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Abstract

Large Manufacturing firms are critical to the economic development of a nation and the wellbeing of its citizens. However, most large manufacturing firms in Kenya have recently recorded a decline in performance. Thus, the study sought to examine the influence of stakeholder involvement on the performance of large manufacturing firms in Kenya. The specific objectives were to examine the influence of commitment, staff participation in the CER process and attendance in CER & implementation forums on the performance of large manufacturing firms in Kenya. The study adopted a descriptive and explanatory research designs. The target population for the study was 499. A sample size of 336 was obtained using the Yamane formula. The study used questionnaires to collect the data. The results and discussion included the reliability results, factor analyses, correlation, hypotheses testing and regression analysis. The findings of the study showed that staff participation in the CER process and attendance at CER & implementation forums explain 20.7% of the variations in the performance of large manufacturing firms in Kenya. The commitment and performance of large manufacturing firms in Kenya are positively and significantly related. Staff participation in the CER process and the performance of large manufacturing firms in Kenya are positively and significantly related. Similarly, attendance at CER & implementation forums are positively and significantly related to the performance of large manufacturing firms in Kenya. The study recommended that large manufacturing firms in Kenya should support environmental innovation such as collaborating and networking to enhance performance. It is recommended that the firms need to allocate resources to fund corporate environmental responsibilities. The top management in the firms needs to be highly committed to supporting the initiatives that safeguard the environment.

Keywords: *Commitment, staff participation in CER process, attendance in CER & implementation forums, performance, large manufacturing firms, Kenya*

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1.0 Background of the Study

The manufacturing sector is the third biggest industrial sector after agriculture and transport and communication (KPMG, 2014). It is the third leading sector contributing to GDP in Kenya. Performance of these enterprises is a great concern not only to firms but the entire society due to their anticipated significance in the contribution of the economic growth in Kenya. The performance can be measured using both financial and non-financial indicators (Tasneem, Muhammad & Basit, 2016). The financial indicators comprise the net profits, return on assets (ROA), return on equity (ROE), return on investments (ROI), net profit margin, while non-financial indicators include market share, customer base, growth, customer satisfaction, production efficiency, customer service, among others (Ntiamoah, Egyiri & Kwamega, 2014). Non-financial performance measures, though subjective, serve as complements to the financial measures (Muloli, 2020). The study measured the performance using both financial and non-financial indicators. Combining these two measures helps managers gain a broader perspective on measuring and comparing performance hence the extent of effectiveness and efficiency in utilization of resources, competitiveness, and readiness to face the growing external pressures, including globalization (Suryani & Dianawati, 2018).

The financial indicator was ROA, while the non-financial indicators included customer base and market share. The ROA was selected among the financial indicators to measure the performance because it shows the assets' effectiveness in estimating the performance. ROA is determined by dividing the net profit by the total assets. ROA takes care of both the income and assets resources hence an adequate measure of performance (Tasneem, Muhammad & Basit, 2016). The stakeholder involvement has been considered key in improving the performance (Bryson, 2011; Bradley, 2016; Gualandris & Kalchschmidt, 2016; Nederhand & Klijn, 2019; Gichohi, 2015; Hafezalkotob, 2015). Stakeholders' involvement is very important in the organization. Freeman (1984) defined a stakeholder as an individual or a group who can affect or be impacted by achieving the organization's goals. The importance of stakeholders in the planning for change in the organization cannot be underrated. Hawrysz and Foltys (2015) views stakeholder involvement as a web of connections between the different components.

Instead, Kamande (2011) sees the engagement of stakeholders as a basis for good corporate governance despite this being ignored or underestimated by most companies. Thus, the study sought to examine the influence of stakeholder involvement on performance of large manufacturing firms in Kenya. Although Kenya is the most industrially developed country in East Africa, the manufacturing sector constitutes merely 10 per cent of the industrial sector contribution to GDP (RoK, 2018). The manufacturing sector has a great potential on promoting economic growth and competitiveness in the country like Kenya. According to the World Bank (2014), sluggish growth in the manufacturing sector is pulling down economic growth in Kenya and is also losing grip on the East Africa Community market where it was dominant, due to inefficiencies and

the unpredictable operating environment. The share of manufactured goods imported by EAC from Kenya declined from 9 per cent in 2009 to 7 per cent in 2013 (WB, 2015).

The large manufacturing firms were 499 in number by year 2017 (KAM, 2017). Over 80 per cent of these large-scale enterprises are based in Nairobi while the rest are located in other major towns and regions including Coast, Nyanza, Nakuru, Eldoret, Athi River, Nyeri and Thika (KAM, 2017). However, statistics from World Bank show that Kenyan manufacturers have registered stagnation and declining profits for the last five years due to unpredictable operating environment (WB, 2015). The growth in manufacturing industry has declined to 3.3 per cent in 2011 as compared to 4.4 per cent in the year 2010 mainly due to a challenging operating environment (KNBS, 2017).

