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Influence of Structural Decisions Strategy on Organizational Performance of Cement Manufacturing Firms in Kenya

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Abstract

Purpose: The study examined the influence of structural decisions strategy on organizational performance of cement manufacturing firms in Kenya.

Methodology: This research employed the positivism philosophy and concurrent triangulation research design. The research was conducted in the Kenyan cement industry. The eight cement production companies made up the target population of the research and are located in the counties of Kisumu, Nairobi, Mombasa, Machakos, Nakuru, and Kajiado were the subject of the study. Whereas, the units of observation of the research comprised of all employees in the 7 cement firms. The research, further, used the census method and the stratified random sampling technique to select a sample size of 365 employees included 37 managers, 322 non-managers and 6 CEOs distributed per company. The study data was then gathered using a questionnaire and interview schedule for main data collection and a secondary data collection sheet for secondary data collection.

Findings: The findings of the research revealed that structural decision strategy is one of the operational strategies that is employed by the cement manufacturing firms to influence their organizational performance. This was according to the high level of agreement by most of the respondents noted in the descriptive results. The study also found that structural decision strategies had a positive and significant relationship with organizational performance of cement manufacturing firms in Kenya. The regression results also led to the rejection of the null hypothesis, thus adopting the alternative hypothesis; structural decision strategy has a significant influence on organizational performance of cement manufacturing firms in Kenya.

Unique Contribution to Theory, Practice and Policy: The theories were relevant to this study as they emphasized on the need to identify both the dysfunctions and functional effects of particular structural arrangements on organizational performance of cement firms. Thus, the theories will also be applicable to other studies with such related research topics. The management of cement firms should effectively take part in the decentralization of management structures and specialization of departments in order to improve managerial efficiency and employee performance. Policymakers should establish operating policies and procedures that are supportive of the firms' set objectives and goals.

Keywords: *Structural Decision Strategy, Organizational Performance, Cement Manufacturing Firms*

INTRODUCTION

The cement and construction industry have continued to play a pivotal role in the recent trend of rising urbanization across the globe. The world consumes over 4 billion tons of cement annually. The cement sector has a large economic impact due to its long and diverse supply chain and it contributes 5.4 percent of global gross domestic product (GDP) and 7.7 % of world employment (CemNet, 2020). Different countries have varying production capacities. For instance, India is the second biggest manufacturer of cement with a manufacturing capacity of over 300 million metric tons per year according to the International Cement Review (2018). The main consumer of cement in India is the construction industry; real estate building being the largest customer of cement followed by infrastructure as well as the commercial real-estate construction. Other leading producers of cement in the world include Vietnam, United States of America and Iran. Despite its popularity and profitability, the global cement industry faces many challenges due to environmental concerns and sustainability issues (Shraddha and Siddiqui, 2014).

The cement capacity in Africa has significantly increased from 262.0 Mt/a in 2014 to 386.1 Mt/a in 2020 which is an increase of 124.1 Mt/a. Accordingly, the cement capacity utilization in Africa has decreased from 70.0% in 2014 to 55.1% in 2020, but is projected to increase in the next few years. The demand for cement and other building materials in Africa, particularly south of the Sahara, continued mostly to develop positively in 2020 despite the Covid-19 pandemic. According to the KNBS economic survey (2022), Kenya's cement output and usage have both been on the rise in the recent years due to a surge in governments heavy infrastructural investments involving use of cement like roads, bridges, dams, among others. Cement production increased from 5.97 Mt/a in 2019 to 6.55 Mt/a in 2020. The PCC stands at 147 kg. A cement capacity of 11.3 Mt/a results in a capacity utilization rate of 58.0%, which is above the African average. The construction sector in Kenya recorded stellar performance, registering a growth of 11.8% in 2020 compared to 5.6% in 2019. Cement consumption registered a year on year growth of 20.3%, presenting quick win opportunities.

Structural Decisions Strategies

Structural decisions are the efforts that shape the building blocks of operations in any production company and this defines a production company's total physical structure and layout (Slack and Lewis, 2011). Structural decisions are related to tangible features of firms' amenities, equipment's and employees are prepared in procedures and inter connected relations within a manufacturing firm. It also involves large amounts of capital investment decisions and once the investment is made, it becomes the basis upon which the directions of operations and interactions within a firm are made. This has a long-term impact on the capabilities and resources of the cement production company, which also has an effect on how successful the company will be in the future. According to Barney (2012), these pricey strategic choices should only be taken into account once for the benefit of cement producing companies. Correspondingly, Barnes (2012) came to the conclusion that structural designs inflate a company's manufacturing costs while the fit between structural designs, capabilities, and market demands affects quality. The cement producing companies should therefore possess a protective capability so as to deal with disturbances in deliveries, and employ flexibility as the demands stabilizes.

