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A Structural Equation Model of Corporate Performance of Bottling Companies in Davao Region

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Abstract

The study determined the level of corporate performance of bottling companies in the organizational values, corporate social responsibility and leadership in Region XI, Mindanao, Philippines. Using descriptive-correlation and Structural Equation Modeling, the researcher selected 400 personnel in bottling companies in the region through stratified proportionate sampling. Findings revealed very high levels of organizational values, corporate social responsibility, leadership and corporate performance. A significant relationship was shown between all latent exogenous variables and corporate performance; all the latent exogenous variables significantly influenced the endogenous variable corporate performance. The most parsimonious model 4 conveyed a generalized new concept that bottling companies' corporate performance was primarily grounded on the financial performance and process. Corporate performance, defined from the nature of corporate social responsibility was influenced by environmental and community and highly strengthened with leadership style assessment of bottling companies. Model 4, which was depicted the direct causal relationships of corporate social responsibility and leadership to the corporate performance of bottling companies, was founded to be the best fit and most parsimonious model.

Keywords

corporate performance; organizational values; corporate social responsibility; leadership; structural equation modeling; Philippines

INTRODUCTION

Corporate performance, a critical indicator of how well organizations achieve their strategic objectives and deliver value to stakeholders, has long been central to management research. The complexities of today's business environments—marked by increased competition, digital disruption, and socio-political volatility—require organizations to not only optimize financial outcomes but also integrate ethical, environmental, and social dimensions into their operations (Krishnan, 2012). This broader approach to performance reflects the evolution of stakeholder capitalism, where success is measured not solely in profits but in social impact and long-term sustainability. Particularly in manufacturing sectors, where resource intensity and ecological footprints are high, performance metrics increasingly incorporate environmental responsibility, labor conditions, and technological innovation as key indicators of excellence (Crisan-Mitra, 2015). These shifts are consistent with the rising importance of non-financial performance metrics emphasized in ESG (Environmental, Social, and Governance) frameworks and integrated reporting standards (Mohammad & Wasiuzzaman, 2021; Buallay, 2020).

In parallel, there has been a global intensification of calls for transparency and accountability in corporate behavior. Regulatory bodies, consumers, and investors are increasingly pressuring firms to engage in authentic corporate social responsibility (CSR) and sustainability efforts. This growing demand has moved CSR from the periphery to the core of corporate strategy, prompting organizations to adopt programs that support community development, reduce environmental impact, and promote ethical governance (Jamali, 2008). In manufacturing industries, CSR initiatives such as waste reduction, sustainable sourcing, and employee welfare not only bolster public reputation but also improve internal efficiencies and stakeholder loyalty. CSR is now widely regarded as a strategic asset that enhances organizational legitimacy, especially in emerging economies where socio-economic needs are acute (Mishra & Suar, 2010; Nabi et al., 2021; Fosu, Yi & Asiedu, 2024).

Leadership, particularly in its transformational form, remains a vital mechanism for translating strategic vision into tangible outcomes. Leaders who foster innovation, empower teams, and model ethical behavior are more likely to guide their organizations toward sustainable success. Transformational leadership has been shown to promote employee engagement, facilitate adaptive learning, and enhance organizational agility—qualities that are essential in fast-changing industries such as manufacturing (Bass & Riggio, 2005). Leadership that embraces innovation and sustainability also supports long-term performance by enabling firms to respond to market shifts and societal expectations simultaneously (Yukl

& Heaton, 2002; Buonocore et al., 2024; Al Khajeh, 2018). Moreover, inclusive and participatory leadership styles positively influence organizational climate and productivity, reinforcing the link between leadership effectiveness and performance (Shin, Taylor & Seo, 2012; Akpoviroro, Kadiri & Owotutu, 2018).

The synergy among organizational values, CSR, and leadership is increasingly recognized as a performance catalyst. Organizational values provide the normative framework that guides decision-making and shapes ethical behavior across the organization (Ferguson & Milliman, 2008). When these values are embedded in daily operations and reinforced by socially responsible policies and effective leadership, they contribute to a high-trust culture and consistent strategic alignment. This integrative view is especially important for manufacturing firms, where operational efficiency must be balanced with sustainability and human development goals. Despite growing scholarly attention to these constructs, the literature has yet to fully explore how their alignment concretely influences corporate performance in emerging market contexts, where institutional environments and cultural norms differ significantly from those of developed economies (Diskiene & Goštautas, 2010; Amornkitvikai & Pholphirul, 2023; Bengtsson et al., 2018).

Organizational values—such as innovation, collaboration, and social responsibility—have been consistently linked to higher levels of employee engagement, operational coherence, and adaptability to change. When employees internalize these values, their sense of purpose and motivation strengthens, thereby enhancing performance at both individual and organizational levels (Bakker & Demerouti, 2008). Furthermore, values-based governance supports long-term sustainability by ensuring that business practices are aligned with stakeholder expectations and ethical standards (Kotler, Kartajaya & Setiawan, 2010). Recent empirical studies have also confirmed that values-driven organizations exhibit greater resilience in times of crisis and are better positioned to capitalize on strategic opportunities (e.g., Chizanga, 2024; Sagar, 2023; Teah, Phau & Sung, 2023). However, the translation of organizational values into measurable performance remains contingent on leadership buy-in and systemic implementation across hierarchies.

Corporate social responsibility continues to be a robust predictor of performance, particularly in enhancing reputational capital, stakeholder trust, and risk management. Numerous studies have highlighted CSR's positive impact on financial returns, customer loyalty, and employee morale (Jamali, 2008; Chand & Fraser, 2006). CSR initiatives tailored to local socio-economic contexts, especially in developing countries, have been shown to strengthen community relations and corporate legitimacy (Belal, 2016; Rais & Goedegebuure, 2009). Nevertheless, the relationship between CSR and short-term profitability remains

complex and at times inconclusive, often moderated by industry type, firm size, and CSR communication strategies (Campbell, 2007; Gupta & Das, 2024; Wang & Qiao, 2022; Welford, 2004). This highlights the need for integrative models that capture both the tangible and intangible effects of CSR on corporate performance, particularly in high-impact sectors like manufacturing.

Leadership style, especially transformational leadership, continues to emerge as a decisive factor in enhancing corporate performance. Leaders who exhibit vision, inspirational motivation, and individualized consideration are instrumental in promoting innovation and high-performance work systems (Moore & Rudd, 2006; Bass & Riggio, 2006). They also foster a psychologically safe environment conducive to creativity and collaboration, which are vital for competitive advantage. Research has consistently shown that transformational leadership is positively associated with improved team outcomes, organizational adaptability, and strategic goal alignment (Shin et al., 2012; Turner & Müller, 2005). However, the effectiveness of leadership styles varies significantly depending on contextual variables such as national culture, organizational maturity, and workforce demographics—underscoring the need for context-sensitive leadership frameworks (Dulewicz & Higgs, 2004; Luo, 2024; Partington, 2003; Roman, 2024).

Taken together, these findings affirm the interdependence of organizational values, CSR, and leadership style as key enablers of corporate performance. Numerous studies converge on the idea that firms that cultivate strong ethical cultures, engage in responsible social practices, and empower leaders to act with integrity outperform their peers in both financial and non-financial terms (Ferguson & Milliman, 2008; Chand & Fraser, 2006; Kotler et al., 2010). These elements function synergistically: values provide the ethical framework, CSR defines the organization's social obligations, and leadership enacts both in practice. Still, the strength of these relationships may differ depending on industry norms and institutional environments, making empirical validation in specific sectors and regions essential (Campbell, 2007; Matten & Moon, 2020; Mishra & Suar, 2010; Zuraida & Sugianto, 2019).

