Competitive Strategies and Performance of Escalator and Elevator Firms in Kenya

[1]John MATHU, [2]Dr. Anne Kiboi, [3]Dr. Cliff Osoro
Strategic Management, Catholic University of Eastern Africa
Corresponding email: engmathu@gmail.com

Abstract

This study examined the relationship between competitive strategies and performance of escalator and elevator firms in Kenya with a moderating effect of firm size. Competitive strategies included cost leadership, differentiation, and focus strategies. The study was hinged on Porter's generic competitive strategies, innovators' dilemma theory, theory of price, Knowledge-Based Theory and Resource-Based View Theory. A correlation research design was used. 38 firms registered with Energy and Petroleum Regulatory Authority (EPRA) formed unit of analysis while 76 senior managers drawn from the firms using purposive sampling technique formed unit of observation. Primary data was collected using questionnaires and analysed using SSPS version 24. Data was presented using percentages, mean and standard deviation, and displayed using tables, pie charts, and figures. Correlation and multiple linear regression analysis were used to assess the relationship between variables. A positive and significant link between firms' performance and cost leadership strategy (r=.683, p=.000), differentiation strategy (r=.411, p=.000) and focus strategy (r=.381, p=.000) was observed. On the other hand, an insignificant and negative correlation between the size of the firms and their performance was established. Differentiation, cost leadership and focus strategies accounted for 50.5% change in firms' performance. With a moderating variable, firm size, a positive shift from 50.5% to 53.8% was realized and differentiation strategy took preeminence over cost leadership strategy. The study recommends emphasis on production efficiency, outsourcing and economies of scale for enhanced performance. As firms increase in size, having unique products, smart pricing, leveraging on proprietary technologies, and enhancing brand equity becomes key. Awareness of disruptive technologies like use of robotics, remote monitoring using internet of things (I.o.T) and other emerging technologies which might shape future competition landscape is key.

Key: ***Competitive Strategies, Cost Leadership, Differentiation, Focus strategies, Firm Size, Performance of Escalator and Elevator Firms***

1.0 Introduction

There is a need for organizations to be innovative in order to differentiate themselves from the competition in the recent times (Liu, Li, & Wang, 2020). According to experts like Al-Romeedy (2019), businesses are becoming more agile and innovative by rapidly adapting their strategies, technologies, human resources, customer service, alliances, and other organisational structures to meet and adapt to shifting market conditions. Strategic tactics employed by enterprises in building a competitive edge include, according to Qin and Nembhard (2015), supplying innovative services in timely fashion, taking advantage of new opportunities, and minimizing threats in a changing work environment.

From a global perspective, various authors such as Bel (2018), Phung, et al. (2022), Wike (2023), and Gordon (2023) have observed that the three most common business strategies include focus, differentiation, and cost leadership. Additionally, a research by Cahyadi et al. (2022) observed that many organizations throughout the world have adopted these three methods in the digital era to obtain an edge over their rivals. Cost leadership restricts competition by minimizing the overall cost of manufacturing and passing those savings on to customers in the form of lower prices (Parnell & Brady, 2019). Finding a reliable supplier of raw materials may be easier if the firm is able to strike advantageous bargains with large suppliers. Firms that take a low-cost strategy face competition from those that do the same and from manufacturers of equivalent replacement products. The strategy's emphasis on repeat business reduces competition and makes it easier for new firms to break into the market (Khan, Kaur, Jabeen, & Dhir, 2021).

In Africa, business leaders have substantially adopted competitive strategies for development of their companies. Firms in Nigeria and Ghana, for instance, have used both pure strategies (such as cost leadership or a differentiation strategy) and hybrid ones (which combine the two). Research shows that these tactics have a considerable effect on firms' market share and performance (Akingbade, 2023; Hamzat, 2020; Kankam-Kwarteng et al., 2019). In Tanzania, Mkakile and Shillingi (2022) indicated that low-cost leadership, focus, and distinctiveness are the three most influential generic strategies on firm performance.