Organizational Performance

Organizational performance is defined as a mix of financial and non-financial measurements that demonstrate the extent to which company's objectives and results have been attained (Alaaraj et al., 2018). Due to a corporation's numerous goals, measuring business performance is often a difficult task. However, profit maximization is still one of the fundamental goals of a business, despite the fact that the discussion surrounding this topic has not yet yielded any definitive answers. Financial metrics from annual reports of companies have been predominantly used in past studies on growth strategies as a measure of performance (Klarner and Raisch, 2013; Aik et al., 2015; Kuriakose and Paul, 2016). Examples of these measures include return on assets, operational income, net asset value, among others (Low & Siesfeld, 1998; Ozkan et al, 2017; Zhao & Murrell, 2016). This indicates, in a holistic way, that financial performance aims to accomplish two goals: profitability and financial soundness (if any) (Zhao & Murrell, 2016).

According to Javier (2002), an organization's performance is also comparable to the well-known 3Es (economy, efficiency, and effectiveness) of a particular program or activity. As a result, an organization's performance level is dictated by its capacity to make prudent use of the finances and other resources available while paying proper attention to efficiency, effectiveness, and economy (Spekle & Verbeeten, 2014; Verbeeten, 2008). Value for money (VFM) is a goal that assists an organization in operating effectively and efficiently. Additionally, it is essential for creating consumer contentment as well as building successful and long-lasting businesses. So, it is believed that the three E's have a substantial influence on organizational success in any manufacturing business. Notably, when an organization is effective, efficient, and economical, success is evident. As a result, combining all three factors is necessary for success because doing so reveals an entity's performance level.

Statement of the Problem

The cement market growth in Kenya has increased significantly and this expansion can be attributed to the government's increased infrastructure spending, particularly in the segments related to roads and dams, and recovery in construction activities in the individual house builders segment (Bamburi Cement Annual Report, 2021). An analysis by Kiilu (2018) indicates that Kenya's cement consumption has continuously experienced a compound growth rate of 13.4% between 2010 and 2015. Despite the strong growth prospects, Kenya still has low cement per capita consumption averaging at 147Kgs compared to the global average of about 510Kgs (GCM, 2021). Hence the opportunities within the industry are still immense. In addition, the cement sector has a number of obstacles, such as high electricity costs brought about by high tariffs and insufficient power supplies, expensive imported coal, and limited clinker and cement production capacity (Nyawira, 2010). For instance, Anyanzwa (2021) study states that Kenya's cement industry is currently dealing with a clinker shortage of roughly 3.3 million tons, with Egypt supplying for 59 percent of the country's deficit, duty free. Notably, with cement plants working at 65 percent of their installed capacity, there was a supply of 3.8 million tons of domestically manufactured clinker, the raw material used to make cement, in the financial year 2020 compared to a demand of 5.3 million tons.

Moreover, given the cut throat competition in the sector and the accessibility to cheap imports, resulting to thin margins, cement firms in Kenya may not resort to increase price of the commodity to match the general inflation level in the country which stood at 7.1 per cent in

May 2022. On the other hand, Porter (1985) outlined that managers should develop strategies at different levels after analyzing the market and the external environment in order to have competitive advantage. In response to this, manufacturing firms have adopted different operations strategies at all levels in order to remain in business**.** The cement manufacturing firms in Kenya have turned to applying operations strategies, such as structural decisions strategy with the goal of achieving efficient and effective production and distribution processes in order to close the current consumption gap and maintain profitability.

This research sought to determine how structural decisions strategy influence the organizational performance of Kenyan cement manufacturing enterprises from an efficiency and effectiveness standpoint.

Objectives of the Study

The study examined the influence of structural decisions strategy on organizational performance of cement manufacturing firms in Kenya.

