

Effect of Organization Culture on Performance of Steel Manufacturing Companies in Kenya

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ABSTRACT:- Steel plays a crucial role in today's economy, serving as an indicator of a country's economic strength and reflecting investments in infrastructure. In Kenya, the steel industry accounts for approximately 13% of the manufacturing sector and is interconnected with complementary sectors such as housing, construction, energy, electronics, and chemicals. However, the steel industry in Kenya faces various challenges that hinder its ability to adapt to changing market dynamics and emerging technologies. Key among these challenges are high electricity costs, inadequate infrastructure, expensive inputs, heavy taxes competition from well established brands, volatile market prices, political instability and significant capital requirements. Previous research has not explored strategic agility as a potential solution to mitigate the effects of these challenges, specifically examining the impact of strategic agility moderators such as organizational culture, leadership, flexibility, and strategic sensitivity. Therefore, the study's objective was to investigate the effect of organizational culture on performance of Kenyan Steel Manufacturing Firms. The study was anchored on Dynamic Capabilities Theory to understand organizational adaptability. Using a correlational research design, the study targeted 33 steel industries in Kenya, with respondents of 132 individuals. Census method was used to study the respondents with primary data collected through structured questionnaires, which constituted of quantitative questions. Reliability tests was conducted using Cronbach's Alpha with a threshold value of 0.7. To ensure validity, the study sought expert opinions and conducted a comprehensive literature review. Multiple regression analysis was employed to examine the relationship between the variables. It is evident from the results that organization culture ($B = .393$, $p < .05$) had positive significant effect on performance. It was therefore concluded that organization culture, had a positive significant effect on performance. The study recommends that firms should invest in cultivating a strong and positive organizational culture, within the organization.

Keywords:- Organizational Culture, Performance, Steel Manufacturing.

I. INTRODUCTION

The concept of "strategic agility" has received a lot of attention during the past seven years as a means by which businesses may deal with the challenges posed by an increasingly volatile and uncertain business climate. According to Goldman et al. (2015), a company's strategic agility is its ability to quickly create and implement new strategies in response to changing market conditions and client demands. This idea of competitiveness places an emphasis on flexibility in the face of change.

Despite this role, the steel sector in Kenya faces numerous challenges that impede its competitiveness, and one of the primary concerns revolves around the considerable costs associated with inputs. For decades, Kenya has heavily relied on imported raw materials to fulfill its steel production requirements, rendering the sector susceptible to fluctuations in global prices. This vulnerability is closely linked to the devaluation of the Kenyan shilling, as the weakened currency has resulted in a substantial upswing in the price of imported raw materials. The exchange rate between the shilling and major currencies, notably the US dollar, has experienced a significant decline, with the average exchange rate in May 2023 recorded at Sh138.45, in contrast to Sh115.85 in May of the preceding year. Consequently, the cost of imported raw materials has increased by no less than 4 percent due to this depreciation in the exchange rate. Another contributing factor to the mounting prices within the steel industry is the exorbitant expenditures associated with transportation and logistics. The costs involved in moving goods from Mombasa to Nairobi have witnessed a surge from \$30 per ton in March 2022 to \$70 per ton in May 2023. This upsurge can be predominantly attributed to the escalation in diesel prices and the inadequate infrastructure, exacerbating the overall transportation costs.

According to Wong (2020), an organization's culture consists of "the shared beliefs, norms, and behaviors that characterize a group." An organization's culture, as defined by Schein (2016), is "a pattern of shared basic assumptions that a group learned as it solved its problems of external adaptation and internal integration. Which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." According to Schein (2016), three tiers make up an organization's culture: artifacts and actions; values; and

underlying assumptions. Culture's artifacts and behaviors are the things that people can see and interact with, such customs and traditions. Organizational values are the guiding concepts and beliefs held by all members of the group. An organization's perspective and method of approaching problems are shaped by its underlying assumptions, which are the unconscious, taken-for-granted ideas and attitudes of its members.