Several Kenyan authors, including Ngugi (2021), Gecheo (2020), Abwodha (2019), Isaboke (2019), and Atikiya (2015), have emphasized the impact of competitive strategies (focus, differentiation, and cost leadership strategies) on the success of businesses in a variety of fields, including micro, small, and medium-sized enterprises (MSEs) and the insurance sector. In the manufacturing industries authors such as Kimiti, Muthae and Murigi (2021) and Dedan et al. (2018) have emphasized that competitive tactics such as cost leadership, differentiation, and focus are essential. This means that adopting the appropriate competitive strategies facilitate positive performances among firms. This formed a key interest in this study.

1.1 Problem Statement

The environment in which Escalator and Elevator Firms operate has been experiencing rapid changes including policy development and regulation. For instance, the National Construction Authority (NCA), a body legally mandated to register all construction firms in Kenya has classified firms as local or foreign. It has further created registration categories from NCA 8 to NCA 1 where NCA1 handles projects over Ksh 1 billion and NCA 8 less than Ksh 10 million. NCA also requires specialized categories like escalator and elevator firms to obtain licenses from the Energy and Petroleum Regulatory Authority (EPRA). To protect local firms, NCA issues a temporal renewable registration certificate to foreign firms per project upon award at a fee of USD 500 for every project. Local firms on the other hand are given an annual registration certificate for an unlimited number of projects at a lower fee of 38 USD. Furthermore, foreign firms are required to subcontract at least 30% of their work to local firms and demonstrate quantifiable skills and technological transfer to a local entity or person. Additionally, the Public Procurement and Assets Disposal Act (PPADA, 2015) gives a 15% upfront advantage to local firms. These policies and regulations tilt the competition landscape in favor of local firms. It was thus interesting for this study to assess the competitive strategies adopted by these firms in the escalator and elevator industry.

Despite the favorable policies in support of local firms in the escalator and elevator industry in Kenya, foreign firms continue to flourish (EPRA, 2023). Local firms have low operating revenue of between 300 million and 100 million whereas other firms have operating revenue of 10 million and below (NCA, 2023). On the other hand, foreign firms operating revenue in the country are in billions. This shows a significant gap in the performance of local firms and hence they may experience challenges in meeting customer-specific needs, quality, safety, and reliability. Notably, significant shortfalls relating to the performance of several firms have been evident such as the fatality incident in Mombasa for a technician installing a high-rise elevator (Nduire, 2024), and students injured from an escalator accident in an airport (Capital Campus, 2014). Ayodo (2022) also observed that most Kenyan buildings had accessibility challenges in contravention to Disability Act 2002 which was enacted in December 2009 and which required buildings to have elevators with persons living with disabilities features.

Some of the highlighted problems could be attributed to the increased number of firms in the industry and competition with a reduction in quality control and monitoring mechanisms. Moreover, the sector continues to experience significant changes regarding technology and innovation as the number of high-rise and complex projects continues to increase. The customers have become more knowledgeable on the desired outcomes of projects hence placing high and tough output demands on the firms (Njang'iru, Muhoho, & Abayo, 2020). This has resulted in increased competition for high skilled workforce among the firms. The industry further battles with a volatile macroeconomic environment characterized by unfavorable exchange rates, increased shipping costs, duties, and tax, and increased cost of materials. For instance, imported materials were exempted from Value Added Tax (VAT) before April 2020. The introduction of VAT from 1st April 2020 (RoK, 2020) saw the prices going up by 16% and this hurt demand and consumer purchasing power. The volatile business operating environment has forced local firms to compete for small projects while multinationals take up a bigger share of Elevator installation projects (Kemei, Kaluli, & Kabubo, 2016). Therefore, this study hypothesized that for the firms to improve their performance, there was a need for strategic competitive approaches to be adopted.

