance in measurable ways.

References

BUSCH Timo & FRIEDE Gunnar, 2018. "The robustness of the corporate social and financial performance relation: A second-order meta-analysis", Corporate Social Responsibility and Environmental Management, 25(4), pp. 583–608. Online edition: https://doi.org/10.1002/csr.1480.

CARROLL Archie B., 1991. "The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders", Business Horizons, 34(4), pp. 39–48. Online edition: https://doi.org/10.1016/0007-6813(91)90005-G.

COMMUNICATIONS AUTHORITY OF KENYA, 2024. Sector Statistics Report for the ICT Sector, Financial Year 2023/2024, Nairobi, Communications Authority of Kenya. Online edition: https://www.ca.go.ke.

COMMUNICATIONS AUTHORITY OF KENYA, 2025. Sector Statistics Report for the ICT Sector, Financial Year 2024/2025, Nairobi, Communications Authority of Kenya. Online edition: https://www.ca.go.ke.

COTTER-LOCKARD Dorianne, 2016. "Edgar Schein's organizational culture theory", Journal of Leadership, Accountability and Ethics, 13(3), pp. 52–63.

CRESWELL John W. & CRESWELL J. David, 2018. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 5th ed., Thousand Oaks (CA), SAGE Publications.

GAMAGE A. N. K. K., 2025. "Research design, philosophy, and quantitative approaches in scientific research methodology", Scholars Journal of Engineering and Technology, 13(2), pp. 91–103. Online edition: https://doi.org/10.36347/sjet.2025.v13i02.004.

GITONGA G. M., KARIUKI P. & KIMANI E., 2025. "Product development strategies and competitive advantage of telecommunication firms in Kenya", Iconic Research and Engineering Journals, 89, pp. 960–980.

INTERNATIONAL TRADE ADMINISTRATION, 2024. "Kenya: Information, communications, and technology (ICT)", Washington (DC), U.S. Department of Commerce. Online edition: https://www.trade.gov.

KATILA J., 2025. "Airtel beats Safaricom after hitting 24 million customers in Kenya", Kenyan Wall Street.

MADZENGO I. S. & KISING'U T., 2025. "Corporate social responsibility and performance of telecommunication firms in Kenya", International Journal of Business Management, 6(1). Online edition: https://doi.org/10.61426/business.v6i1.340.

MOGAKA M. M., 2016. Effect of Corporate Social Responsibility on Financial Performance in the Telecommunication Industry in Kenya, PhD Thesis, University of Nairobi, Nairobi.

MORDOR INTELLIGENCE, 2025. Kenya Telecom MNO Market: Size and Share Analysis, Mordor Intelligence. Online edition: https://www.mordorintelligence.com.

MUCHIRI M. K., ERDEI-GALLY S. & FEKETE-FARKAS M., 2022. "Effect of corporate social responsibility on the financial performance of financial institutions in Kenya", Economies, 10(7), 174. Online edition: https://doi.org/10.3390/economies10070174.

MWANIA L. M., 2023. Effect of Corporate Social Responsibility Practices on Organizational Performance, PhD Thesis, Strathmore University, Nairobi.

NYEADI J. D., IBRAHIM M. & SARE Y. A., 2018. "Corporate social responsibility and financial performance nexus: Empirical evidence from South African listed firms", Journal of Global

Responsibility, 9(3), pp. 301–328. Online edition: https://doi.org/10.1108/JGR-01-2018-0004.

OGINDO K. O., MWANZIA M. & CHEPKEMOI J., 2024. “Strategic management practices and performance”, International Journal of Social Sciences and Management Research, 8(4).

ONYANGO N. A. & MORONGE M., 2017. “Effects of corporate social responsibility strategies on performance of commercial banks in Kenya”, The Strategic Journal of Business & Change Management, 4(4), pp. 1098–1117. Online edition: https://doi.org/10.61426/sjbcm.v4i4.611.

ORLITZKY Marc, SCHMIDT Frank L. & RYNES Sara L., 2003. “Corporate social and financial performance: A meta-analysis”, Organization Studies, 24(3), pp. 403–441. Online edition: https://doi.org/10.1177/0170840603024003910.

PARK Yoon Soo, KONGE Lars & ARTINO Anthony R., 2020. “The positivism paradigm of research”, Academic Medicine, 95(5), pp. 690–694. Online edition: https://doi.org/10.1097/ACM.0000000000003093.

SAUNDERS Mark N. K., LEWIS Philip & THORNHILL Adrian, 2023. Research Methods for Business Students, 9th ed., Harlow, Pearson.

SCHEIN Edgar H., 2010. Organizational Culture and Leadership, 4th ed., San Francisco (CA), Jossey-Bass.