According to the findings of Cameron (2012), the presence of a robust organizational culture that places emphasis on innovation, risk-taking, and cooperation can significantly augment an organization's capacity to conceive and execute novel strategic initiatives. Conversely, certain scholarly investigations have underscored the potential adverse consequences associated with a strict or dysfunctional organizational culture in the context of strategic management. A deterioration in performance may result, for instance, from an organizational culture that places a premium on conformity and stability, as was discovered in a study by Bezginova (2018). The success of a business is greatly influenced by the company's culture, which is an essential part of organizational behavior. An organization's performance and adaptability to environmental changes can be improved through the cultivation of methods that take into account the culture's underlying beliefs, assumptions, and habits.

Similarly, the steel industry in Kenya confronts hindrances in the shape of elevated tax rates. In comparison to neighboring nations like Uganda, which imposes no Import Declaration Fee (IDF), and Tanzania, where the IDF stands at 0.6%, Kenya enforces a 2% rate. Moreover, the industry bears an additional burden in the form of a 1.5% railway development levy, further amplifying the costs of production. Additionally, the electricity tariffs in Kenya are among the highest in the East African region, with an average price of \$0.16 per kilowatt-hour (kWh). This surpasses the rates observed in countries such as South Africa, Egypt (at \$0.03 per kWh), Morocco, Ethiopia (at \$0.05 per kWh), and Tanzania (at \$0.08 per kWh). This considerable disparity in electricity costs significantly inflates the expenses associated with production for local industries, thereby undermining their competitive position. The cost differential also presents a substantial challenge for Kenyan steel firms as they struggle to contend with international counterparts that enjoy access to more economically viable inputs (Juma, 2016).

➤ *Statement of Research Problem*

The contemporary economy places significant emphasis on the steel industry due to its role as an indicator of a nation's economic well-being. It reflects investments in infrastructure, development, and stability. In Kenya, the steel sector is pivotal for the growth of related industries such as housing, construction, energy, and electronics. These potential supports infrastructure development, employment opportunities, and wealth creation. Yet, the industry grapples with complex challenges, including high electricity costs, inadequate infrastructure, expensive inputs, taxes, market volatility, and substantial capital requirements. Creating a steel business necessitates substantial investment and involves material wastage. To ensure profitability, steel firms must achieve high production and navigate regulatory compliance, market stability, and environmental concerns. Established steel companies from Asia, Europe, and the USA pose strong competition, and new players entering the market intensify the rivalry. This is accentuated by the East African Bloc's free trade agreement. Addressing these challenges demands strategic measures for local steel manufacturers to remain competitive and contribute to Kenya's economy.

Numerous scholars have explored the link between strategic agility and firm performance. Helfat and Peteraf studied this in the US, while Hitt, Ireland, and Lee delved into strategic agility, innovation, and firm performance. Both found a positive relationship. However, results are mixed, with studies like Wilden et al. showing no direct impact of strategic agility on performance in Germany's manufacturing, and Kianto et al. finding no significant link in Finland's software industry. This suggests context matters, considering factors like industry and firm size. Limited local studies focused on the broader manufacturing sector, not steel. Gitau and Waweru identified factors influencing Kenya's manufacturing competitiveness. Chepkoech and Cheruiyot studied innovation's effect on Kenyan manufacturing, while Kiplang'at, Kihoro, and Mugure explored corporate governance's impact. A specific study on Kenya's steel industry is needed to understand its performance determinants and how strategic agility enhances competitiveness.

➤ *Research Objective*

The general objective was to determine the effects of organizational culture on performance of Kenyan Steel Manufacturing Firms.

➤ *Conceptual Framework*

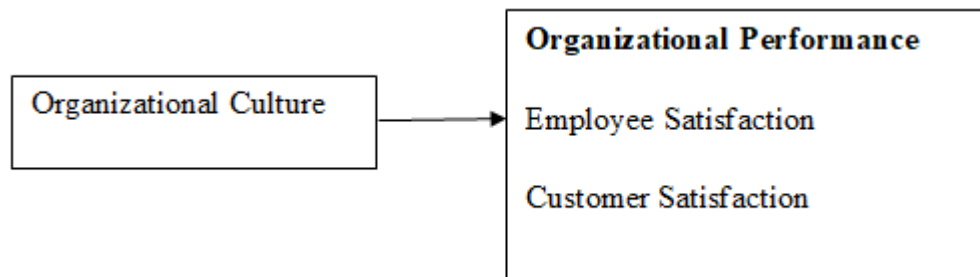


Fig 1 Conceptual Framework

In the context of this study, the conceptual framework was instrumental in illustrating the anticipated relationship between the independent variable, namely organizational culture, and the dependent variable, which is organizational performance characterized by employee satisfaction and customer satisfaction.