From the literature review, it has been observed that there is limited content about competitive strategies and Escalator and Elevator Firms' performance. In terms of the contextual gap, most of the studies have been done in other industries such as the insurance industry (Njuguna & Waithaka, 2020), telecommunications industry (Adunayo, 2018; Kitheka & Bett. 2019), finance institutions (Nyanchama & Murigi, 2019; Mbugua & Kinyua, 2019) and manufacturing industry (Islami et al., 2020; Ifeoma et al., 2021) among others. These studies established that the different competitive strategies had a significant influence on the firm performance. Regarding the conceptual gap, studies carried out on Kenya's Elevator industry's performance concentrated on other areas such as supply chain management practices (Masila, 2013) and quality management (Njang'iru, Muhoho, & Abayo, 2020). To fill this gap, this study scrutinized the effect of competitive strategies on Kenya's Escalator and Elevator Firm's performance.

1.2 Research Hypotheses

H_{01}: Competitive strategies have no statistically significant effect on the performance of escalator and elevator firms in Kenya.

H_{02}: Firm size has no statistically significant moderating effect on the relationship between competitive strategies and performance of Escalator and Elevator industry in Kenya.

2.0 Literature Review 2.1 Theoretical Review

The Porter's generic competitive strategies grounded this study. This is a framework developed by Michael Porter, a renowned professor at Harvard Business School, to help businesses identify and choose their competitive strategies. The model includes three generic strategies that a business can use to gain a competitive advantage over its rivals. The model proposes three major strategies which include cost leadership, differentiation, and focus strategy (Porter, 1980).

Porter (1980) defined cost leadership as being the industry's lowest-cost producer. Businesses that pursue cost leadership seek to outperform their rivals in terms of quality while providing goods and services at a reduced cost. Economies of scale, cost-cutting techniques, and effective operations can all help achieve this. Businesses that use differentiation as a strategy aim to provide distinctive goods or services that clients value highly. This might be accomplished by strong brand identification, innovative products, excellent services, or high-quality goods. The goal is to create something distinct from competitors, allowing the company to charge a premium price. Targeting a certain market niche and meeting the distinct demands and preferences of a certain consumer segment is the goal of the focus approach. The two subcategories of this strategy are differentiation focus and cost focus. Differentiation focus tries to provide distinctive products catered to the niche, whereas cost focus tries to be the lowest-cost manufacturer in a niche market (Porter, 1980).

According to Porter (1980), a firm must choose one of these generic strategies to be successful in the long run. Each strategy requires a different set of skills, resources, and capabilities, and a firm must align its entire organization around the chosen strategy to achieve success. This theory was therefore found to be applicable and relevant in the current study which focused on examining how the different competitive strategies affect the performance of the Escalator and Elevator industry in Kenya.

In supporting Porter's competitive strategies generic model, several other theories were adopted. These theories included the innovator's dilemma theory, the resource-based theory of a firm (RBT), the knowledge-based theory, and the theory of prices. According to RBT, the basis for designing competitive strategies that result in superior performance through the creation of long-lasting competitive advantages is a firm's distinct resources and capabilities. According to the KnowledgeBased Theory of the Firm, a firm's ability to apply Porter's competitive strategies—cost leadership, distinctiveness, and focus—can be improved by efficiently leveraging on organizational knowledge, which will ultimately improve the performance of the entire firm. According to the Innovator's Dilemma theory, established businesses may find it difficult to embrace disruptive technologies (such as remote monitoring using Internet of Things (IoT), robotics, and machine learning) because they are too preoccupied with maintaining their present accomplishments. This might make it more difficult for them to successfully employ Porter's competitive strategies, such as differentiation or focus. The Theory of Price, which deals with how prices are determined in free markets by forces of supply and demand, can impact firm performance by influencing cost structures and competitive positioning. This theory therefore supports the viability of pursuing cost leadership or differentiation strategies among firms. Application of price theory has several limitations including the following; the role of motivation in price determination. Bruno (1993) observed that the inducement of monetary rewards to a consumer representative impairs his judgment, sense of fairness, and willingness to discharge his duty from intrinsic motivation. Anshuman & Subrahmanyam (1999) point out that if a certain