Further statistics from Kenya Association of Manufacturers have shown that certain firms announced plans to shut down their plants and shift operations to Egypt as a result of reduced profits (KAM, 2017). Cadbury Kenya announced that it will close down its manufacturing plant in Nairobi by the end of October 2014 (RoK, 2017). In the full-year to September 2013 results, Eveready's net profit fell 58.7 per cent to \$493,237 from \$784,783 the previous year. Its production capacity dropped to 50 million units annually down from a previous high of 180 million per year mainly caused by contingencies (RoK, 2017). Tata Chemicals Magadi scaled down its operations by closing down its main factory (Kandie, 2014). Manufacturers in the region lose over \$330 million annually and the government loses \$67 million in potential tax revenue due to unforeseen uncertainties. Thus, the study sought to examine whether stakeholder involvement can influence the performance of large manufacturing firms in Kenya

1.1 Statement of the Problem

The manufacturing sector is among the priority sectors identified by Vision 2030, earmarked to catalyze Kenya's leap to a higher middle-income economy. However, the sector's contribution to the GDP has stagnated with a growth of 3.1 percent, significantly lower than the overall economic growth of 5.0 percent (World Bank, 2019). For instance, East African Breweries Limited (EABL), which is a large East African brewing company, has been experiencing low profits and reduced market share in recent years with a 15% and 7% drop in the profits and market share in 2016/2017 year compared to 2015 (Baraza, 2017). Moreover, East African Portland Cement reported a net loss of Ksh 3.4 billion in 2019 and 2.8 billion in 2020 (East African Portland Cement, 2020;2021). In addition, tata chemicals Magadi limited reported a loss of ksh. 134,000,000 in 2020 (Tata Chemicals Magadi Limited, 2021). Statistics from the Kenya Association of Manufacturers indicated that certain firms announced plans to shut down their plants and shift operations to Egypt due to reduced profits (KAM, 2017).

The cement volume exported from the manufacturing firms decreased by 62.8 percent from 388.4 thousand tonnes in 2017 to 144.3 thousand tonnes in 2018 (KNBS, 2019). Also, cement production decreased by 2.6 percent to 6,069.9 thousand tonnes in 2018 from 6 230.3 in 2017 and the imports increased from 14.7 thousand tonnes in 2017 to 23.0

thousand tonnes in 2018 (KNBS, 2019). The decline in the performance of some of these large manufacturing firms could be due to flawed corporate environmental responsibility, thus forming the basis of the current study. Based on the reviewed studies, the knowledge gap exists that formed the basis of conducting the current study. For instance, Makori and Jagongo (2013) looked at only environmental accounting while the current examined the influence of stakeholder involvement on performance, thus a conceptual gap. Besides, Ienciu, Cardos, and Muller (2017) used environmental audit as the study variable and thus presents a conceptual gap. A study by Menike (2020) was done in food, beverage and tobacco sector companies listed on the Colombo Stock Exchange, thus presenting a contextual gap because the current study was done in manufacturing firms.

Another study by Mwangi and Mwititi (2015) presented a conceptual gap because it only focused on voluntary financial disclosures. Nederhand and Klijn (2019) carried out a study on stakeholder involvement in public-private partnerships, and thus contextual gap. A study by Somjai, Fongtanakit and Laosillapacharoen (2020) utilized a descriptive research design, thus a methodological gap since the current study used both descriptive and explanatory research design. The explanatory research design is used to examine the relationship between variables. In addition, Kibogy (2017) used a descriptive research design, thus a methodological gap. Ntiamoah, Egyiri and Kwamega (2014) conducted the study in the banking sector, thus presenting a contextual gap. Furthermore, Muloli (2020) conducted the study in banks, thus a contextual gap. Thus, based on the reviewed studies, a knowledge gap existed in conceptual, contextual and methodological and this formed the basis of the current study.

1.2 Research Objectives

- i. To examine the influence of commitment on performance of large manufacturing firms in Kenya
- ii. To examine the influence of staff participation in CER process on performance of large manufacturing firms in Kenya
- iii. To examine the influence of attendance in CER & implementation forums on performance of large manufacturing firms in Kenya

1.3 Research Hypotheses

- i. **H₀₁:** Commitment has no significant influence on performance of large manufacturing firms in Kenya
- ii. **H₀₂:** Staff participation in CER process has no significant influence on performance of large manufacturing firms in Kenya
- iii. **H₀₃:** Attendance in CER & implementation forums has no significant influence on performance of large manufacturing firms in Kenya

2.0 Literature Review

2.1 Theoretical Review

The study was anchored on stakeholders' theory. Stakeholder theory, developed by Edward Freeman (1984) is a replica of corporate social responsibility. Corporate