➤ *Dynamic Capabilities Theory*

The theory of dynamic capabilities provides a framework for understanding how businesses can develop and make the most of their assets in order to respond to shifts in their external environment and maintain a competitive edge over time. According to the notion, in order to keep up with the demands of a dynamic market, businesses must be able to detect shifts in their surroundings, identify opportunities, and reorganize their resources and skills accordingly. The concept of dynamic capabilities was first introduced by Teece, Pisano, and Shuen (1997), who defined it as "the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (p. 516). The team identified three key processes that enable dynamic capabilities: (1) sensing changes in the environment, (2) seizing opportunities arising from those changes, and (3) reconfiguring the organization's resources and capabilities to respond to those opportunities. Eisenhardt and Martin (2000) and Helfat and Peteraf (2003) are only two of many academics who have built upon and enhanced the original hypothesis. Rapid adaptation to new circumstances is highlighted in the dynamic capacities model provided by Eisenhardt and Martin (2000). They proposed that businesses should cultivate skills in "sensing," "capturing," and "transforming" to succeed. To adapt to the ever-evolving needs of the market, businesses must first "sense" the environment, "seize" new opportunities, then "transform" their internal structures and operations.

Helfat and Peteraf (2003) expanded on the concept, highlighting the significance of resources and capabilities in the development of adaptable ones. They argued that in order to adapt to shifting external conditions, businesses should possess both measurable and intangible assets and skills. They also stressed the value of strategic adaptability, which allows businesses to better meet changing market demands. Among the many applications of dynamic capacities theory is its explanation of the function of organizational learning and

knowledge management in innovation (Eisenhardt and Martin, 2000). (Zollo and Winter, 2002). Additionally, scholars have used dynamic capabilities theory to study the strategies and practices of successful companies, such as Amazon (Zott and Amit, 2010) and Apple (Teece, 2012)

According to the dynamic capabilities hypothesis, in order to maintain a competitive edge in the face of shifting market conditions, businesses must continually strengthen and improve their internal resources and skills. Several academics worked to establish and refine the idea, which is now utilized to shed light on the strategies employed by flourishing businesses. Organizations can better adapt to the ever-evolving needs of the market and exploit emerging opportunities by developing "dynamic capabilities."

II. EMPIRICAL LITERATURE REVIEW

A reviewed literature by Schein's (2010), explored the connection between organizational culture and leadership. The study revealed a positive significance effect of leaders in shaping and maintaining organizational culture, which had an impact on organizational performance. From the study findings, the researcher emphasized on the importance of aligning leadership behavior with organizational values and assumptions to promote employee engagement, commitment, and performance. The study offers valuable insights into assessing and changing organizational culture, as well as the risks of unintended consequences. Shahzad, Xiu, and Shahbaz (2017) used a survey-based technique on a sample of 215 software companies in Pakistan to investigate the link between organizational culture and innovation performance. From these results, we can conclude that there is a causal link between clan culture and innovative output. This negative relevance of market culture and innovation performance was further proved by the robust. The research conducted by Shahzad, Xiu, and Shahbaz (2017) found that organizational culture is an important determinant of innovation success in the software business in Pakistan. This finding was based on Schein's theory of organizational culture.

Olu-Owolabi's (2015) research into SMEs in Nigeria looked into the connection between company culture and results. A survey was used to gather information from 250 small and medium-sized enterprises (SMEs) in Lagos State.