Theoretical Framework

Strategic Contingency Theory

The proponents of this theory were Hickson, Hinings, Lee, Schneck and Pennings in 1971. According to the contingency theory, there is no "optimal" structure for organizations because each one's internal dynamics and external environmental circumstances are unique (Truong, Nguyen & Duong, 2020). Consequently, there is no single industrial process management strategy that works best in every situation. Using a set of operational judgments, a unit contingent is able to achieve a pinnacle performance when this theory is well practiced, claims Vastag (2009). This has an impact on the structural and infrastructure-related decisions made regarding plant layout and plant operations. Accordingly, applying theory the helps the cement manufacturing company adopt and maintain a variety of strategies, ultimately maximizing its production performance (Helkiö, 2008). Bearing in mind that not all production strategies are equally successful when being executed in various circumstances suggests that some businesses use strategies that are more appropriate than others. Decision-makers in businesses should make logical choices that are molded to deal with the challenges and uncertainties of their situation in order to improve performance (Zeithaml, 2012).

The differences in technical and ecological dimensions for different firms lead to difference in structures, policies and decisions. Decision-makers in businesses should make logical choices that are molded to deal with the challenges and uncertainties of their environment in order to improve performance (Zeithaml, 2012). The strategic contingency theory in manufacturing management is based on the assumption that strategic manufacturing decisions if well done can have an influence production process of cement manufacturing firms. Crawford (2010) opines stated that there is necessity to regulate the contingencies that are needed by sub-units within the business. There is need for the organization to have a fit amongst contingency and organizations' which leads to greater performance and is key in contingency theory (Helkiö, 2008). According to Vastag (2009), the theory, when used correctly, enables a unit to perform to its maximum potential in accordance with a set of operational choices that essentially come down to infrastructure-related aspects of plant operations. Thus, by applying the theory, cement manufacturing companies will be able to adopt and maintain a variety of strategies, ultimately improving their manufacturing performance (Helkiö, 2008).

Institutional Theory

Institutional theory proponents are Meyer, Rowan, Dimaggio and Powell (1935). It is concerned with the institutional structures within the manufacturing firm setups. The institutional theory takes into account the establishment of frameworks, such as structural outlines, procedures, conventions, and protocols as attested standards for social conduct (Wandiga, James & Rosemary, 2017). Furthermore, the advocates of this theory contend that institutional theory develops the envisioned networks via which the components of organizational structure exert their influence. Ketema (2015) is of the argument that meanwhile organizations provide rules and procedures of games that govern the structures and organizations' interactions inside decision sections of manufacturing process. Particularly in contemporary organizational administration, the role that the existing environment plays is becoming increasingly important. Cai, Jun and Yang (2010), concur that institutional theory should deliberate on monetary, societal, cultural and administrative forces inside manufacturing sections as important operations ecological constituents that affect companies' resolutions and practices.

The cement manufacturing setting in Kenya is extremely volatile and unpredictable. In this regard, (Brown and Squire, 2016; Dung, 2012) claim that resource-based and institutionally established perspectives can be used to anticipate a company's strategy. The establishment of organizations' structures as authoritative norms for group conduct is the subject of institutional theory (Kraft and Furlong, 2007). The actuality of boundaries and the internal structure of an organization are made clearer by institutional theory, according to Cai et al. (2010). It is important to consider institutional elements in a manufacturing setting alongside other resources; this is because there is an existence of numerous forces that exert pressures on the firm. Arising from the already mentioned divergent opinions, the present study proposes that structural components of manufacturing systems ought to be integrated. Notwithstanding the aforementioned conflicting opinions, the current study suggested that for a manufacturing system to function as a whole, its structural components should be integrated. By identifying both the dysfunctions and functional effects of particular structural arrangements within a given cement manufacturing firm, the study used institutional theory to evaluate the degree to which internal forces affect manufacturing performance or subsequently contribute to the development and improvement of critical capabilities.

Empirical Review

Ketema (2015) examined the drivers of manufacturing performance in Ethiopian SME's companies. The data gathering was at plant level and engaged one hundred and ninety-seven firms and made more emphasis on mixed methodology approach alongside cross – sectional design and the data gathered was qualitatively examined. Structural equation modeling was then utilized to explore the hypothetical relationship. The main finding of the study is that competitive priorities, structural decisions, and infrastructure decisions all had a significant impact on operations performance. The study also found that when a company tries to meet quality and delivery targets, structural and infrastructural decisions together have a substantial impact on manufacturing performance.