Despite the substantial body of literature supporting these constructs, critical gaps remain in contextualizing their interplay within developing economies such as the Philippines. Much of the existing research is grounded in Western corporate frameworks, with limited generalizability to settings with distinct socio-cultural, economic, and regulatory environments. Moreover, the temporal dynamics—how long it takes for CSR, leadership reforms, or values-based programs to yield performance gains—remain underexplored. This study addresses these gaps by examining the relationship between organizational values, CSR, leadership, and corporate performance among manufacturing firms in a developing

economy, using a localized lens to generate context-specific insights. By doing so, it aims to inform both academic understanding and managerial practice in fostering sustainable, inclusive, and high-performing organizations.

Research Objective

This study seeks to generate a structural equation model of corporate performance as influenced by organizational values, corporate social responsibility, and leadership among bottling companies in Region XI. While existing research has explored these variables independently, few studies have integrated them into a comprehensive framework to understand their combined impact on corporate performance. The study specifically seeks to assess the levels of the exogenous variables, composed of organizational values (as measured by people, innovation, corporate governance, social responsibility, and education), corporate social responsibility (as measured by environmental, community, employee, education, customers, and health indicators), and leadership (as measured in terms of leadership style assessment, flexibility assessment, outward focus assessment, reflexivity assessment, radical product innovation assessment, and incremental product innovation assessment). Meanwhile, the study also intends to measure corporate performance in terms of financial performance, process, and people development as indicators. Significant relationships and causal dynamics are also investigated in this study.

METHODS

Research Design

This study adopted a quantitative research design employing the descriptive-correlational technique and structural equation modelling (SEM) to explore the relationships among organizational values, corporate social responsibility, and leadership as determinants of corporate performance among bottling companies in Region XI. Descriptive-correlation studies aim to describe phenomena while investigating the relationships among variables and conditions that influence them (Bordens & Abbott, 2002; Grimes & Schulz, 2002). SEM was selected as the primary analytic technique due to its capacity to test theoretical models involving latent variables, particularly those that are unobservable but theoretically significant (Muthén, 2002; Hair et al., 2021). Given the study's focus on complex intervariable relationships and underlying constructs such as corporate performance, SEM provided a rigorous framework for both measurement and structural modeling.

SEM involves multiple stages including model specification, identification, estimation,

and evaluation (Hasman, 2015). It allows researchers to examine the direct and indirect effects between observed and latent variables by integrating the strengths of factor analysis and multiple regression in a single analytic framework (Hair et al., 2021; Ullman & Bentler, 2012). Unlike traditional multivariate techniques such as MANOVA, general factor analysis, and multiple regression—which analyze only isolated relationships—SEM enables the testing of a complete system of hypothesized relationships simultaneously (Byrne, 2016; Tabachnick & Fidell, 2007). Moreover, it accounts for measurement error in both exogenous and endogenous constructs, enhancing the validity of parameter estimates (Bagozzi & Yi, 2012; Bagozzi, Yi, & Phillips, 1991). SEM procedures operate on both observed and unobserved variables, thereby providing a more comprehensive assessment of theoretical models through confirmatory, hypothesis-driven testing.

The hypothesized model was constructed with corporate performance modeled as the latent endogenous variable. SEM's structural diagrams utilized standard visual notations—ellipses for latent variables, rectangles for observed variables, single-headed arrows to indicate causality, and double-headed arrows to show correlations or covariances (Byrne, 2016). Residual errors (e) were included to reflect unexplained variance, acknowledging that not all variance is accounted for within specified pathways. The realism paradigm underpinned this study, supporting the use of SEM for theory-building and hypothesis-testing through in-depth, multi-item survey data (Healy & Perry, 2000). Consistent with prior studies on corporate performance (e.g., Alrowwad et al., 2017; Hockerts, 2015; Rueda, Moriano, & Liñán, 2015), SEM proved to be the most appropriate methodology for investigating complex causal structures and validating a best-fit model based on empirical data.

Population and Sample

In selecting the respondents, a combination of scientific procedure and purposive sampling was employed. The study involved approximately 400 rank-and-file and supervisory employees from bottling companies in Region XI. This sample size is considered adequate for studies utilizing Structural Equation Modelling (SEM), as Bagozzi and Yi (2012) recommend a minimum sample of 200 for SEM applications, while Hair et al. (2021) emphasize that SEM requires a relatively large sample to increase the accuracy of parameter estimates and minimize measurement error. Thus, the inclusion of 400 qualified participants justifies the analytical requirements of the study and supports the robustness of the statistical procedures applied.

To ensure the integrity and relevance of the data, only employees who held permanent

status and had served for more than one year were included in the sample. Those who were not regular employees or who had worked for less than a year, as well as those who had already resigned or were no longer affiliated with the company, were excluded. This exclusion criterion was applied to guarantee that participants had sufficient tenure to meaningfully assess the leadership and organizational performance of their respective companies. These criteria ensured that respondents had an established familiarity with the corporate environment, enabling more accurate responses related to leadership orientation and performance outcomes.

Participant autonomy was respected throughout the data collection process. Individuals were informed that their participation was voluntary and that they could decline or withdraw from the study at any point without consequence or the need to provide justification. No pressure was exerted on those who opted not to participate or who chose to discontinue. The sample size was computed using Slovin's formula after determining the total population of employees within the selected bottling companies in Region XI. This methodological approach ensured that the sample was both statistically valid and reflective of the target population.

Instruments

Primary data were collected using an adopted survey instrument. The instrument had four parts that generated information about the different variables considered in the study. These parts include the corporate performance, organizational values, corporate social responsibility and leadership.

The different components of the instrument were adopted from various related studies. They were restructured and modified based on the suggestions of the expert validators. After the validation, a pilot test was conducted and Cronbach alpha was utilized to measure its validity. Cronbach's alpha is an index of reliability associated with the variation accounted for by the true score of the underlying construct. Construct is the hypothetical variable that is being tested and measured (Hatcher & Stepanski, 1994).

The survey on corporate performance is adapted from Tseng (2010). The instrument was designed to measure the corporate performance of bottling companies on three factors, namely: financial performance, process, and people development.

Range of Means	Descriptive Levels	Interpretations
4.20 - 5.00	Very High	This means that the specific corporate performance is always observed.

3.40 - 4.19	High	This means that the specific corporate performance is oftentimes observed.
2.60 - 3.39	Moderate	This means that the specific corporate performance is sometimes observed.
1.80 - 2.59	Low	This means that the specific corporate performance is rarely observed.
1.00 - 1.79	Very Low	This means that the specific corporate performance is not observed.

The survey on organizational values is adapted from Toliver (2016). The said instrument is design to measure the organizational values of bottling companies based on five factors, namely: people, innovation, corporate governance, social responsibility and education.

Range of Means	**Descriptive Levels**	**Interpretations**
4.20 - 5.00	Very High	This means that the specific organizational values are always observed.
3.40 - 4.19	High	This means that the specific organizational values are oftentimes observed.
2.60 - 3.39	Moderate	This means that the specific organizational values are sometimes observed.
1.80 - 2.59	Low	This means that the specific organizational values are rarely observed.
1.00 - 1.79	Very Low	This means that the specific organizational values are not observed.