Organizational cultures were categorized into four distinct groups using the Competing Values Framework. Compared to SMEs with a strong market or hierarchy culture, those with a strong clan culture fared better in terms of profitability, growth, and customer satisfaction. Organizational culture was also found to mediate the connection between owner/manager traits and SME performance. Self-reported data is one of the study's flaws, as is the limited geographic reach. Further research is needed to understand the connection between organizational culture and performance in SMEs in Nigeria and other African countries, but the results suggest that SMEs in Nigeria should prioritize developing and maintaining a strong clan culture to achieve better performance outcomes.

Onyango and Ongori (2013) sought to evaluate the relationship between organizational culture and employee commitment in Nairobi, Kenya's manufacturing industry. Data for the study came from surveys given to 203 workers at various industrial firms in Nairobi. The research was a cross-sectional examination based on Schein's theory of organizational culture. Organizational culture was found to have a positive relationship with employee commitment and to be a more accurate predictor of employee commitment than demographic characteristics. Both the self-reported data and the cross-sectional nature of the study can be seen as flaws. Companies can foster a favorable culture to increase employee dedication and boost productivity, as suggested by the writers. However, further study is needed to fully comprehend the complex relationship between company culture and employee dedication across industries and businesses in Kenya and the rest of Africa.

Zhang, Li, and Li (2017) investigated the relationship between organizational culture and performance in Chinese private firms through a quantitative research study. Data from 318 private businesses in China's Guangdong Province were used in a cross-sectional analysis. The authors used structural equation modeling to examine how the Competing Values Framework's four dimensions of company culture affect employee engagement, creativity, and profitability. Compared to market and hierarchy cultures, clan and adhocracy cultures were proven to have a beneficial effect on employee happiness and creativity. However, assessing financial data for privately-owned Chinese firms proved challenging, which may explain why no significant correlation was discovered between organizational culture and financial success. The self-reported nature of the data raises concerns about the reliability of the results. The study may not be generalizable to other organizational types or cultural contexts due to its narrow emphasis on Chinese private firms in a single province. The study concludes that private Chinese businesses can benefit from increased employee satisfaction and creativity by fostering a culture of positivity. To completely comprehend the connection between organizational culture and financial performance in this and other cultural settings, more research is needed.

Park, Lee, and Lee (2016) used regression analysis and the Competing Values Framework to investigate the connection between company culture and bottom line results in the South Korean hospitality business. However, clan culture did have a favorable effect on employee job satisfaction and retention, despite the study's main finding that there was no correlation between organizational culture and financial performance. Financial performance was also found to be negatively impacted by the prevalence of a hierarchy culture, while that of a clan, adhocracy, or the market had no influence. Self-reported surveys and the study's narrow emphasis on the South Korean hospitality industry are two of its flaws. Thus, it is important for future studies to investigate the connection between organizational culture and financial performance across a variety of sectors and cultural settings.

Olalekan and Adeyemi's (2019) research on Nigerian banking institutions examined the correlation between company culture and bottom-line results. Based on the Competing Values Framework, which classifies corporate cultures as ad hoc, clan, hierarchy, and market, this survey-based study recruited a sample of 221 workers from 10 different banks. To examine the impact of culture on financial performance, a regression analysis was conducted, with the inclusion of extraneous elements serving as control variables. The results showed a favorable association between clan and adhocracy cultures and economic success, and a negative relationship between market cultures and economic success. The small sample size of this study may limit its applicability to firms outside of Nigeria or to organizations in other sectors. The possibility of response bias in self-reported data is also acknowledged.

Lasrado and Vermal (2016) did a quantitative analysis in the Indian IT industry to learn more about the connection between company culture and bottom line results. The study used a cross-sectional research approach informed by the Competing Values Framework to analyze information gathered from both primary and secondary sources. Using a stratified random selection method, we picked 50 Indian IT firms and received 250 completed surveys. In contrast to the negative correlation between hierarchy culture and financial success, the authors discovered a favorable correlation between clan culture and financial success. Cultures of adhocracy and the market were shown, however, to have no bearing whatsoever. The authors claimed that the good impact on financial performance may be attributed to the emphasis on teamwork and collaboration in clan culture, whereas the negative impact could be attributed to the rigid structure and lack of creativity characteristic of hierarchical culture. The study's limited sample size and reliance on self-reported questionnaires, which are vulnerable to response biases and mistakes, were limitations.