Moreover, Odollo (2019) came to the conclusion that structural choices have little to no impact on the performance of a firm. Sciuto and Filho (2013) conducted research on the connection between a metallurgical company's operating strategy and its lean manufacturing systems using

a single case study from a metallurgical firm. Direct observation of production managers and semi-structured interviews were used to gather primary data, while extensive document examination was used to provide secondary data. The study discovered that the development of lean manufacturing systems was significantly and positively impacted by infrastructure elements. With the aim of boosting productivity, broadening the use of strong performance indicators, and enhancing interface with suppliers, these systems made extensive process modifications, largely administrative in nature. The long-term viability and success of a particular firm in its operating environment will ultimately depend on the strategy the firm employs. The structural choices and operational activities of the cement company therefore directly affect how well the firm will operate in its environment.

On the other hand, cement manufacturing firms need to come up with decisions amid high volumes of standardized products and lower volumes of distinguished products. Gong (2013) study came up with a product – process matrix which can be used to examine marketplace manufacturing similarity hitches and to assist in manufacturing processes choices. The matrix connects the elements of the process structures, which identify the alternatives for the processes and the stages of the product life cycles that are appropriate to meet the demand. Gongs' explanation shows that the matrix can also help cement manufacturing companies gain a competitive edge. The current research seeks to analyse influence of structural decisions strategy on performance of cement manufacturing firms in Kenya from this perspective.

METHODOLOGY

This research employed the positivism philosophy because it permits the use of both qualitative and quantitative data collection methods which were anticipated to be necessary in order to achieve the stated study objectives (Creswell, 2018). Additionally, the use of positivism philosophy enabled situational data to be gathered from their natural environments with the aim of evaluating the causal relationship between structural decision strategy and the performance of Kenyan cement producing enterprises. The concurrent triangulation research design was also used as it also permits the research to make use of quantitative and qualitative techniques concurrently Creswell (2016). The research was conducted in the Kenyan cement industry. The eight cement production companies made up the target population of the research and are located in the counties of Kisumu, Nairobi, Mombasa, Machakos, Nakuru, and Kajiado were the subject of the study. Whereas, the units of observation of the research comprised of all employees in the 7 cement firms. The research, further, used the census method and the stratified random sampling technique to select a sample size of 365 employees included 37 managers, 322 non-managers and 6 CEOs distributed per company. The study data was then gathered using a questionnaire and interview schedule for main data collection and a secondary data collection sheet for secondary data collection.

RESULTS AND DISCUSSION

Response Rate

The questionnaires were distributed to a total of 359 respondents which was the targeted sample for managers and non-managers in this study. Out of the 359 questionnaires, 258 questionnaires were properly filled, returned and found suitable for analysis, while 101 questionnaires were not returned. This represented a response rate of 71.87% of the questionnaires used for analysis and 28.13% of questionnaires that were not returned. These findings were also in agreement with those of the study by Ali, Ogolla and Nzioki (2022) which

revealed that a total of 111 questionnaires out of 137 were successfully filled. This represented a response rate of 81%.

Table 1: Response Rate

Response Rate	Frequency	Percent
Returned Questionnaires	258	71.87
Unreturned Questionnaires	101	28.13
Total	**359**	**100**

Source: Researcher (2023)

Descriptive Statistics for Structural Decision Strategy

The objective of the study was to assess the influence of structural decision strategy on organizational performance of' cement manufacturing firms in Kenya. Respondents were asked to indicate their level of agreement with the following statement in regard to structural decision strategy. The findings were presented in table 2.