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environmental responsibility is an obligation on firm proprietors to discard any waste properly and securely. Alternately, stakeholder theory attends to those living in the neighboring manufacturing communities or poisoned environment and consider business morals by demanding the privilege to clean air and water (Jamali, 2008). In large manufacturing firms, stakeholders may include customers, company employees, creditors, suppliers, local community and those living next to the firm (Orlitzky, Siegel & Waldman, 2011). Government entities, competing firms, shareholders and the firm's management are the other stakeholders. Shareholders, workers, customers, suppliers, and community are the cardinal stakeholders (Epstein & Buhovac, 2014). In the current study, the theory explains the influence of stakeholder involvement on the performance of Large Manufacturing firms in Kenya Stakeholder theory commits corporate leaders to speak to all sides, adjust everybody's interests and welfare to boost benefits across the board of those whose lives are impacted by the business.

2.2 Conceptual Framework

Orodho (2012) defines conceptual framework as graphical or diagrammatical model that represents relationships between variables in the study. Figure 1 illustrates the relationship between variables.

Independent Variables

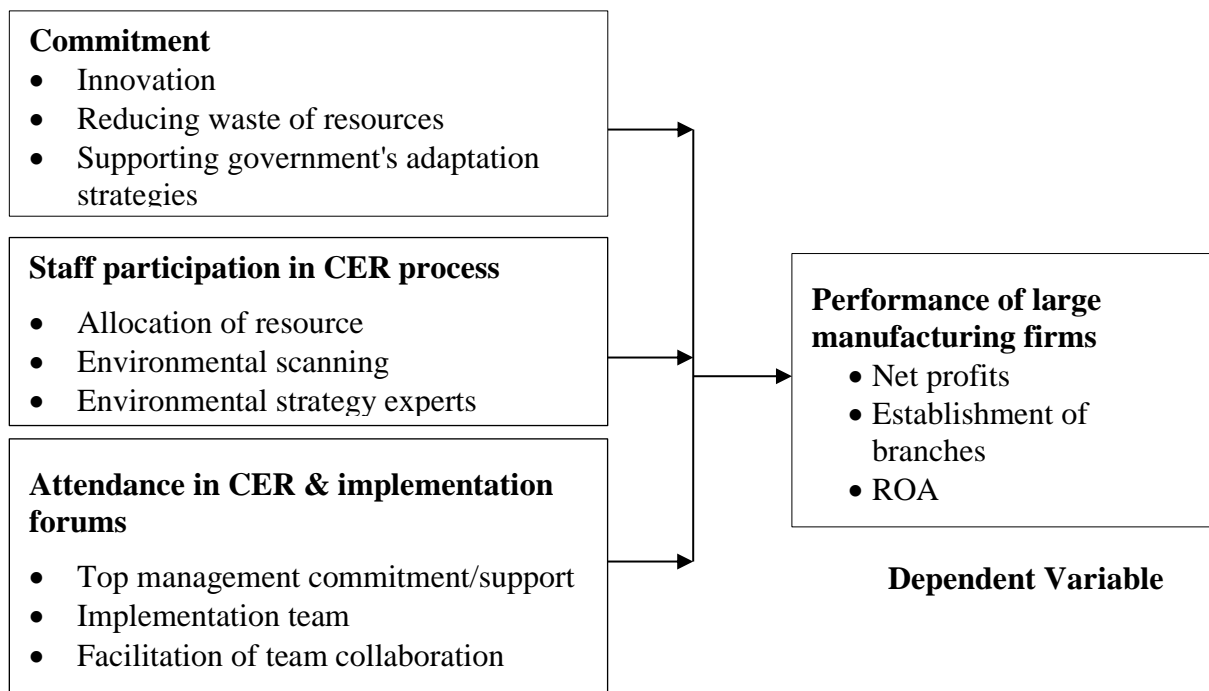


Figure 1: Conceptual Framework

2.3 Empirical Review

A study was conducted by Somjai, Fongtanakit and Laosillapacharoen (2020) to determine the impact of environmental commitment and environmental management accounting on firm performance. The study utilized the descriptive research design. The unit of analysis included multinational manufacturing firms in Indonesia. The study results showed that environmental commitment and environmental management accounting have a positive and significant effect on firm performance. It was revealed by the study that the constructs of environmental commitment and environmental management accounting can include the firms having a vision that fully embraces sustainability, setting protection and restoration of the environment as a strategic priority, adhering to the government regulations and encouraging, reducing waste of resources, supporting government's adaptation strategies and rewarding a corporate culture that fosters environmental values.