The survey on corporate social responsibility is adapted from Tilakasiri (2012). The said instrument is design to measure corporate social responsibility of bottling companies based on six factors, namely: environmental, community, employee, education, customers and health.

Range of Means	**Descriptive Levels**	**Interpretations**
4.20 - 5.00	Very High	This means that the specific corporate social responsibility is always observed.
3.40 - 4.19	High	This means that the specific corporate social responsibility is oftentimes observed.

2.60 - 3.39	Moderate	This means that the specific corporate social responsibility is sometimes observed.
1.80 - 2.59	Low	This means that the specific corporate social responsibility is rarely observed.
1.00 - 1.79	Very Low	This means that the specific corporate social responsibility is not observed.

The survey on leadership is adapted from Alahmad (2016). The said instrument is design to measure leadership styles of bottling companies on six factors, namely: leadership style, flexibility, outward focus, reflexivity, radical product innovation, and incremental product innovation.

Range of Means	**Descriptive Levels**	**Interpretations**
4.20 - 5.00	Very High	This means that the specific leadership is always observed.
3.40 - 4.19	High	This means that the specific leadership is oftentimes observed.
2.60 - 3.39	Moderate	This means that the specific leadership is sometimes observed.
1.80 - 2.59	Low	This means that the specific leadership is rarely observed.
1.00 - 1.79	Very Low	This means that the specific leadership is not observed.

Data Collection

The researchers followed a systematic and ethically sound process in conducting the study to ensure the validity, reliability, and integrity of the data collected. Prior to the commencement of data collection, ethical clearance was obtained from the University of Mindanao Ethics Review Committee, confirming compliance with institutional research ethics for studies involving human participants. After securing ethical approval, formal letters were sent to the management of selected bottling companies in Davao Region to request permission to conduct the survey among their employees. Only those companies that granted endorsement and access were included in the study.

Upon receiving the necessary approvals, the researchers coordinated with company focal persons to plan the proper administration of the survey instruments. The required

number of questionnaires was reproduced based on the computed sample size using Slovin's formula. A clear and manageable data collection schedule was developed, allowing sufficient time for distribution, completion, and retrieval of the instruments. Eligible participants—regular employees with at least one year of service, including both rank-and-file and supervisory staff—were oriented on the purpose of the study and assured of the confidentiality of their responses. Participation was voluntary, and respondents were informed of their right to withdraw from the study at any point without consequence.

The distribution and retrieval of the questionnaires were systematically documented. Completed forms were checked for completeness and accuracy, then encoded for analysis. The data were subsequently tabulated and subjected to appropriate statistical treatments using structural equation modelling (SEM), as aligned with the research design. The results were interpreted and organized according to the study objectives and the sequence of the research questions. Based on these findings, the researchers derived conclusions and formulated practical recommendations relevant to improving leadership practices and enhancing corporate performance in the context of bottling companies in Davao Region.

Statistical Tools

This study made use of the following statistical tools for the analysis of the data:

Mean. This was used to measure the level of organizational values, corporate social responsibility, leadership and corporate performance

Pearson Product Moment Correlation (Pearson r). This was used to determine the interrelationships between organizational values, corporate social responsibility and leadership and the corporate performance.

Structural Equation Modelling. This was used to assess the interrelationships among the hypothesized models and as also with the determination of the best-fit-model of corporate performance of bottling companies. In evaluating the goodness of fit of the models, the following indices were computed and should meet the criteria: CMIN/DF should be 0<<2 with a p-value >0.05,Tucker-Lewis should be >0.9, Comparative Fit Index (CFI) should be >0.9, Goodness of Fit Index (GFI) should be >0.9, Normative Fit Index (NFI) should be >0.9 and root Mean Square Error of Approximation (RMSEA) should be <0.05 and P of close Fit (PCLOSE) should be >0.50.

RESULTS AND DISCUSSION

Descriptive Statistics of the Variables

As presented in Table 1, the overall corporate performance of bottling companies in Region XI was rated at a very high level (M = 4.27, SD = 0.579), indicating that the critical dimensions of organizational performance are consistently observed and manifested within these companies. Disaggregating the results, financial performance registered the highest mean (M = 4.32, SD = 0.594), suggesting that indicators such as revenue generation, profitability, and return on investment are perceived to be highly effective by employees. This finding supports the view of Kaplan and Norton (2006), who emphasized that financial metrics remain essential for evaluating the immediate effectiveness and sustainability of business strategies, especially in performance-focused sectors like manufacturing and bottling.

Table 1. *Descriptive statistics of corporate performance indicators (N = 400)*

Indicator	Mean	SD	Interpretation
financial performance	4.32	0.594	very high
process	4.26	0.673	very high
people development	4.25	0.691	very high
Overall	**4.27**	**0.579**	**very high**

The process dimension followed closely (M = 4.26, SD = 0.673), underscoring the companies' capabilities in ensuring operational efficiency, innovation in production, and competitiveness in market response. This aligns with the observations of Tangen (2005), who argued that companies with streamlined internal processes and continuous innovation are more likely to maintain quality and timely product delivery, both of which are central to achieving superior performance. Lastly, people development was rated slightly lower (M = 4.25, SD = 0.691) but still within the "very high" category. This suggests a strong focus on employee capacity-building, leadership development, and staff welfare—factors that, according to Lepak and Boswell (2012), are instrumental in cultivating a high-performance workforce.

The closeness of the mean scores across all three dimensions reflects a well-balanced and integrated approach to corporate performance, wherein financial success, operational agility, and human capital development are pursued concurrently. This holistic alignment reinforces the concept advanced by Neely, Gregory, and Platts (2005), which posits that sustained corporate performance arises when strategy, processes, and people are harmoniously developed and executed. Thus, the results affirm that bottling companies in the

region demonstrate a high-performing organizational profile grounded in strong financial health, operational discipline, and employee-centered leadership.

As presented in Table 2, the organizational values of bottling companies in Region XI were rated very high across all five core dimensions. The highest-rated indicator was people (M = 4.65, SD = 0.401), underscoring a strong culture of employee-centered values, such as respect, recognition, safety, and customer-oriented service. This finding aligns with the framework of Diskienė and Goštautas (2010), who argued that organizational values function as the foundational principles that guide expected employee behavior and influence how organizational objectives are achieved. When employees feel valued and respected, organizational culture becomes a key driver of both performance and morale.

Table 2. *Descriptive statistics of organizational values indicators (N = 400)*

Indicator	Mean	SD	Interpretation
people	4.65	0.401	very high
innovation	4.39	0.601	very high
corporate governance	4.53	0.495	very high
social responsibility	4.62	0.425	very high
education	4.33	0.630	very high
Overall	**4.50**	**0.424**	**very high**

Close behind were social responsibility (M = 4.62, SD = 0.425) and corporate governance (M = 4.53, SD = 0.495), which reflect the companies' strong commitment to ethical conduct, stakeholder engagement, and community responsiveness. These dimensions suggest that the companies demonstrate principled leadership and a culture of sustainability, resonating with Berman et al. (1999), who emphasized that companies with high ethical standards and social accountability tend to perform better over the long term due to stronger relationships with internal and external stakeholders. The slightly lower, though still very high, mean scores for innovation (M = 4.39, SD = 0.601) and education (M = 4.33, SD = 0.630) indicate a positive but more varied perception of how well the companies support creativity, continuous learning, and professional development. These findings reinforce the notion by Schein (2010) that innovation and learning are cultural elements that must be nurtured over time to embed them into an organization's identity.