Employee happiness and creativity benefit from an organization's culture, and studies show that clan and adhocracy cultures are especially effective (Olu-Owolabi's,

2015). However, findings on the connection between company culture and bottom line performance vary widely between sectors and societies. Park, Lee, & Lee (2016) and Zhang, Li, & Li (2017) both found no significant relationship between organizational culture and financial performance, while other research indicated a positive link (Lasrado & Vermal, 2016; Olalekan & Adeyemi, 2019). More research is required to completely understand the factors that influence the connection between culture and performance.

III. METHODOLOGY

Although a descriptive research design could have been employed to understand the association between organizational performance and strategic agility in the Kenyan Steel Manufacturing context, the study's objective of

identifying relationships between strategic agility and organizational performance deemed the correlational research design more appropriate. The study was carried out in Kenya among firms in the steel manufacturing sector. In the context of this study, the target population comprises all the 33 officially registered steel manufacturing firms in Kenya, as reported by the Kenya Association of Manufacturers (KAM) in 2018. The major data for this study was gathered through the use of questionnaires with predetermined questions and answers. To establish construct validity, an extensive literature review was conducted, and expert opinions sought. The reliability of the proposed constructs was calculated using Cronbach's Alpha, which revealed a reliability coefficient of 0.789 indicating reliability of the study instrument. Data was analysed using descriptive statistics as well as linear regression model.

IV. FINDINGS AND DISCUSSIONS

The researcher distributed 132 questionnaires across 33 steel companies in Kenya. The table below shows the response of the study.

Table 1 Response Rate

sample size	Response	Response rate	Non- responsive	Non-responsive rate
132	126	95.5%	6	4.5%

Out of the distributed questionnaire, 132 only 126 were fully filled and returned. This equates to (95.5%) response rate. The ones not returned were six translating to (4.5%). This was a high response rate and therefore the data was adequate for analysis and enough for further analysis.

➤ *Organisational Culture*

The first objective of the study wanted to establish the effect of organizational culture on performance of Kenyan Steel Manufacturing Firms. A set of eleven statements was developed in order to assess and evaluate the dimensions of organizational culture. The participants in this study were asked to score these statements using a five-point Likert scale, ranging from "1" representing "Strongly disagree" to "5" representing "Strongly agree". The responses were subjected to analysis and afterwards presented through the utilization of frequency tables, as depicted in Table 2.

Table 2 Organizational Culture

Statement	1	2	3	4	5	M	STD
The company is committed to diversity and inclusion.	41(32.5)	54(42.9)	18(14.3)	6(4.8)	7(5.6)	2.1	1.1
I am aware of how my work impacts the organization's strategic objectives.	88(69.8)	20(15.9)	6(4.8)	6(4.8)	6(4.8)	1.6	1.1
The organization provides a secure workplace for all employees.	33(26.2)	45(35.7)	35(27.8)	35(27.8)	4(3.2)	2.3	1.1
Within the organization, there is a culture of collaboration and cooperation. I am free to express my opinions and ideas.	20(15.9)	51(40.5)	42(33.3)	4(3.2)	9(7.1)	2.5	1.0
I would suggest our company to my family and acquaintances.	43(34.1)	42(33.3)	29(23)	6(4.8)	6(4.8)	2.1	1.1
Everyone's perspectives are respected and valued.	44(34.9)	41(32.5)	22(17.5)	3(2.4)	16(12.7)	2.3	1.3
I have a sense of belonging at work, and my contributions are acknowledged and valued.	71(56.3)	15(11.9)	34(27)	5(4)	1(0.8)	1.8	1.0
My work schedule is adaptable enough to accommodate my family and personal obligations.	51(40.5)	31(24.6)	30(23.8)	3(2.4)	11(8.7)	2.1	1.2
The company is committed to diversity and inclusion.	53(42.1)	11(8.7)	42(33.3)	3(2.4)	4(3.2)	2.1	1.1
I am aware of how my work impacts the organization's	57(45.2)	20(15.9)	22(17.5)	5(4)	22(17.5)	2.3	1.5