Likewise, Suryani and Dianawati (2018) examined the effect of environmental commitment on the financial performance of manufacturing companies listed on the Indonesia Stock Exchange (IDX). This study shows that environmental commitment has a positive and significant effect on financial performance. To demonstrate genuine environmental commitment, companies must walk the talk by building sustainability into their visions, annual goals, targets and plans, and have structures and processes to incorporate environmental considerations into all levels of business and decision-making (Somjai, Fongtanakit & Laosillapacharoen, 2020). Moreover, Li, Cao, Zhang, Chen, Ren and Zhao (2017) examined the effect of corporate environmental responsibility on financial performance. The data was collected from 1179 observations of Chinese energy-intensive listed companies from 2012-to 2014. The study used a descriptive research design. The collection of the data was done using a secondary data collection template. The study results showed that corporate environmental responsibility significantly positively influences financial performance.

Anser, Yousaf, Majid and Yasir (2020) conducted a study examining whether corporate social responsibility commitment and participation predict environmental and social performance. Data were collected from 324 managers of hotels and tourism units. Statistical techniques such as correlation, regression and AMOS 7.0 software were used for data analysis. Results reveal that CSR commitment positively predicts CSR participation. CSR participation significantly predicts social performance and environmental performance. The direct link of CSR commitment with social performance and environmental performance is positive and significant. Costa and Fonseca (2022) examined the impact of corporate social responsibility and innovative strategies on financial performance. The findings of the study showed that corporate social responsibility and innovative strategies have a positive and significant effect on financial performance. Corporate social responsibility can include reducing the waste of resources and supporting the government's adaptation strategies. The study concluded that corporate social responsibility and innovative strategies positively and significantly financial performance.

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Seunghye, Chung and Yang (2016) conducted a study on employees' participation in corporate social responsibility and organizational outcomes/performance. The study used a descriptive research design. The collection of the data was done using questionnaires. The study was conducted in South Korea and sampled 393 full-time employees from several conglomerates. The study found employees' participation in CSR is positively related to job satisfaction, organizational identification and organizational commitment. Employee participation positively affects organizational outcomes/performance. The participation of the employees can incorporate ensuring there are environmental strategy experts. The study concluded that employees' participation in corporate social responsibility is positively and significantly related to performance

In addition, a study was conducted by Kibogy (2017) to examine the effect of corporate environmental responsibility on organizational performance in the case of Bamburi Cement Limited. The study applied a descriptive research design. The study population consisted of all employees in the organization and data collection was done through questionnaires. The sample size of the study was 52 respondents. Data was collected using a questionnaire and later analyzed using Statistical Package for Social Sciences (SPSS) version 23. Data was presented using frequency tables. The study results showed that Bamburi engages in corporate environmental responsibility, with the strongest of them being that the company engages in environmental management practices that have positively influenced performance. The environmental management practices can be determined by Allocation of resources, environmental strategy experts, management commitment, facilitation of team collaboration and emphasis on environmental innovation such as the use of clean technologies to minimize the environmental burden.

Further, another study was conducted by Bejnarowicz and Aderum (2018) to examine the impact of employees' participation in a Company's CSR on organizational performance. The study was conducted through qualitative research and a case study method. The case study consisted of semi-structured interviews and the sample consisted of seven employees. The research in this thesis was conducted through an inductive approach. Findings show that employees' participation in a Company's CSR positively influences organizational performance. The findings also indicated low awareness hinders employees to take CSR-related actions. A study was done by Farooq and Reynaud (2019) on whether employees' participation in decision-making increases the level of corporate social and environmental sustainability. The study indicated that employee participation in corporate social and environmental sustainability initiatives increases the performance of an organization. Moreover, the findings show that the impact of employee participation on the components of sustainability is moderated by organizational identification in such a way that if employees have a strong sense of identification with their organization, their participation in decision-making has a greater impact on the sustainability of their organization.

A study was conducted by Kadie (2021) to determine the influence of corporate social responsibility on organizational performance in the manufacturing industry in Kenya.

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Specifically, the study sought to assess the impact of participation in charitable activities, building an ethical culture, top management commitment and collaboration on the performance of the manufacturing industry in Kenya. To achieve these objectives, the study employed a descriptive research design to provide a deeper understanding of the phenomenon of corporate social responsibility and its role in manufacturing companies. The target population was 336 employees working at the manufacturing companies located in the Nairobi industrial area. The study adopted a stratified sampling technique. The study showed that participation in charitable activities, building an ethical culture, top management commitment and collaboration has a positive and significant influence on the performance of the manufacturing industry in Kenya.

Moreover, Dobre, Stanila and Brad (2015) studied the impact of CSR activities on the financial performance of Romanian publicly traded companies. The study adopted the descriptive research design. The collection of the data was done using questionnaires. The study used descriptive and inferential statistics to present the data. The study findings showed that environmental protection spending has a significant impact on financial performance. The study stated that commitment of the top leadership to environment protection and ensuring there is a team to implement strategies that protect the environment are critical. A study conducted by Ntiamoah, Egyiri and Kwamega (2014) showed that top management support, environmental strategy experts and facilitation of team collaboration have a positive and significant effect on performance.