Overall, the mean score for organizational values (M = 4.50, SD = 0.424) reflects a highly values-driven environment, where employee well-being, ethical practice, innovation, and community welfare are integral to the organizational ethos. This comprehensive alignment of values supports both internal cohesion and external trust, forming the

foundation for effective governance and sustainable enterprise development.

In parallel, the very high level of corporate social responsibility (CSR) in these bottling companies further strengthens this values-based organizational identity. The consistently high ratings across CSR indicators—including environmental stewardship, community engagement, employee support, customer service, educational involvement, and health advocacy—suggest that CSR is not merely performative, but embedded in the companies' strategic intent. This is supported by Campbell (2007), who posited that corporations engage in CSR not only to avoid harming stakeholders but also to proactively rectify and prevent damage through responsible practices. He emphasized that CSR responsibilities may often carry more social and reputational weight than financial or legal obligations. The results of this study affirm this argument, as the high CSR ratings indicate that these companies are viewed as actively protecting and promoting the interests of employees, communities, and the environment—thereby reinforcing their social license to operate.

As shown in Table 3, the overall level of corporate social responsibility (CSR) among bottling companies in Region XI was rated as very high (M = 4.22, SD = 0.565). This indicates that respondents consistently observe the presence and implementation of CSR initiatives across multiple dimensions. The highest-rated indicator was customer-related responsibilities (M = 4.65, SD = 0.448), highlighting the companies' strong commitment to product quality, consumer rights, and post-sale services. This result echoes the findings of Du, Bhattacharya, and Sen (2010), who emphasized that companies that effectively manage customer-focused CSR build stronger brand trust, customer satisfaction, and long-term loyalty.

Table 3. *Descriptive statistics of corporate social responsibility indicators (N = 400)*

Indicator	Mean	SD	Interpretation
environmental	4.32	0.816	very high
community	4.32	0.755	very high
employee	4.46	0.510	very high
education	3.75	0.992	high
customers	4.65	0.448	very high
health	3.85	0.977	high
Overall	**4.22**	**0.565**	**very high**

The employee domain also received a high rating (M = 4.46, SD = 0.510), suggesting that employees recognize company efforts in ensuring workplace safety, providing competitive benefits, and promoting employee welfare through grievance mechanisms and workplace support structures. This finding is consistent with the view of Turker (2009), who posited that internal CSR, especially those targeting employees, has a significant impact on

job satisfaction, commitment, and employee engagement.

The dimensions of environmental responsibility (M = 4.32, SD = 0.816) and community involvement (M = 4.32, SD = 0.755) were also rated very high, indicating the companies' proactive involvement in sustainability efforts and social initiatives such as tree-planting, waste management, local safety drives, and outreach programs. This reflects alignment with Carroll's (1991) CSR model, which emphasizes the ethical and philanthropic obligations of businesses in ensuring their operations contribute positively to the environment and community welfare.

On the other hand, education-related CSR initiatives (M = 3.75, SD = 0.992) and health-related responsibilities (M = 3.85, SD = 0.977) were rated slightly lower, though still within the "high" range. These relatively lower ratings, combined with higher standard deviations, may point to uneven implementation or access to these programs across different sites or employee groups. While some employees benefit from scholarships, daycare programs, and health services, others may experience less exposure or engagement with these initiatives. This variability suggests areas where the companies can enhance CSR efforts to ensure more inclusive and consistent impact across all locations and stakeholder groups. The results affirm that the CSR efforts of bottling companies in Region XI are strongly embedded in organizational practice, particularly in customer service, environmental protection, community involvement, and employee welfare. These findings resonate with the argument by Campbell (2007), who asserted that companies participate in CSR not just to satisfy formal obligations, but to avoid causing harm to stakeholders—such as investors, staff, customers, and communities—and to take responsibility when such harm occurs. Campbell further emphasized that social responsibility should be viewed as an ethical imperative that goes beyond financial and legal accountability.

Finally, as presented in Table 4, the overall level of leadership in bottling companies in Region XI was rated very high (M = 4.35, SD = 0.535), reflecting consistently favorable perceptions of leadership practices among employees. The uniformly high mean scores across all nine indicators suggest that leadership in these companies is strategic, adaptive, innovation-driven, and people-oriented. This supports the assertion of Avolio (2004) that high-impact leadership involves not just influencing people but aligning behavior with organizational values, fostering shared vision, and promoting innovation at all levels.

The highest-rated dimension was Outward Focus Assessment (M = 4.54, SD = 1.007), which highlights the leaders' strong external orientation—particularly their responsiveness to customer needs and prioritization of service improvement. This finding supports the view of Day and Schoemaker (2006), who emphasized that outward-focused leadership is essential

for building strategic foresight and aligning organizational responsiveness with market demands and stakeholder expectations. Other highly rated leadership dimensions included Radical Product Innovation (M = 4.40, SD = 0.673), Reflexivity Assessment (M = 4.34, SD = 0.589), and Flexibility Assessment (M = 4.31, SD = 0.553). These scores suggest that leaders in the bottling industry are open to change, regularly re-evaluate organizational goals, and foster a culture of creativity and innovation. Such traits are characteristic of what Bass and Riggio (2006) defined as transformational leadership, wherein leaders inspire innovation, navigate uncertainty, and motivate employees to exceed standard expectations. The ability to adapt and encourage organizational learning reflects a strategic mindset oriented toward long-term resilience and growth.

Table 4. *Descriptive statistics of leadership indicators (N = 400)*

Indicator	Mean	SD	Interpretation
leadership style assessment	4.26	0.649	very high
flexibility assessment	4.31	0.553	very high
outward focus assessment	4.54	1.007	very high
reflexivity assessment	4.34	0.589	very high
radical product innovation	4.40	0.673	very high
incremental product innovation	4.26	0.784	very high
financial performance	4.32	0.594	very high
process	4.26	0.673	very high
people development	4.25	0.691	very high
Overall	**4.35**	**0.535**	**very high**

Leadership Style Assessment (M = 4.26, SD = 0.649) and Incremental Product Innovation (M = 4.26, SD = 0.784) were also rated very high, indicating that leaders balance both visionary and practical approaches. These scores suggest that while large-scale innovation is valued, consistent small-scale improvements are also encouraged—supporting George's (2024) argument that effective leadership is both visionary and grounded in the operational realities of everyday work.

What is particularly notable in this study is the inclusion of Financial Performance (M = 4.32), Process (M = 4.26), and People Development (M = 4.25) within the broader leadership framework. This integrative structure reflects the idea that effective leadership is not confined to motivation and vision alone but also extends to influencing strategic outcomes, operational excellence, and employee growth. This interpretation resonates with Yukl's (2012) model of effective leadership, which emphasizes the coordination of task, relationship, and change-oriented behaviors to achieve comprehensive organizational success.

Correlation Analysis of the Exogenous and Endogenous Variables

As shown in Table 5, results reveal a significant positive relationship between organizational values and corporate performance among bottling companies in Region XI. The overall correlation between the two variables is r = .570, $p < .001$, indicating a moderate to strong relationship. This finding suggests that when employees perceive their organization as consistently practicing core values such as people-centeredness, innovation, corporate governance, social responsibility, and education, it positively influences corporate performance outcomes in terms of financial success, operational processes, and people development.