strategic objectives.							
Overall mean and standard deviation						2.1	1.2

From Table 2 it can be clearly seen that majority of the respondent 54(42.9%) disagreed (M=2.1, STD= 1.1) that their organization is dedicated to diversity and inclusiveness. This therefore implies that steel industries are not dedicated to diversity and inclusivity. The statement ‘I understand how my work impacts the organizations business goal’ was strongly disagreed by 88(69.8%) significant number of the respondents. This was supported by low mean rate and standard deviation (M=1.6, STD=1.1). This also implies that the respondents do not feel their contributions as impacting the organization. From the findings also it can be seen that most of the respondents disagreed that their organization has a safe working environment for all employees. This was by 45(35.7%) of the respondents supported by a low mean rate and standard deviation (M=2.3, STD= 1.1). This therefore shows that steel industries in Kenya are not yet providing safe conducive environment for its employees. There is a culture of teamwork and cooperation within the organization was also disagreed by 51(40.5%) who were the majority. This was supported by low mean and standard deviation, (M=2.5 and STD=1). This shows that culture of team work is not yet embraced in the steel industry in Kenya. 42(33.3%) of the respondents on, I am free to voice my opinions and ideas, was strongly disagreed. This was indicated the respondents supported by a low mean (M= 2.1, STD=1.1). 44(34.9%) of the respondents strongly disagreed (M=2.3, STD=1.3) with recommending their current steel industry to their friends or family. This therefore implies that the working environment might be toxic to the respondents who participated in the study. The respondents 71(56.3%) who were the majority strongly disagreed that (M=1.8, STD=1.0) that perspectives of all people are respected and valued. 51(40.5%) strongly disagreed to feeling a sense of belonging at work. 53(42.1%) of the respondent also strongly disagreed they feel recognised and appreciated for their contributions. This were supported by (M=2.1, STD= 1.2) and (M=2.1, STD=1.1) respectively. This further the captured aspect of the industries not having a safe working environment. 57(45.2%) of the respondents disagreed (M=2.3, STD=1.5) that their working schedule was flexible enough for them to meet their families and personal responsibilities. This indicates employees working in the steel industries have a very tight working schedule. The overall mean and standard deviation (M=2.1, STD=1.2) was low thus implying that organizational culture of the steel industries was not properly maintained and managed. The findings also shows that the B statistics, Organisation culture (B = .393, p <.05) had positive significant effect on performance. The B statistics of Organisation culture shows that unit change in the level of organisation culture practices causes a 0.393 units increment in performance level. The study sought to establish the effect of organizational culture on performance of Kenyan Steel Manufacturing Firms. Its corresponding hypothesis was ‘Firm organizational culture has no significant effect on the performance of steel manufacturing industries in Kenya.’

From the multiple regression model, it can be inferred that organisation culture (B=.393, p<.05) had a positive significant effect on performance. A unit change in the level of organisation culture practices causes a 0.393 units increment in performance level and thus the null hypothesis was rejected.

V. CONCLUSIONS AND RECOMMENDATIONS

The primary aim of this study was to examine the impact of organizational culture on the performance of Steel Manufacturing Firms in Kenya. The hypothesis that was formulated to correlate with this study is as follows: "The organizational culture of firms in the steel manufacturing industries in Kenya does not have a statistically significant impact on their performance." The results of the study indicate that a substantial amount of the variation in organizational performance can be attributed to the influence of organizational culture. The impact of organizational culture on organizational performance was shown to be beneficial. The null hypothesis was rejected based on the findings. The research findings indicate that there exists a notable correlation between the organizational culture of Kenyan Steel Manufacturing Firms and their performance outcomes. The impact of organizational culture on organizational performance was shown to be beneficial. The study's findings underscore the importance of organizational culture in shaping the performance of steel manufacturing enterprises in Kenya. In order to optimize organizational performance, the study so proposes that;

Steel manufacturing firms should invest in cultivating a strong and positive organizational culture that aligns with the company's mission and values. Fostering a culture of teamwork, open communication, and mutual respect can contribute to improved employee morale and overall performance. Leaders should actively champion and embody the desired organizational culture. Through their actions and communication, leaders can shape the culture and create a shared sense of purpose among employees.

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