Table 2: Structural Decision Strategy

Variables	Strongly disagree	Disagree	Moderately agree	Agree	Strongly agree	Mean	Std Dev
Our firm's capacity in terms of production is sufficiently utilized.	5.81%	10.08%	15.12%	40.70%	28.29%	3.76	1.14
The scale of production in our firm meets our customer demands.	5.81%	12.02%	14.34%	33.72%	34.11%	3.78	1.2
There is enough storage capacity of our firm products which is able to store all the products.	4.65%	12.40%	12.40%	39.15%	31.40%	3.8	1.15
There is a lot of repeated works in the production process leading to familiarity of the process.	7.75%	12.02%	16.67%	36.82%	26.74%	3.63	1.22
Our cement firms have real time information to offer right information for the production process.	4.55%	11.34%	16.57%	34.98%	32.56%	3.79	1.15
The capacity of production technology currently in use is adequate.	6.98%	11.02%	18.05%	31.78%	32.17%	3.7	1.23
There is decentralization of decision-making structure in our cement firm.	6.59%	12.40%	15.89%	33.72%	31.40%	3.71	1.22
The production operation is sub- divided into zones of specializations.	9.30%	13.57%	18.22%	31.78%	27.13%	3.54	1.28
There are strict rules and procedures that guides the production processes.	6.59%	15.12%	14.34%	37.60%	26.36%	3.62	1.21
The management permits comparison of the best practices of operations with those of competitors.	7.36%	13.57%	16.67%	33.72%	28.68%	3.63	1.24
Communication of Key Performance Indicators to affected parties is always done for real-time action.	9.30%	11.24%	16.67%	34.11%	28.68%	3.62	1.26
The production process is constantly making minor system upgrades.	8.91%	9.30%	18.60%	36.43%	26.74%	3.63	1.22
Overall Mean						**3.68**	**1.21**

The findings from table 2 revealed that 5.81% of the respondents strongly disagreed and 10.08% disagreed with the statement that the firm's capacity in terms of production is sufficiently utilized. On the other hand, 15.12% moderately agreed, 40.7% agreed and 28.29% strongly agreed with the statement. The mean of 3.76 implied that majority of the respondents (84.11%) agreed with the first statement on structural decision strategy and their opinions were varied as shown by the standard deviation of 1.25.

The results also showed that 5.81% of the respondents strongly disagreed and 12.02% disagreed with the statement that the scale of production in the firm meets the customer demands. 14.34% moderately agreed, 33.72% agreed and 34.11% strongly agreed with the statement. The mean of the responses was 3.78 which meant that the most of the respondents (82.17%) agreed with the second statement and their responses were moderately varied as shown by the S.D of 1.2.

The results also indicated that 4.65% of the respondents strongly disagreed and 12.40% disagreed with the statement that there is enough storage capacity of our firm products which is able to store all the products. Whereas, 12.40% of the respondents moderately agreed, 39.15% agreed and 31.40% strongly agreed with the statement. The mean of the responses was 3.8 showing that most of the respondents (82.95%) agreed with the third statement and their responses were varied as shown by the S.D of 1.15.

Furthermore, the findings of the study indicated that 7.75% of the respondents strongly disagreed and 12.02% disagreed with the statement that there is a lot of repeated works in the production process leading to familiarity of the process. In addition, 16.67% moderately agreed, 36.82% agreed and 26.74% strongly agreed with the statement. The mean of 3.63 also revealed that majority of the respondents (80.23%) agreed with the fourth statement and their opinions were significantly varied as shown by the standard deviation of 1.22.

These findings also showed that 4.55% of the respondents strongly disagreed and 11.34% disagreed with the statement that the cement firms have real time information to offer right information for the production process. 16.57% moderately agreed, 34.98% agreed and 32.56% strongly agreed with the statement. The mean of 3.79 implied that the highest percentage of the respondents (84.11%) agreed with the fifth statement and their responses were moderately varied by the standard deviation of 1.15.

The results also indicated that 6.98% of the respondents strongly disagreed and 11.02% disagreed with the statement that the capacity of production technology currently in use is adequate. While 18.05% moderately agreed, 31.78% agreed and 32.17% strongly agreed with the statement. As observed, it can be noted that majority of the respondents (82%) agreed with the sixth statement and this is also supported by the mean of 3.7. The S.D of 1.23 also indicated that their responses were varied.

Moreover, the results found that 6.59% of the respondents strongly disagreed and 12.40% disagreed with the statement that there is decentralization of decision-making structure in our cement firm. 15.89% moderately agreed, 33.72% agreed and 31.40% strongly agreed with the statement. The mean of 3.71 indicated that most of the respondents (81.01%) agreed with the seventh statement and their responses were varied as shown by the S.D of 1.22.

The results also showed that 9.30% of the respondents strongly disagreed and 13.57% disagreed with the statement that the production operation is sub- divided into zones of specializations. In addition,18.22% moderately agreed, 31.78% agreed and 27.13% strongly agreed with the statement. The mean of the responses was 3.54 implying that the highest percentage of the respondents (77.13%) agreed with the eighth statement and their opinions were varied as shown by the S.D of 1.28.