Table 5. *Correlations between organizational values and corporate performance (N = 400)*

Organizational Values	financial performance	process	people development	Overall Corporate Performance
people	.386***	.387***	.596***	.518***
innovation	.338***	.324***	.650***	.499***
corporate governance	.329***	.409***	.607***	.512***
social responsibility	.294***	.335***	.410***	.393***
education	.381***	.309***	.486***	.443***
Overall Values	.418***	.419***	.665***	.570*

***p* < .001

Among the specific value indicators, people values (r = .518), innovation (r = .499), and corporate governance (r = .512) demonstrated moderate positive correlations with overall corporate performance. Lower but still significant correlations were observed for social responsibility (r = .393) and education (r = .443). Notably, people development exhibited the strongest correlations across all value dimensions, particularly with people (r = .596), innovation (r = .650), and governance (r = .607), highlighting the deep influence of internal culture on human capital outcomes.

These findings support the proposition by Moullin (2007) that organizational values are deeply interlinked with performance outcomes. Moullin argued that organizations aspiring for excellence must embed values as performance drivers, enabling them to pursue and sustain high levels of achievement. This is echoed by Donker, Poff, and Zahir (2008), who emphasized that organizational values serve as strategic guides for decision-makers, influencing which goals to prioritize and how to reach them.

In line with these perspectives, Dowling and Moran (2012) noted that whether explicitly stated or implicitly practiced, organizational values shape behavior and outcomes by

influencing an organization's disposition to act in particular ways. The data in this study confirm that organizational values are not abstract principles—they manifest in the organizational climate and directly influence how companies perform in measurable ways.

Moreover, Hassan (2007) emphasized the need for organizations to clearly articulate and internalize their values so that all stakeholders, particularly employees, understand and embody them. Whether embedded in mission statements, annual reports, or internal policies, the visibility and reinforcement of values foster alignment, trust, and a strong corporate identity. The high correlations in this study affirm that the bottling companies have likely succeeded in translating their core values into employee-aligned practices that drive productivity and shared purpose.

Finally, the strategic importance of values in the contemporary business environment is reinforced by Kotler et al. (2010), who asserted that values have become a competitive differentiator in an era of globalization, transparency, and co-creation. As consumers and stakeholders increasingly hold companies accountable to social and ethical standards, organizations that live by their values gain reputation, loyalty, and legitimacy. The results of this study affirm that the bottling companies in Region XI are likely benefiting from this alignment—achieving stronger corporate performance through a solid foundation of shared and practiced organizational values.

As reflected in Table 6, a statistically significant and moderate positive relationship was found between corporate social responsibility (CSR) and corporate performance among bottling companies in Region XI, with an overall correlation of $r = .420$, $p < .001$. This result reinforces the notion that socially responsible business practices are closely associated with improved financial performance, operational efficiency, and human capital outcomes. The findings support the longstanding assertion of Solomon (2020) that CSR initiatives not only fulfill ethical obligations but also lead to better corporate outcomes through stakeholder engagement and reputation enhancement.

Among the specific CSR dimensions, customer-focused CSR demonstrated the strongest relationship with overall corporate performance ($r = .525$), suggesting that practices such as providing quality products, respecting consumer rights, and offering reliable after-sales services significantly enhance corporate effectiveness. This supports the work of Luo and Bhattacharya (2006), who found that CSR initiatives targeted at customers can enhance brand loyalty and consumer trust, ultimately translating into stronger firm performance. Other strong and statistically significant relationships were also observed between corporate performance and the employee ($r = .401$) and education ($r = .394$) domains. These results highlight how investments in employee welfare—such as training, safety, and workplace

benefits—as well as community educational initiatives can reinforce internal motivation and external legitimacy. This is aligned with Turker (2009), who emphasized that internal CSR has a substantial impact on employee satisfaction and engagement, which in turn enhances organizational productivity and commitment.

Table 6. *Correlations between corporate social responsibility and corporate performance (N = 400)*

CSR Indicators	financial performance	process	people development	Overall Corporate Performance
environmental	.139**	.101*	.218***	.174***
community	.226***	.207***	.278***	.268***
employee	.377***	.282***	.409***	.401***
education	.389***	.336***	.330***	.394***
customers	.445***	.508***	.443***	.525***
health	.273***	.262***	.154**	.256***
Overall CSR	.392***	.354***	.376***	.420*

$p < .05$, *$p < .01$, **$p < .001$

On the other hand, although environmental (r = .174), community involvement (r = .268), and health (r = .256) dimensions yielded relatively weaker correlations with corporate performance, all were still statistically significant (p < .001). These results indicate that while environmental and social initiatives are valuable for long-term sustainability and corporate citizenship, their effects on immediate performance outcomes may be less direct. However, Falck and Heblich (2007) argue that CSR includes responsibilities that extend beyond the firm's traditional financial roles—namely, to protect, preserve, or enhance stakeholder well-being. Thus, even CSR efforts that yield more intangible or delayed benefits contribute meaningfully to the company's broader performance ecosystem.

The overall pattern of results confirms that CSR is not merely a philanthropic endeavor but a strategic business practice. The significant correlation across all domains of CSR and performance suggests that bottling companies that institutionalize socially responsible behavior—especially those that focus on customers, employees, and education—are more likely to thrive in competitive environments. As such, the findings are consistent with the broader literature that positions CSR as a source of strategic value creation (Porter & Kramer, 2011), affirming the business case for CSR within the context of the Philippine bottling industry.

As shown in Table 7, a very strong and statistically significant positive correlation was found between leadership and corporate performance among bottling companies in Region

XI, with an overall correlation of r = .849, p < .001. This finding provides compelling evidence that effective leadership is a central driver of organizational success, influencing a wide range of performance outcomes including financial results, operational excellence, and human resource development. Among the leadership indicators, the strongest correlations with overall corporate performance were observed in radical product innovation (r = .827), incremental product innovation (r = .759), and reflexivity (r = .693). These dimensions underscore the critical role of innovation, adaptability, and learning in leadership practices. The ability of leaders to guide organizations through disruptive product development and incremental enhancements contributes directly to performance. This finding echoes the assertions of Bass and Riggio (2006), who emphasized that transformational leaders foster an innovation-oriented climate that challenges the status quo, encourages experimentation, and leads to long-term strategic advantage. Furthermore, reflexivity, which reflects the leaders' ability to reassess goals and adapt strategies based on internal and external feedback, is notably influential. This supports the view of Yukl et al. (2013), who argued that effective leadership requires not only goal-setting and motivation but also situational awareness and continuous realignment of objectives based on dynamic environments.

Table 7. *Correlations between leadership and corporate performance*

Leadership Dimensions	financial performance	process	people development	Overall Corporate Performance
leadership style assessment	.525***	.543***	.619***	.636***
flexibility assessment	.427***	.481***	.658***	.594***
outward focus assessment	.350***	.366***	.393***	.418***
reflexivity assessment	.538***	.597***	.699***	.693***
radical product innovation	.691***	.829***	.680***	.827***
incremental product innovation	.648***	.829***	.555***	.759***
Overall Leadership	.692***	.820***	.769***	.849*

***p* < .001

.