Further, research by Rashid, Rahman and Khalid (2014) on community CSR as a strategic social marketing initiative found that community CSR increases customer loyalty and improves the corporate image. The commitment to environmental and sustainability issues is not just a public relations exercise but has long-term financial benefits. The study showed that top management support and facilitation of team collaboration increase the success of CSR. The consumers' willingness to purchase from companies that are more environmentally conscious increases the overall performance of an organization. Furthermore, a positive corporate image increases client faith in the company's products and services, resulting in customer loyalty, which secures the company's long-term profitability and growth. A study was conducted by Dyduch and Krasodomska, (2017) to look at the effect of corporate social responsibility on stock market returns of the companies listed on the Warsaw Stock Exchange. The study used multiple linear regression. The results show that the relationship between corporate social responsibility such as voluntary disclosure and stock market returns is positive. The voluntary disclosure included revealing information such as financial data, shareholders' information, corporate social responsibility and human resources.

Kavitha and Anuradha (2016) studied the influence of community CSR activities on the performance of insurance firms in India. The results indicated that companies contribute resources and support activities targeted at increasing economic and social development by improving the living conditions of the local community in which they operate and society at large. The community CSR can be increased by ensuring there is top leadership

support. The insurers have a responsibility to the community and society. CSR for community development has a favourable impact on corporate financial performance in general. The study recommended that insurance firms in India should continue with CSR activities and this will continue improving their financial performance due to the loyalty of their customers.

3.0 Research Methodology

The study adopted a descriptive and explanatory research designs. Positivistic philosophy approach was adopted for the study, which rely on relevant theories to setup the research hypotheses. The study used large-sized firms in Nairobi City County as the case study. The population of the large sized registered members as per the directory was 499. Thus, the unit of analysis included large manufacturing firms, while the unit of observation included managers from middle level management and top-level management. A sample size of 336 respondents in middle level management and top-level management were drawn from finance, procurement, operations, human resources and production departments. The study utilized a questionnaire to collect primary data. The results and discussion included the reliability results, factor analyses, correlation, hypotheses testing and regression analysis.

4.0 Research Results and Discussion

4.1 Response Rate

The study targeted a sample of 336 respondents. Out of the 336 questionnaires given out during data collection, 315 filled ones were received back, with twenty-one (21) not returned. This translated to 93.8% response rate which was good for analysis. According to Kothari (2004), a response rate of above 50% is adequate for a descriptive study. Babbie (2004) also asserted that return rates of above 50% are acceptable to analyze and publish, 60% is good and 70% is very good and 80% is excellent. Based on these assertions from renowned scholars, the researcher used the returned questionnaires to analyze and non-response questionnaires were not considered.

Table 1: Response Rate

Item	Frequency	Percent
Returned questionnaires	315	93.8
Unreturned questionnaires	21	6.2
Total	336	100.0

4.2 Reliability of Research instrument

Cronbach Alpha was used to determine the reliability of the questionnaire. The Cronbach Alpha of Commitment, Staff participation in the CER process, Attendance in CER & implementation forums and performance of large manufacturing firms was found to be above 0.7 as shown in Table 2. This indicated that the instruments were adequately reliable for the measurement. Taber (2018) suggests that Cronbach's alpha values of items included in the study should not be lower than 0.7. while Rahi (2017) recommends a

Cronbach alpha should exceed 0.7. The closer Cronbach's alpha coefficient is to 2, the higher the internal consistency and reliability. Therefore, the variables were considered reliable in the study as their Cronbach's alpha coefficients were more than 0.7.

Table 2: Reliability Results

Variable	Cronbach alpha	Comments
Commitment	0.856	Reliable
Staff participation in CER process	0.841	Reliable
Attendance CER & implementation forums	0.796	Reliable
Performance	0.889	Reliable

4.3 Factor Analysis

4.3.1 Factor Analysis for stakeholder involvement

Factor analysis was conducted on the statements on a variable stakeholder involvement (commitment, staff participation in the CER process and attendance in CER & implementation forums). This was done by subjecting the statement to dimension reduction in SPSS, where any sub-variable with an eigenvalue less than 0.5 is dropped. The results presented in Table 3 shows that the statements under variable stakeholder involvement had eigenvalues greater than 0.5. Therefore, all the statements under variable stakeholder involvement were utilized during the final data collection, analysis and presentation. The rule of thumb is that the statements with eigenvalues less than 0.5 are dropped during the analysis (Ringnér 2008; Vidal, Ma & Sastry, 2016).