maximum price is pre-agreed, this information may not be available to all suppliers and therefore disadvantage some participants. Price theory assumes that this information is uniformly distributed in the market which is not the case. In the escalator and elevator industry, at times some vendors may be privy to engineers' estimates in upcoming projects having been engaged in specs development and therefore they bid from a point of information that is not available to other bidders.

2.2 Empirical Review

Several studies have been done on the different components of competitive strategies. Regarding the cost leadership strategy, the study by Liao et al. (2022) conducted within the Taiwan Elevator industry and data obtained from 454 respondents using questionnaires showed that cost leadership strategies influenced performance. Similarly, Kankam-Kwarteng, Osman, and Donkor (2019) carried out a study to assess how company performances was affected by cost leadership competitive strategy (CLCS) and moderated by the quality management (QM) practices across MSMEs. Structured questionnaires were distributed to 245 certified MSMEs in India. Based on the data, CLCS had no correlation with performance of firms ($r=0.12, 0.13>0.05$), but that there is a strong association between the two when mediated by QM practices ($r=0.73$, $p=0.01<0.05$). Wairimu and Kirui (2020) looked into how adopting a cost leadership strategy affected the output of tea processing plants in Kenya's Murang'a County. Research design was descriptive survey. Nine tea factories in Kenya's Murang'a County were the focus of the research. There were 407 total respondents, including both managers and support employees. The participants were selected by a combination of a stratified sampling strategy and a basic random sampling strategy. From the analysed descriptive statistics, it was established that using cost leadership strategy significantly improved business outcome ($M=4.12$, Std. $=1.024$, $p<0.05$).

Firm performance in Kosovo was studied by Islami, Mustafa, and Topuzovska (2020) in relation to Porter's generic strategies (low-cost strategy, differentiation strategy, and focus strategy). In order to quantify these connections, a questionnaire and an econometric model were developed and used to collect data from 113 participants. The hypotheses were tested using t test, Pearson's correlation, and multivariate regression. Results showed that while both the low-cost strategy ($b=0.245$, $p=0.031<0.05$) and the focus strategy ($b=0.246$, $p=0.019<0.05$) from Porter's generic framework had a favorable effect on firm performance, the differentiation strategy produced significantly better results ($b= 0.312$, $p=0.028<0.05$).

Ifeoma, Vincent, Purity, and Akaegbobi (2021) investigated the connection between manufacturing enterprises' use of a differentiation strategy and their subsequent expansion within the state of Ebonyi. The impact of people difference on competitive advantage and the correlation between product differentiation and market share were the primary focus of the research. According to David Deephouse (1999) Strategic Balance Theory, this investigation was motivated. The authors used a correlational study methodology to look at the connection between manufacturing firms' use of a differentiation strategy and their subsequent expansion. Information was gathered using a questionnaire. Sixty-three respondents were obtained from 126 targeted population using the Taro Yamane methodology. The hypotheses were evaluated using correlation and simple regression. Differentiation of products was found to significantly correlate with increased market share ($r=0.976$, $p=0.00<0.05$). Differentiating your employees is also a great way to gain an edge in the market ($b=0.871$, $p=0.00<0.05$).

Franco (2020) examined the effects of servitization on the long-term success of manufacturing enterprises in the Elevator industries in Spain. The goal of the study was to learn what factors affect the intensity of servitization over time, how servitization affects the financial performance of a manufacturing firm, and how internal and external variables either encourage or discourage servitization. The research utilized a longitudinal and dynamic strategy due to the highly servitized nature of the Elevator business (service revenues account for more than 50% of overall sales). Using quantitative and qualitative data from financial reports of leading escalator and elevator manufacturing enterprises across different nations between 2005 and 2017, the study tested the hypotheses using statistical methods. The research found that servitization intensity does not change over time due to external events, which contradicts previous work. Instead, manufacturercontrolled variables, like strategic priorities and resource availability, appear to be more important in determining the degree of servitization ($r=0.0826$, $p<0.05$).