Moderate to strong correlations were also observed with leadership style assessment (r = .636), flexibility (r = .594), and outward focus (r = .418), confirming that both internal leadership capacities and external responsiveness are integral to achieving performance excellence. The high correlation of flexibility with people development (r = .658) and of leadership style with process (r = .543) and financial performance (r = .525) highlight how leaders who embrace change and demonstrate participative, coaching-oriented behaviors foster stronger commitment and alignment among employees. This supports the findings of

Haldar, Mishra, and Dash (2016), who posited that effective leaders contribute not only to shareholder value and customer satisfaction but also to ethical governance and employee engagement.

The particularly strong relationship between leadership and process performance (r = .820) further affirms the critical role of leadership in managing operational systems, driving innovation cycles, and supporting cross-functional coordination. According to Avolio (2004), such leaders engage in both task-oriented and relational behaviors, which are essential for sustaining a high-performance culture.

Overall, these results validate the premise that leadership is not merely a support function but a performance catalyst, particularly when grounded in strategic foresight, innovation, and employee empowerment. The consistently high correlation values across all dimensions reinforce the idea that the bottling companies' leadership practices in Region XI are aligned with modern leadership theories—transformational, adaptive, and innovation-driven—making leadership a cornerstone of organizational excellence.

Model Fit Comparison for the Four Structural Models

The best-fit structural equation model generated in this study demonstrates a direct and statistically significant causal relationship between two exogenous variables—corporate social responsibility (CSR) and leadership—and the endogenous variable, corporate performance. As seen in Figure 1, corporate social responsibility is represented by two key indicators: environmental and community initiatives, while leadership is measured through leadership style assessment. In turn, corporate performance is measured by two dimensions: financial performance and process efficiency. The final structural equation model, succinctly put, affirms that corporate performance is not merely the result of internal operational metrics, but is significantly influenced by how companies lead and engage with society and the environment. The integration of CSR and leadership as key performance drivers highlights a holistic and values-driven organizational paradigm—one that is increasingly vital for sustainable success in today's business landscape.

The inclusion of financial performance and process as the key indicators of corporate performance underscores the dual emphasis placed by bottling companies on achieving strong revenue outcomes and maintaining operational effectiveness. These companies demonstrate robust profitability, high income performance, and substantial return on investment, while also excelling in areas such as timely product innovation, automation, and process sophistication. This finding aligns with Stegerean and Gavrea (2010), who argued that corporate performance reflects the degree to which organizations are effectively managed

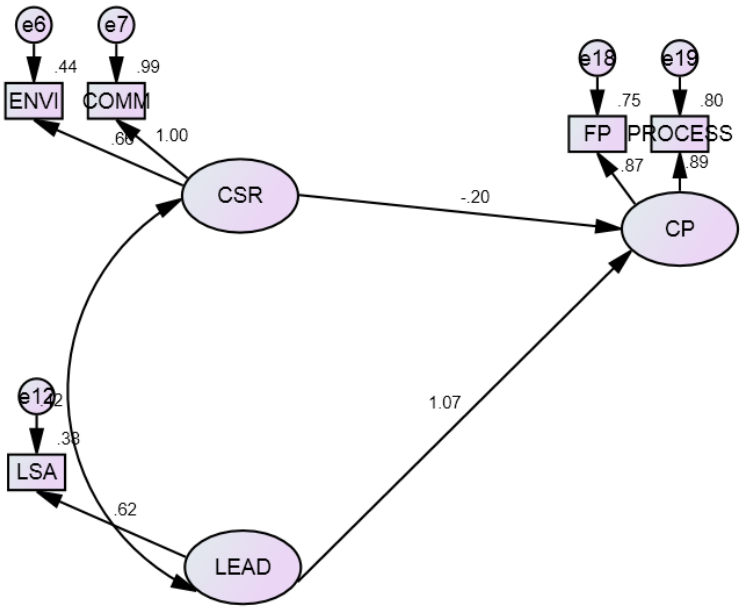

Figure 1. *Final structural model of the study*

and capable of delivering value to customers and stakeholders. It is also consistent with Carvalho, Meier, and Wang (2016), who emphasized that performance is influenced by employee capability, strategic planning quality, and organizational adaptability to a changing business environment.

The structural model further revealed that among the many CSR and leadership indicators initially considered, only environmental, community, and leadership style assessment remained significant contributors to corporate performance. This suggests that bottling companies in Region XI place particular strategic importance on environmental responsibility, such as conducting clean-up drives, tree planting, and organizing awareness campaigns for sustainability. Similarly, their community engagement is manifested in initiatives for vulnerable populations—including elderly care, support for children and persons with disabilities, safety and first aid programs, and community sports development. These findings corroborate the assertions of Welford (2004), who defined CSR as an organizational obligation to engage in activities that contribute to the welfare of society at large, encompassing not only environmental stewardship but also ethical commitments to various stakeholder groups including customers, employees, and the broader community.

The retention of leadership style assessment in the final model reinforces the notion that leadership plays a crucial role in shaping performance outcomes, particularly when leaders adopt participative, transformational, and people-centered approaches. Leaders who

articulate clear visions, coach and mentor employees, and embrace shared values are instrumental in fostering both productivity and organizational cohesion. This is supported by existing leadership literature, particularly Bass and Riggio (2006), who emphasized that transformational leadership strengthens organizational performance through influence, motivation, and individualized consideration.

Finally, Table 8 presents the summary of model fit indices for the four hypothesized structural equation models tested in the study. Model fit was evaluated using multiple goodness-of-fit indices including the Chi-Square to degrees of freedom ratio (CMIN/DF), Root Mean Square Error of Approximation (RMSEA), and its corresponding *p*-close, along with incremental fit indices such as the Normed Fit Index (NFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and the Goodness of Fit Index (GFI). Based on the established thresholds, acceptable model fit is indicated by: (a) CMIN/DF between 0 and 2 with a *p*-value ≥ .05, (b) RMSEA < .05 with *p*-close > .05, and (c) NFI, TLI, CFI, and GFI all exceeding .95 (Byrne, 2016; Hair et al., 2012).

Model 1, the initial hypothesized structure, demonstrated poor fit, as indicated by a high CMIN/DF = 12.275, a significant Chi-square *p*-value = .000, and RMSEA = .168 with *p*-close = .000. Additionally, the incremental fit indices (NFI = .701, TLI = .674, CFI = .717, GFI = .619) were all below the recommended cutoff. Model 2 similarly failed to meet the minimum fit criteria with CMIN/DF = 14.456, RMSEA = .184, *p*-close = .000, and fit indices ranging from .740 to .807—again, well below the thresholds for acceptable fit. Model 3, while slightly improved, still demonstrated poor model fit. Although its fit indices were closer to acceptable levels (e.g., NFI = .931, CFI = .936, GFI = .930), it still failed to meet the RMSEA criterion (RMSEA = .160, *p*-close = .000), and its CMIN/DF = 11.198 with a significant *p*-value indicated model misfit.

In contrast, Model 4 achieved excellent fit across all criteria. It reported a CMIN/DF = 1.034 and a non-significant Chi-square *p*-value = .376, suggesting minimal discrepancy between the model and the data. The RMSEA was very low at .009, and the *p*-close = .718 further confirmed the model's parsimony. Incremental indices (NFI = .996, TLI = 1.000, CFI = 1.000, GFI = .997) all surpassed the .95 threshold, confirming superior model fit. Thus, Model 4 was accepted as the best-fitting structural model. These findings emphasize that corporate social responsibility—particularly its environmental and community dimensions—alongside leadership, specifically leadership style assessment, are the most robust predictors of corporate performance in bottling companies in Region XI. The final model offers a well-fitting, evidence-based representation of how these constructs interact to influence organizational outcomes.