Table 3: Factor Analysis for stakeholder involvement

Statements on stakeholder involvement	Factor Loadings
The organization support environmental innovation such as collaborating and networking to enhance the performance	0.802
The organization is keen on reducing the waste of resources and this enhances the organization's performance	0.819
The organization is highly involved in supporting the government's adaptation strategies	0.734
The organization allocates resources to fund corporate environment responsibilities	0.781
The organization regularly participates in environmental scanning to stimulate the overall organization performance	0.700
The organization has established environmental strategy experts who advise the management	0.810
The top management in the organization are highly committed to supporting the initiatives that safeguard the environment	0.707
The organization has created an implementation team focused on ensuring environmental protection	0.657
The organization champions team collaboration in corporate environment responsibilities/initiatives	0.780

4.3.1 Factor Analysis for performance of large manufacturing firms

Factor analysis was conducted on the statements on the dependent variable, performance. This was done by subjecting the statement to dimension reduction in SPSS, where any sub-variable with an eigenvalue less than 0.5 is dropped. The results presented in Table 4 shows that the statements under variable performance had eigenvalues greater than 0.5. Therefore, all the statements under variable performance were utilized during the final data collection, analysis and presentation.

Table 4: Factor analysis for performance of large manufacturing firms

Statement on performance	Factor Loadings
The organization assets have been increasing	0.806
The organization equity has been growing	0.833
The organization net profits have been on the rise	0.763
The organization has established/opened new branches in the last five years	0.799
The organization's customers have been loyal	0.790
The organization has been achieving its target goals	0.760
The market share of our company has increased consistently over the past 5 years	0.993

Trend analysis was performed to examine the trend of the return of the assets among the large manufacturing firms. Based on the results presented in Figure 2, the ROA of the large manufacturing firms has been fluctuating. The trend illustrates that ROA has been decreasing from 2016 up to 2017. This could be attributed to the fact that Kenya was approaching the general election and thus, investors were not willing to inject their resources into the firms due to the fear of losing. However, from 2018 onward, the ROA has been increasing. This could have been attributed to the peace stability that the country is encountering.

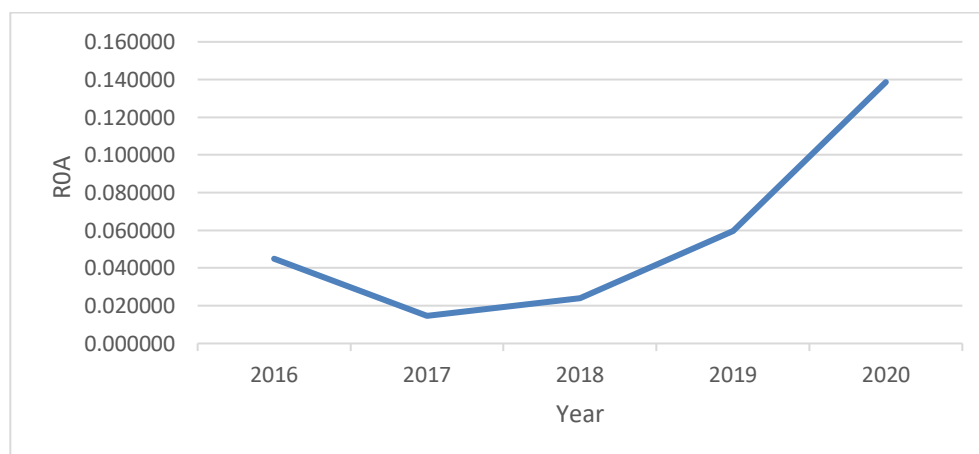


Figure 2: Trend Analysis of ROA

4.4 Correlation Analysis

The correlation results show the movement/association of the variables. The positive correlation indicates variables move in the same direction, while the negative correlation implies the association among the variables moves in the opposite direction. There is no association when the correlation is zero. The study results of the correlation analysis in Table 5 indicate that a positive and significant association exists between commitment and performance of large manufacturing firms ($r=.300$, $p=.000$). Also, a positive and significant association exists between staff participation in the CER process and performance of large manufacturing firms ($r=.391$, $p=.000$). Further, attendance CER & implementation forums is positively and significantly associated with the performance of large manufacturing firms ($r=.356$, $p=.000$).

Table 5: Correlation Matrix

Variables		Performance	Commitment	Staff participation in CER process	Attendance CER & implementation forums
Performance	Pearson				
	Correlation	1.000			
	Sig. (2-tailed)				
Commitment	Pearson				
	Correlation	.300**	1.000		
	Sig. (2-tailed)	0.000			
Staff participation in CER process	Pearson				
	Correlation	.391**	.384**	1.000	
	Sig. (2-tailed)	0.000	0.000		
Attendance CER & implementation forums	Pearson				
	Correlation	.356**	.378**	.449**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	

4.5 Hypotheses Testing

The first hypothesis tested was;

H₀₁: Commitment has no significant influence on performance of large manufacturing firms in Kenya

The testing of the hypothesis was based on the regression results. Under the regression analysis, the model fitness, analysis of variance (ANOVA) and regression coefficient was presented. The results presented in Table 6 indicate that commitment is an adequate variable in explaining the performance of large manufacturing firms in Kenya This is supported by the R square of 9%. This implies that commitment can explain 9% of the variations in the performance of large manufacturing firms in Kenya

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Table 6: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.300a	0.090	0.087	0.512773

The results in Table 7 indicate that the overall model is statistically significant. The results signify that commitment is a good predictor of the performance of large manufacturing firms in Kenya This is supported by an F statistic of 30.958 and the reported p-value (0.000), which is less than the conventional probability of 0.05 significance level.