The focus strategy and output of dairy cottage enterprises in Kenya's Kiambu County was studied by Kaara, Amuhaya, Oloko, and Waititu (2021). Using a stratified random sampling method, 114 dairy cottage enterprises in Kiambu County were chosen to participate in the survey. Statistical analysis was performed with SPSS 21 (Statistical Package for the Social Sciences). Statistical inference and straightforward descriptive analysis were used to make sense of the numbers. Histograms and frequency tables were used to illustrate the analysis of qualitative data. Exploratory Factor Analysis (EFA), a method under Factor Analysis (FA), was used to ascertain how many latent variables were necessary to explain the observed correlations in the study. Results showed that in Kiambu County, Kenya, dairy cottage enterprises fared better when they adopted a strategy of narrowing their attention ($b= 0.704$, $p=0.00<0.05$).

According to Olawale and Lawal (2017), modern firms seek to increase their size in order to attain competitive advantage. Larger firms leverage on lower production cost and increased market share. The association between firm size and the moderating influence of firm size on corporate social responsibility (CSR) acts and the economic performance (EP) of MSMEs was investigated by Hernández, Yañez-Araque, and Moreno-García (2020). The study examined the social impact of CSR on EP in addition to the moderating influence. The PLS-SEM technique was used to analyse data from 278 Spanish firms. The results showed that MSMEs that participate in initiatives involving CSR that encompass environmental, social, and economic aspects perform better economically; this relationship is influenced by the size of these organizations ($p<0.05$), with larger organizations showing a stronger relationship. However, in the context of the current study, firm size was considered as a moderating variable in examining the effect of competitive strategies on performance of escalator and elevator firms in Kenya. Other authors such as Corvino et al. (2019), Mubeen et al. (2022), and Mutunga and Owino (2017) have also been able to confirm that firm size had a moderating effect on the relationship between performance and other components such as operation practices and competitiveness in different industries. Hence, this study looked at the moderating effect of firm size on the performance of escalator and elevator firms in Kenya in relation to competitive strategies.

3.0 Methodology

This study employed a correlational approach to research. The unit of analysis in this study consisted of 38 EPRA-registered Escalator and Elevator Firms. Two of the senior managers from Escalator and Elevator Firms were selected using a purposive sampling approach resulting to a

total of 76 responses. The semi-structured questionnaire was used. Reliability was conducted and the questionnaire had a Cronbach Alpha value of 0.833 making the instrument reliable for the study. Inferential analysis was done in order to establish the relationship between the study variables. This was facilitated with the help of the Statistical Package for Social Sciences version 26. For the inferential analysis, correlation and multiple linear regressions (MLR) were applied. The analyzed data was used to draw the study's conclusions and recommendations.

4.0 Results and Discussion of the Findings 4.1 Correlation Results

The correlation coefficient describes how two score distributions are related to one another. The Pearson correlation coefficient, on the other hand, reflects the strength of a linear link between two variables. To determine how well the line of regression describes the data, the coefficient of determination was utilized. The p-values were used to assess the study's hypotheses. The initials presented in the table 1 include CL= Cost Leadership; DS= Differentiation Strategy; FS= Focus Strategy; PEEF= Performance of Escalator and elevator Firms.