Table 8. *Summary of goodness-of-fit indices for the four structural models*

Model	CMIN/DF	*p*-value	NFI	TLI	CFI	GFI	RMSEA	*p*-close
1	12.275	.000	.701	.674	.717	.619	.168	.000
2	14.456	.000	.797	.740	.807	.770	.184	.000
3	11.198	.000	.931	.852	.936	.930	.160	.000
4	1.034	.376	.996	1.000	1.000	.997	.009	.718

Legend:
CMIN/DF – Chi-Square to Degrees of Freedom Ratio
NFI – Normed Fit Index
TLI – Tucker-Lewis Index
CFI – Comparative Fit Index
GFI – Goodness of Fit Index
RMSEA – Root Mean Square Error of Approximation
p-close – Test of Close Fit

CONCLUSION

Based on the empirical findings of this study, several important conclusions are drawn. First, the level of organizational values among bottling companies in Region XI was rated as very high by the respondents, indicating that values such as integrity, innovation, respect, and social responsibility are consistently demonstrated across organizational processes. Similarly, the level of corporate social responsibility (CSR) was also assessed as very high, suggesting that these companies actively implement CSR programs within their workplace and engage in community and environmental stewardship on a regular basis. The leadership practices within these organizations were likewise rated very high, reflecting a strong presence of leadership behaviors that support employee development, responsiveness to change, and innovation. Furthermore, the overall corporate performance of bottling companies in the region was also perceived to be very high, underscoring the effectiveness of their financial management, operational efficiency, and people development efforts.

In terms of relationships among variables, the study confirmed that organizational values, corporate social responsibility, and leadership are all significantly and positively related to corporate performance. Among these, organizational values exerted the strongest influence on corporate performance, followed by CSR, with leadership showing the least—but still significant—predictive strength. This hierarchy of influence highlights the foundational role that internal values play in shaping strategic and operational outcomes, while also affirming the strategic importance of CSR and leadership in sustaining high levels of performance.

The study further identified Model 4 as the best-fit structural equation model for

predicting corporate performance among bottling companies in Region XI. This model retains financial performance and process as key indicators of corporate performance, while identifying environmental and community-based CSR initiatives, along with leadership style assessment, as significant predictors. The exclusion of other indicators from the final model reflects the statistical refinement necessary to achieve model fit, and demonstrates that not all dimensions of CSR and leadership equally influence corporate outcomes.

REFERENCES

Alahmad, Y. Y. (2016). Understanding the relationship between transformational leadership styles: idealized influence, intellectual stimulation, inspirational motivation, individualized consideration and product innovation among manufacturing and services firms, the role of open system.

Al Khajeh, E. H. (2018). Impact of leadership styles on organizational performance. *Journal of Human Resources Management Research*, *2018*(2018), 1-10.

Akpoviroro, K. S., Kadiri, B., & Owotutu, S. O. (2018). Effect of participative leadership style on employee's productivity. *International Journal of Economic Behavior (IJEB)*, *8*(1), 47-60.

Alrowwad, A. A., Obeidat, B. Y., Tarhini, A., & Aqqad, N. (2017). The impact of transformational leadership on organizational performance via the mediating role of corporate social responsibility: A structural equation modeling approach. *International Business Research*, *10*(1), 199-221.

Amornkitvikai, Y., & Pholphirul, P. (2023). Business productivity and efficiency from aligning with sustainable development goals: Empirical evidence from ASEAN manufacturing firms. *Business Strategy & Development*, *6*(2), 189-204.

Avolio, B. J. (2004). Examining the full range model of leadership: Looking back to transform forward. In *Leader development for transforming organizations* (pp. 71-98). Psychology Press.

Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, *40*, 8-34.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, 421-458.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, *13*(3), 209-223.

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology Press.

Belal, A. R. (2016). *Corporate social responsibility reporting in developing countries: The case of*

Bangladesh. Routledge.

Bengtsson, M., Alfredsson, E., Cohen, M., Lorek, S., & Schroeder, P. (2018). Transforming systems of consumption and production for achieving the sustainable development goals: Moving beyond efficiency. *Sustainability Science*, *13*, 1533-1547.

Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal*, *42*(5), 488-506.

Bordens, K. S., & Abbott, B. B. (2002). *Research design and methods: A process approach*. McGraw-Hill.

Buonocore, F., Annosi, M. C., de Gennaro, D., & Riemma, F. (2024). Digital transformation and social change: Leadership strategies for responsible innovation. *Journal of Engineering and Technology Management*, *74*, 101843.

Buallay, A. (2020). Sustainability reporting and firm's performance: Comparative study between manufacturing and banking sectors. *International Journal of Productivity and Performance Management*, *69*(3), 431-445.

Byrne, B. M. (2016). Adaptation of assessment scales in cross-national research: Issues, guidelines, and caveats. *International Perspectives in Psychology*, *5*(1), 51-65.

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, *32*(3), 946-967.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39-48.

Carvalho, L. S., Meier, S., & Wang, S. W. (2016). Poverty and economic decision-making: Evidence from changes in financial resources at payday. *American Economic Review*, *106*(2), 260-84.

Chand, M., & Fraser, S. (2006). The relationship between corporate social performance and corporate financial performance: Industry type as a boundary condition. *The Business Review*, *5*(1), 240-245.

Crisan-Mitra, C. (2015). *Corporate Social Responsibility And Corporate Performance In Romania*. Cluj-Napoca: Babes Bolyai University. Retrieved from https://search.proquest.com/docview/1786765956?accountid=31259

Day, G. S., & Schoemaker, P. J. (2006). Leading the vigilant organization. *Strategy & Leadership*, *34*(5), 4-10.

Diskienė, D., & Goštautas, V. (2010). Relationship between individual and organizational values and employees' job satisfaction. *Current Issues of Business & Law/Verslo ir*

Teisės Aktualijos, *5*(2).

Donker, H., Poff, D., &Zahir, S. (2008). Corporate values, codes of ethics, and firm performance: A look at the Canadian context. *Journal of Business Ethics*, *82*(3), 527-537.

Dowling, G., & Moran, P. (2012). Corporate reputations: built in or bolted on?. *California Management Review*, *54*(2), 25-42.

Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International journal of management reviews*, *12*(1), 8-19.

Dulewicz, S. V., & Higgs, M. J. (2004). Design of a new instrument to assess leadership dimensions and styles. *Selection and Development Review*, *20*(2), 7-12.

Falck, O., & Heblich, S. (2007). Corporate social responsibility: Doing well by doing good. *Business Horizons*, *50*(3), 247-254.

Ferguson, J., & Milliman, J. (2008). Creating effective core organizational values: A spiritual leadership approach. *Intl Journal of Public Administration*, *31*(4), 439-459.

Fosu, E., Yi, K., & Asiedu, D. (2024). The effect of CSR on corporate social performance: Mediating role of corporate image, green innovation and moderating role of corporate identity. *Corporate Social Responsibility and Environmental Management*, *31*(1), 69-88.

George, A. S. (2024). The symbiotic relationship between visionary and pragmatic leadership in propelling organizational success. *Partners Universal International Innovation Journal*, *2*(3), 57-79.

Grimes, D. A., & Schulz, K. F. (2002). Descriptive studies: what they can and cannot do. *The Lancet*, *359*(9301), 145-149.