Table 7: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.14	1	8.14	30.958	.000b
	Residual	82.299	313	0.263		
	Total	90.439	314			

The regression of coefficients results in Table 8 shows that commitment and performance of large manufacturing firms in Kenya are positively and significantly related ($\beta=0.449$, $p=0.000$). This signifies that an increase in the commitment by one unit increases performance by 0.449 units, holding other factors constant. Thus, since the p value is less than 0.05, the null hypothesis is rejected. Hence, commitment has a significant influence on performance of large manufacturing firms in Kenya Based on the study results, the regression model specification was;

$$Y = 2.228 + 0.449X$$

Where:

Y = Performance of large manufacturing firms in Kenya

X = Commitment

Table 8: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.228	0.329		6.783	0.000
Commitment	0.449	0.081	0.300	5.564	0.000

a Dependent Variable: Performance

The second hypothesis tested was;

H₀₂: Staff participation in CER process has no significant influence on performance of large manufacturing firms in Kenya

The testing of the hypothesis was based on the regression results. Under the regression analysis, the model fitness, analysis of variance (ANOVA) and regression coefficient was presented. The results presented in Table 9 indicate that Staff participation in CER process is an adequate variable in explaining the performance of large manufacturing firms in Kenya This is supported by the R square of 15.3%.

Table 9: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.391a	0.153	0.150	0.494746

The results in Table 10 demonstrate that the overall model is statistically significant. The results indicate that staff participation in the CER process is a good predictor of the performance of large manufacturing firms in Kenya This is supported by an F statistic of 56.48 and the reported p-value (0.000), which is less than the conventional probability of 0.05 significance level.

Table 10: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.825	1	13.825	56.48	.000b
	Residual	76.614	313	0.245		
	Total	90.439	314			

The regression of coefficients results in Table 11 shows that staff participation in the CER process and the performance of large manufacturing firms in Kenya are positively and significantly related ($\beta=0.622$, $p=0.000$). This denotes that an increase in staff participation in the CER process by one unit increases performance by 0.622 units, holding other factors constant. Hence, since the p-value is less than 0.05, the null hypothesis is rejected. Therefore, staff participation in the CER process has a significant influence on the performance of large manufacturing firms in Kenya Based on the study results, the regression model specification was;

$$Y = 1.504 + 0.622X$$

Where:

Y = Performance of large manufacturing firms in Kenya

X = Staff participation in the CER process

Table 11: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.504	0.340		4.426	0.000
Commitment	0.622	0.083	0.391	7.515	0.000

a Dependent Variable: Performance

The third hypothesis tested was;

H₀₃: Attendance in CER & implementation forums has no significant influence on performance of large manufacturing firms in Kenya

The testing of the hypothesis was based on the regression results. Under the regression analysis, the model fitness, analysis of variance (ANOVA) and regression coefficient was presented. The results presented in Table 12 indicate that attendance in CER & implementation forums is an adequate variable in explaining the performance of large manufacturing firms in Kenya This is supported by the R square of 12.7%. This indicates that 12.7% of the variations in the performance of large manufacturing firms in Kenya can be explained by Attendance in CER & implementation forums.

Table 12: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356a	0.127	0.124	0.502291

The results in Table 13 demonstrate that the overall model is statistically significant. The results indicate that attendance in CER & implementation forums is a good predictor of the performance of large manufacturing firms in Kenya This is supported by an F statistic of 45.464 and the reported p-value (0.000), which is less than the conventional probability of 0.05 significance level.