As shown in Table 1, cost leadership and escalator and elevator firms' performance correlation were positive and significant. This is because the variable had a Pearson correlation of .683 with a significance level of .000 which is within the recommended threshold of $p<0.05$. This therefore points to a significant correlation between cost leadership and escalator and elevator firms' performance. Concurring with this finding, Njuguna and Waithaka (2020) also noted that cost leadership influenced business success. Differentiation strategy and performance of the escalator and elevator firms had a positive correlation. This is because the Pearson correlation value was .411 with a significance value of .000. It can therefore be concluded that differentiation strategy positively correlated with performance of Kenya's escalator and elevator firms. In supporting this observation, the study by Chelanga, Rono, and Boit (2017) also observed that there was a positive and statistically significant relationship between financial performance and Focus and differentiation strategies.

Escalator and elevator firms' performance and focus strategy had a Pearson correlation value of .381. The level of significance was .000<.05. It is, therefore, concluded that there is a positive and significant correlation between focus strategy and performance of escalator and elevator firms in Kenya. In line with this finding, Gakuye and Njue (2018) also noted in their study that the effect of focus approach variable on customer loyalty was positive and statistically significant. **Table 1: Correlation Results**

		CL	DS	FS	P.E.E.F
CL	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	70			
DS	Pearson Correlation	.333**	1		
	Sig. (2-tailed)	.005			
	N	70	70		
FS	Pearson Correlation	.457**	.522**	1	
	Sig. (2-tailed)	.000	.000		
	N	70	70	70	
P.E.E.F	Pearson Correlation	.683**	.411**	.381**	1
	Sig. (2-tailed)	.000	.000	.001	
	N	70	70	70	70

**. Correlation is significant at the 0.01 level (2-tailed).

4.2 Regression Analysis

After examining the correlations between the study variables, a further linear regression analysis was conducted in order to establish the link or relationship between competitive strategies and performance of escalator and elevator firms in Kenya. For this analysis, the model summary, ANOVA and coefficient tables were utilized in presenting the results. As shown in the model summary Table 2, R is .710 and R Square .505. This means that 50.5% variation of the performance of escalator and elevator firms is addressed by the components of competitive strategies (Differentiation, focus strategy and cost leadership strategy). The residue of 49.5% can be explained by other factors besides the competitive strategies.

The model under investigation was clearly statistically significant in describing the relationship between study variables, according to ANOVA results. This is because the calculated F Value was 22.408 was greater than the critical F-value tabulated of 2.74 at a 5% significance level. Thus, the null hypothesis was rejected and the study concluded that the link between performance of Kenyan escalator and elevator firms and their competitive strategies (cost leadership, differentiation, and focus strategy) is statistically significant. Various authors have also been able to confirm the relationship between competitive strategies and firm performance in different industries. For instance, Bel (2018) highlighted that competitive strategies such as cost leadership, differentiation, and focus strategy were commonly adopted by businesses and they played a significant role in their performance. Within the local industries, studies by Ngugi (2021), Gecheo (2020), Abwodha (2019) and Isaboke (2019) have also established that competitive strategies had a significant impact on the overall performance of firms in the MSEs and insurance sectors.

According to Table 2, the regression of coefficient results shows that cost leadership and performance of escalator and elevator firms is positively and significantly related (β=0.418, $p<0.05$). In this case, the null hypothesis that cost leadership strategy has no effect on the performance of Escalator and Elevator Firms in Kenya is rejected and concluded that cost leadership strategy has significant effect on the performance of escalator and elevator firms in Kenya. While holding all other factors constant, a unit increase in cost leadership leads to 41.8% increase in the performance of the elevator and escalator firms in Kenya. This finding has also been supported by researchers such as Abdala (2022), Liao et al. (2022) and Chepchirchir et al.

(2018) who confirmed the statistical significance of cost leadership on firm performance in different industries.

With regards to the differentiation strategy, there exists a positive and significant relationship to the escalator and elevator firms' performance (β=0.203, $p<0.05$). As a result, the alternative is accepted and the null hypothesis, which claimed that differentiation strategy had no bearing on the performance of escalator and elevator firms in Kenya, is rejected. This suggests that the success of elevator and escalator firms in Kenya is positively and significantly impacted by differentiation strategies. Therefore, it can be said that a 20.3% improvement in the performance of Kenyan elevator and escalator firms is associated with a unit increase in differentiation strategy. In supporting this observation, studies by Islami et al. (2020), Ifeoma et al. (2021) and Kitheka and Bett (2019) have also identified the significant correlation between differentiation strategy and firm performance in the telecommunications industry.