Gupta, J., & Das, N. (2024). Too little or too much? The curvilinear relationship between corporate social responsibility disclosure and investment efficiency in BRICS economies. *Corporate Social Responsibility and Environmental Management*, *31*(4), 2600-2618.

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S., ... & Ray, S. (2021). An introduction to structural equation modeling. *Partial least squares structural equation modeling (PLS-SEM) using R: a workbook*, 1-29.

Haldar, P. K., Mishra, L., & Dash, G. (2016). Corporate governance influence on firm's financial performance. *Srusti Management Review, 9*(2), 33-40.

Hasman, A. (2015). Structural equation modelling (SEM) in connection to big data. *IJBH*, 19.

Hassan, A. (2007). Human resource development and organizational values. *Journal of*

European Industrial Training, *31*(6), 435-448.

Hatcher, L., & Stepanski, E. J. (1994). *A step-by-step approach to using the SAS system for univariate and multivariate statistics*. SAS Institute.

Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal*, *3*(3), 118-126.

Hockerts, K. (2015). A cognitive perspective on the business case for corporate sustainability. *Business Strategy and the Environment*, *24*(2), 102-122.

Jamali, D. (2008). A stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. *Journal of Business Ethics*, *82*(1), 213-231.

Kaplan, R. S., & Norton, D. P. (2006). *Alignment: Using the balanced scorecard to create corporate synergies*. Harvard Business Press.

Krishnan, N. (2012). Does Institutional Ownership Affect Corporate Social Performance-A Study of Select BSE Listed Companies. *DYPDBM International Business Management Research Journal*, (12), 68.

Kotler, P., Kartajaya, H., & Setiawan, I. (2010). *Marketing 3.0: From products to customers to the human spirit*. John Wiley & Sons.

Lepak, D., & Boswell, W. R. (2012). Strategic human resource management and employee–organization relationship. In *The Employee-Organization Relationship* (pp. 455-484). Routledge.

Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, *70*(4), 1-18.

Luo, W. (2024). Flexible leadership: Bridging gender dynamics and enhancing enterprise performance. *Management Research Quarterly*, *1*(4), 4-17.

Matten, D., & Moon, J. (2020). Reflections on the 2018 decade award: The meaning and dynamics of corporate social responsibility. *Academy of Management Review*, *45*(1), 7-28.

Mishra, S., & Suar, D. (2010). Does corporate social responsibility influence firm performance of Indian companies? *Journal of Business Ethics*, *95*(4), 571-601.

Mohammad, W. M. W., & Wasiuzzaman, S. (2021). Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems*, *2*, 100015.

Moore, L. L., & Rudd, R. D. (2006). Leadership styles of current extension leaders. *Journal of Agricultural Education*, *47*(1), 6.

Moullin, M. (2007). Performance measurement definitions: Linking performance measurement

and organisational excellence. *International Journal of Health Care Quality Assurance*, *20*(3), 181-183.

Muthén, B. O. (2002). Beyond SEM: General latent variable modeling. *Behaviormetrika*, *29*(1), 81-117.

Nabi, N., Akter, M., Almasud, A., Habib, A., & Pal, S. K. (2021). Influence of CSR stakeholders on the textile firms performances: The mediating role of organizational legitimacy. *International Journal of Research in Business and Social Science*, *10*(8), 25-38.

Neely, A., Gregory, M., & Platts, K. (2005). Performance measurement system design. *International Journal of Operations & Production Management*, *25*, 12.

Partington, D. A. (2003). Managing and Leading. In J.R. Turner (Ed.). *People in Project Management*. Aldershot, UK: Gower.

Porter, M. E., & Kramer, M. R. (2011). Criação de valor compartilhado. *Harvard Business Review*, *89*(1/2), 62-77.

Rais, S., & Goedegebuure, R. V. (2009). Corporate social performance and financial performance. The case of Indonesian firms in the manufacturing industry. *Problems and Perspectives in Management*, *7*(1), 224-234.

Roman, F. M. G. (2024). *Bridging Digital Transformation Gaps in Southeast Asia* (Doctoral dissertation, Massachusetts Institute of Technology).

Rueda, S., Moriano, J. A., & Liñán, F. (2015). Validating a theory of planned behavior questionnaire to measure entrepreneurial intentions. In *Developing, shaping and growing entrepreneurship* (pp. 60-78). Edward Elgar Publishing.

Sagar, S. (2023). Innovation and sustainability in business: Navigating the future landscape. *IOSR Journal of Business and Management (IOSR-JBM)*, *25*(12), 51-60.

Schein, E. H. (2010). Three cultures of management: The key to organizational learning. *Glocal Working. Living and Working Across the World With Cultural Intelligence. Milan, Italy, Franco Angeli*, 37-58.

Shin, J., Taylor, M. S., & Seo, M. G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, *55*(3), 727-748.

Solomon, J. (2020). *Corporate governance and accountability*. John Wiley & Sons.

Stegerean, R., & Gavrea, C. (2010). Innovation and Development-Criteria for organizational performance. *Managerial Challenges of the Contemporary Society. Proceedings*, 202.

Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Boston: Pearson

Education, Inc.

Tangen, S. (2005). Demystifying productivity and performance. *International Journal of Productivity and Performance Management*, *54*(1), 34-46.

Teah, K., Phau, I., & Sung, B. (2023). CSR commitment and consumer situational scepticism of luxury brands: antecedents, moderator and outcomes. *International Journal of Ethics and Systems*.

Tilakasiri, K. K. (2012). *Corporate social responsibility and company performance: evidence from Sri Lanka* (Doctoral dissertation, Victoria University).

Toliver, A. D. (2016). *Measuring corporate social responsibility through organizational values: A scale validation study* (Doctoral dissertation, The University of Texas at Arlington).

Turker, D. (2009). Measuring corporate social responsibility: A scale development study. *Journal of Business Ethics*, *85*(4), 411-427.

Turner, J. R., & Müller, R. (2005). The project manager's leadership style as a success factor on projects: A literature review. *Project Management Journal*, *36*(2), 49-61.

Tseng, S. M. (2010). The correlation between organizational culture and knowledge conversion on corporate performance. *Journal of knowledge management*, *14*(2), 269-284.

Ullman, J. B., & Bentler, P. M. (2012). Structural equation modeling. *Handbook of Psychology, second edition*, *2*.

Wang, K., & Qiao, Y. (2022). The horizontal S-shaped relationship between corporate social responsibility and financial performance: The moderating effects of firm size and industry dynamism. *Business Ethics, the Environment & Responsibility*, *31*(4), 937-968.

Welford, R. (2004). Corporate social responsibility in Europe and Asia: Critical elements and best practice. *Journal of Corporate Citizenship*, (13), 31-47.

Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management perspectives*, *26*(4), 66-85.

Yukl, G. A., & Heaton, H. (2002). Leadership in organizations. New Jersey: Prentice Hall.

Yukl, G., Mahsud, R., Hassan, S., & Prussia, G. E. (2013). An improved measure of ethical leadership. *Journal of leadership & organizational studies*, *20*(1), 38-48.

Zuraida, Z., & Sugianto, S. (2019, January). An inherent ambiguity of CSR disclosure concept: Evidence from IPO prospectuses of Indonesian listed companies. In *1st Aceh Global Conference (AGC 2018)* (pp. 437-445). Atlantis Press.

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