Table 13: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.47	1	11.47	45.464	.000b
	Residual	78.969	313	0.252		
	Total	90.439	314			

The regression of coefficients results in Table 14 shows that attendance in CER & implementation forums and the performance of large manufacturing firms in Kenya are positively and significantly related ($\beta=0.522$, $p=0.000$). This denotes that an increase in attendance in CER & implementation forums by one unit increases performance by 0.522 units, holding other factors constant. Therefore, since the p-value is less than 0.05, the null hypothesis is rejected. Hence, Attendance in CER & implementation forums has a significant influence on the performance of large manufacturing firms in Kenya Based on the study results, the regression model specification was;

$$Y = 1.923 + 0.522X$$

Where: Y = Performance of large manufacturing firms in Kenya; X = Attendance in CER & implementation forums

Table 14: Regression Coefficients

	Unstandardize d Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.923	0.317		6.073	0.000
Commitment	0.522	0.077	0.356	6.743	0.000

a Dependent Variable: Performance

4.6 Multiple Regression Analysis

The regression analysis presented the relationship between the variables. Under the regression analysis, the model fitness, analysis of variance (ANOVA) and regression coefficients were presented. The results presented in Table 15 indicate that commitment, staff participation in the CER process and attendance at CER & implementation forums are adequate variables in explaining the performance of large manufacturing firms in Kenya This is supported by the coefficient of determination also known as the R square, of 20.7%. This means that commitment, staff participation in the CER process and attendance at CER & implementation forums explain 20.7% of the variations in the performance of large manufacturing firms in Kenya

Table 15: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.455a	0.207	0.199	0.48018

The results in Table 16 indicate that the overall model is statistically significant. The results signify that commitment, staff participation in the CER process and attendance at CER & implementation forums are good predictors of the performance of large manufacturing firms in Kenya This is supported by an F statistic of 27.079 and the reported p-value (0.000), which is less than the conventional probability of 0.05 significance level.

Table 16: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.731	3	6.244	27.079	.000b
	Residual	71.708	311	0.231		
	Total	90.439	314			

The regression of coefficients results in Table 17 shows that commitment and performance of large manufacturing firms in Kenya are positively and significantly related ($\beta=0.194$, $p=0.023$). This signifies that an increase in the commitment by one

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unit increases performance by 0.194 units, holding other factors constant. Equally, staff participation in the CER process and the performance of large manufacturing firms in Kenya are positively and significantly related ($\beta=0.406$, $p=0.000$). This means that an improvement in staff participation in the CER process by one unit increases the performance of large manufacturing firms in Kenya by 0.406 units while other factors are held constant. Similarly, Attendance at CER & implementation forums are positively and significantly related to the performance of large manufacturing firms in Kenya ($\beta =0.282$, $p=0.001$). This indicates that an increase in Attendance CER & implementation forums by one unit would lead to an increase in the performance of large manufacturing firms in Kenya by 0.282 when other factors are held constant. Based on the study results, the regression model specification was;

$$Y = 0.454 + 0.194X_1 + 0.406X_2 + 0.282X_3$$

Where:

Y = Performance of large manufacturing firms in Kenya

X₁ = Commitment

X₂ = Staff participation in CER process

X₃ = Attendance CER & implementation forums

Table 17: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.454	0.404		1.124	0.262
Commitment	0.194	0.085	0.129	2.291	0.023
Staff participation in CER process	0.406	0.093	0.255	4.356	0.000
Attendance CER & implementation forums	0.282	0.085	0.193	3.305	0.001

a Dependent Variable: Performance

5.1 CONCLUSION

It is concluded that commitment, staff participation in the CER process and attendance at CER & implementation forums explain 20.7% of the variations in the performance of large manufacturing firms in Kenya. The commitment and performance of large manufacturing firms in Kenya are positively and significantly related. In addition, staff participation in the CER process and the performance of large manufacturing firms in Kenya are positively and significantly related. Similarly, attendance at CER & implementation forums are positively and significantly related to the performance of large manufacturing firms in Kenya. The commitment incorporate innovation, reduce waste of resources and supporting the government's adaptation strategies. It is also concluded that staff participation in CER process can be founded on the allocation of resources, environmental scanning and environmental strategy experts. Attendance in CER &

implementation forums can be based on top management commitment/support, having an implementation team and facilitation of team collaboration.

6.1 RECOMMENDATIONS

It is recommended that large manufacturing firms in Kenya should support environmental innovation such as collaborating and networking to enhance performance. The firms need to be keen on reducing the waste of resources. The firms should be involved in supporting the government's adaptation strategies. It is recommended that the firms need to allocate resources to fund corporate environmental responsibilities. The firms regularly participate in environmental scanning to stimulate the overall organization's performance. In addition, the firms need to establish environmental strategy experts to advise the management. The top management in the firms needs to be highly committed to supporting the initiatives that safeguard the environment. The firms need to create an implementation team focused on ensuring environmental protection. Organizations need to champion team collaboration in corporate environment responsibilities/initiatives. It was found that staff participation in the CER process has the highest coefficient of determination and thus needs to be highly put in place within the firms. The study suggests further research to be carried out on the other corporate environmental responsibility and how they influence the performance of large manufacturing firms. Since this study focused on large manufacturing firms in Kenya, there is a need to replicate the same in other industries in the private sector and also in public institutions. Finally, the researcher further recommends future studies to adopt other research designs (e.g., experimental, causal, or descriptive research designs) in studying issues of corporate environmental responsibility and firm performance.

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