Finally, in the combined regression model, the performance of the elevator and escalator firms in Kenya was negatively and statistically insignificantly correlated with focus strategy (β=-.012, t value=-0.188, $p>0.05$). This means that a unit increase in focus strategy had no significant decrease in the performance of escalator and elevator firms in Kenya and vice versa. This suggests that the overall performance of the escalator and elevator firms in Kenya is not affected by changes in the focus strategy. In this case, the null hypothesis which stated that focus strategy has no effect on the performance of Escalator and Elevator Firms in Kenya was accepted. As a take-away point, it could be addressed that while combining the competitive strategies in the escalator and elevator industries, it is paramount for more attention to be given towards the cost leadership and differentiation strategies respectively. Contrary to these observations, previous studies (Nyanchama et al., 2019; Gakuye et al., 2018; Chelanga et al. (2017) showed that focus strategy had a significant influence on the performance of firms in different industries. Therefore, from the coefficients the new regression model is presented as follows:

Performance of Escalator & Elevator Firms = 3.430 + .418 $\mathbf{X_1}$ + .203$\mathbf{X_2}$ -.012$\mathbf{X_3}$

Where: X_1 = Cost leadership Strategy X_2 = Differentiation Strategy X_3 = Focus Strategy

Table 2: Regression Results for the Overall Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710[a]	.505	.482	2.28154

a. Predictors: (Constant), Focus Strategy , Cost Leadership, Differentiation Strategy

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	349.926	3	116.642	22.408	.000[b]
	Residual	343.559	66	5.205		
	Total	693.486	69			

a. Dependent Variable: Performance of Escalator and Elevator Firms

b. Predictors: (Constant), Focus Strategy , Cost Leadership, Differentiation Strategy

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.430	2.900		1.183	.241
	Cost Leadership	.418	.066	.619	6.300	.000
	Differentiation Strategy	.203	.098	.212	2.068	.043
	Focus Strategy	-.012	.102	-.013	-.118	.906

a. Dependent Variable: Performance of Escalator and Elevator Firms

4.3 Moderating Linear Regression Results

Determining the moderating effect of firm size on the link between the competitive strategies and performance of Kenyan elevator and escalator companies was one of the study's goals. A moderate linear regression analysis was carried out in order to accomplish this goal. With the introduction of the moderating variable (availability of resources), the R^2 for the regression model between competitive strategy and performance of escalator and elevator firms increased from 0.505 to 0.538 (Table 3). This shows that, with the moderating variable in place, competitive strategies (cost leadership, differentiation strategy, and focus strategy) explained 53.8% of the variation in the performance of the escalator and elevator firms.

Key: MFS – Moderating Variable combined with Focus Strategy, MCS- Moderating Variable combined with Cost Leadership Strategy, MDS- Moderating Variable combined with Differentiation Strategy, M – Firm Size

Table 3: Model Summary for the Moderation Effect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734[a]	.538	.494	2.25449

a. Predictors: (Constant), MFS, MCS, Cost Leadership, Focus Strategy, Differentiation Strategy, MDS