The findings also noted that 6.59% of the respondents strongly disagreed and 15.12% disagreed with the statement that there is efficient handling of customers' feedback and

complaints. 14.34% moderately agreed, 37.60% agreed and 26.36% strongly agreed with the statement. As observed, it can be noted that majority of the respondents (78.3%) agreed with the ninth statement and this is also supported by the mean of 3.62. The standard deviation of 1.21 also showed that their opinions were significantly different.

Additionally, it was also observed that 7.36% of the respondents strongly disagreed and 13.57% disagreed with the statement that there are strict rules and procedures that guides the production processes. 16.67% moderately agreed, 33.72% agreed and 28.68% strongly agreed with the statement. The mean of the responses was 3.63 which meant that most of the respondents (82.17%) agreed with the tenth statement and the responses were differentiated as shown by the standard deviation of 1.24.

The findings also revealed that 9.30% of the respondents strongly disagreed and 11.24% disagreed with the statement that the firm is able to quickly respond to new market demands. 16.67% moderately agreed, 34.11% agreed and 28.68% strongly agreed with the statement. The mean of 3.62 showed that the highest percentage of the respondents (79.46%) agreed with the eleventh statement and their opinions were varied as indicated by the standard deviation of 1.26.

The results also found that 8.91% of the respondents strongly disagreed and 9.30% disagreed with the statement that resources are deployed in response to changes in technology. 18.60% moderately agreed, 36.43% agreed and 26.74% strongly agreed with the statement. The mean of 3.63 implied that majority of the respondents (81.77%) agreed with the twelfth statement and the responses were varied as shown by the standard deviation of 1.22.

Additionally, the respondents were also asked to indicate the extent to which their firm have made improvements in particular areas regarding structural decision strategy. They were also requested to use the scale of; **1= 1-3%, 2= 4-6%, 3= 7-9%, 4= 10-12%, 5= Over 12%** to show their level of agreed with the statements.

Table 3: Structural Decision Strategy

Variables	1-3%	4-6%	7-9%	10-12%	Over 12%	Mean	Std Dev
Firm Capacity improvement	17.44%	14.44%	17.34%	24.42%	26.36%	3.25	1.46
Firm processes improvement	15.12%	15.12%	19.38%	29.84%	20.54%	3.26	1.35
Structure of operations improvement	14.05%	16.67%	18.12%	28.58%	22.58%	3.26	1.44
Operations and Development improvement	15.50%	14.73%	18.99%	23.26%	27.52%	3.33	1.42
Overall Mean						**3.28**	**1.42**

Source: Researcher (2023)

The findings from table 3 disclosed that 17.44% of the respondents indicated that improvement in their firm capacity was between 1-3%, 14.44% had an improvement in firm capacity of between 4-6%, 17.34% had an improvement in firm capacity of between 7-9%, 24.42% had an improvement in firm capacity of between 10-12% and 26.36% had an improvement in firm capacity of over 12%. The mean of the responses was 3.25 implying that most of the respondents' firms (68.12%) have experienced high levels of improvement

in terms of firm capacity and their opinions were different as shown by the standard deviation of 1.46.

The results also found that 15.12% of the respondents indicated that improvement in their firm processes was between 1-3%, 15.12% had an improvement in firm processes of between 4-6%, 19.38% had an improvement in firm processes of between 7-9%, 29.84% had an improvement in firm processes of between 10-12% and 20.54% had an improvement in firm processes of over 12%. The mean of the responses was 3.26 which meant that majority of the respondents' firms (69.76%) have experienced high levels of improvement in terms of firm processes and their responses were varied as shown by the standard deviation of 1.35.

The findings also showed that 14.05% of the respondents noted that improvement in their firms' structure of operations was between 1-3%, 16.67% had an improvement of between 4-6%, 18.12% had an improvement of between 7-9%, 28.58% had an improvement of between 10-12% and 22.58% had an improvement of over 12%. The mean of 3.26 also revealed that most of the respondents' firms (69.28%) have experienced high levels of improvement in their structure of operations and their responses were varied as shown by the S.D of 1.44.

In addition, it was also observed that 15.50% of the respondents indicated that improvement in their firms' operations and development was between 1-3%, 14.73% had an improvement of between 4-6%, 18.99% benefited from an improvement of between 7-9%, 23.26% had an improvement of between 10-12% and 27.52% had an improvement of over 12%. The mean of the responses was 3.33 implying that majority of the respondents' firms (69.77%) have experienced high levels of improvement in terms of firm capacity and their opinions were different as shown by the standard deviation of 1.42.

Further, the CEOs who participated in the interview guide were also asked to give their opinions regarding structural decision strategy. Their responses were as follows;

> *"The use of better communication channels and increased scale of production have enabled the firm to the increasing demand of its customers."* (Respondent 1)
>
> *"Improvement of system upgrades to increase efficiency in repeated works and improving quality products has increased employee and organizational performance." (Respondent 2)*
>
> *"The firm has invested in improved communication channels and marketing channels and this has improved their customer service delivery and profits."* (Respondent 3)
>
> *"The initiative by the management of the firm to engage their employees more in decision- making and increasing job specialization in the different departments of the firm has promoted production efficiency and better decision-making."* (Respondent 4)

These findings were also in agreement with those of Ketema (2015) who noted that the finding of the present study is that structural decisions strategy had a significant impact on operational performance. The study also found that when a company tries to meet quality and delivery targets, structural and infrastructural decisions together have a substantial impact on manufacturing performance.

Regression Results of Structural Decision Strategy and Organizational Performance

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.737a	0.542	0.541	0.210555

a Predictors: (Constant), Av_ structural decision strategy

Source: Researcher (2023)

The findings from the model summary showed that structural decision strategy explains 54.2% of the variations in organizational performance. This was according to the R-square of 0.541. This also meant that structural decision strategy was a suitable variable in explaining organizational performance of cement manufacturing firms in Kenya. In addition, the model applied to show the relationship between structural decision strategy and organizational performance was sufficient.

Table 5: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.456	1	13.456	303.51	.000
	Residual	11.349	256	0.044		
	Total	**24.805**	**257**			

Source: Researcher (2023)

The results of the ANOVA indicated that the overall model of regression was statistically significant and structural decision strategy was a good predictor of organizational performance. This was according to the calculated F statistic of 303.51 and the reported p-value of (0.000) which was less than 0.05 significance level.

Table 6: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.172	0.039		81.569	0
	Av_ structural decision strategy	0.170	0.010	0.737	17.027	0

a Dependent Variable: Av_organizational performance

Source: Researcher (2023)

The results of the regression coefficients revealed that structural decision strategy had a positive and significant influence on organizational performance (β=0.170, p=0.000). This implied that a unit increase in structural decision strategy leads to a corresponding increase in organizational performance by 0.169 units. According to the results from the ANOVA and regression coefficient table where the F-statistic 303.51 was greater than the f-critical of 3.878 and the t-calculated 17.027 which was greater than t-critical (1.96), the null hypothesis **H_{02}**: Structural decision strategies have no significant influence on the organizational performance

of cement manufacturing firms in Kenya was rejected, and the study accepted the alternative hypothesis; **H_{A2}**: structural decision strategies have a significant influence on the organizational performance of cement manufacturing firms in Kenya.

These results also concurred with those of Sciuto and Filho (2013) which revealed that infrastructural components had a substantial and positive impact on the implementation of lean manufacturing systems. However, Odollo (2019) disagreement with these findings since it concluded that structural choices have little to no impact on the performance of a firm.

Conclusion

The research concluded that structural decision strategy is an operational strategy that is also employed by the cement manufacturing firms to influence their organizational performance. This was according to the high level of agreement by most of the respondents noted in the descriptive results. The study also concluded that structural decision strategies had a positive and significant relationship with organizational performance of cement manufacturing firms in Kenya. The regression results also led to the rejection of the null hypothesis, thus adopting the alternative hypothesis; structural decision strategy has a significant influence on organizational performance of cement manufacturing firms in Kenya. Thus, a unit increase in structural decision strategy will lead to an increase in organizational performance by 0.170 units.

Recommendations

According to the research findings, the research recommended that;

1. The management of cement firms should improve their production technology capacity so as to increase flexibility in all operations and ensure the changing customer demands in the marketplace are met on time.
2. They should also effectively take part in the decentralization of management structures and specialization of departments in order to improve managerial efficiency and employee performance.
3. Policymakers should establish operating policies and procedures that are supportive of the firms' set objectives and goals.

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