As shown in Table 4, calculated F statistic for the overall model was 22.408. However, with the introduction of the moderating variable, the calculated F statistic decreased to 12.240 which is less than f critical. Moreover, the calculated F-value after moderation was greater than the critical Fvalue tabulated which was 2.24 at a 5% significance level, hence null hypothesis was rejected

and the alternative accepted concluding that firm size had a moderating effect on the relationship between competitive tactics and performance of the elevator and escalator firms in Kenya. Based on the data, this study concludes that there is a statistically significant moderating effect of firm size on the performance of the escalator and elevator firms in Kenya, rejecting the null hypothesis that firm size have no moderating effect on the relationship between competitive strategies and performance of the Escalator and Elevator industry in Kenya. In supporting this observation, previous studies such as that by Hernández et al. (2020) showed that firm size had a moderating influence on CSR and economic performance of firms. Additionally, another study by Mubeen et al. (2022) also confirmed that firm size had a moderating effect on product market competition and performance of Chinese firms. Within the Kenyan manufacturing industries, a study by Mutunga and Owino (2017) confirmed that firm size moderated the relationship between various micro factors and financial performance of the firms.

Table 4: ANOVA for the Moderation Effect

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	373.273	6	62.212	12.240	.000[b]
	Residual	320.213	63	5.083		
	Total	693.486	69			

a. Dependent Variable: Performance of Escalator and Elevator Firms

b. Predictors: (Constant), MFS, MCS, Cost Leadership, Focus Strategy, Differentiation Strategy, MDS

The coefficients for the moderation effect of firm size on the relationship between the competitive strategies and firm performance is presented in Table 5. As shown in model ii after moderation, it is evident that firm size had significant effect on the relationship between competitive strategies and performance of elevator and escalator firms in Kenya. In the summarized model, the unstandardized coefficients for cost leadership (X_1) combined with the interaction term (M_X_1) led to an increase from the initial 0.449 units (p=0.000) to 0.969 units (p=0.205). This means that a unit increase in cost leadership after moderation had no significant increase on the performance of escalator and elevator firms in Kenya. Similarly, the unstandardized coefficients for differentiation (X_2) combined with the interaction term (M_X_2) increased from 0.385 units (p=0.187) to 1.025 units (p=0.283). This shows that with the presence of firm size, differentiation did not contribute to any significant increase in the performance of escalator and elevator firms in Kenya.

Regarding focus strategy, the introduction of firm size contributed to the unstandardized coefficients of focus strategy (X_3) combined with the interaction term (M_X_3) changing from 0.130 units (p=0.348) to -0.954 units (p=0.614). This shows that with the introduction of firm size, a unit increase in focus strategy in any direction had no significant effect on the performance of escalator and elevator firms in the opposite direction. Overall, it was observed that with the introduction of firm size, focus strategy, differentiation strategy and cost leadership in isolation had no significant influence on firm performance. This finding has also been confirmed by a previous study by Farooq, et al. (2021) which showed that firm size (investment) did not moderate the relationship between innovation orientation and business performance. In the context of this study, firm size was assessed using operating revenue which could also be attributed as the investments made by the firms.

Table 5: Coefficients for the Moderation Effect

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.752	3.508		1.925	.059
	Cost Leadership	.449	.073	.664	6.189	.000
	Differentiation Strategy	.184	.137	.192	1.335	.187
	Focus Strategy	-.130	.137	-.138	-.945	.348
	MCS	.520	.406	.119	1.281	.205
	MDS	.841	.498	.491	1.689	.096
	MFS	-.824	.735	-.336	-1.122	.266

a. Dependent Variable: Performance of Escalator and Elevator Firms

From the moderated multiple linear regression, the following regression models are presented;

Model …….i

Firm Performance = 6.752 + .449X_1+ .184X_2 -.130X_3 +.841 M_X_2+.520M_X_1 -.824M_X_3

Where: X_1 is Cost Leadership X_2 is Differentiation Strategy X_3 is Focus Strategy

M is Moderating Variable (Firm Size)

Summarized model after moderation: Model……. ii Firm Performance = 6.752 + 0.969 X_1+1.025 X_2-0.954 X_3

5.0 Conclusion

This study concluded that competitive strategies had significant effect on the performance of escalator and elevator firms in Kenya. Specifically, cost leadership strategy has a positive and significant effect on the performance of firms in the escalator and elevator industry in Kenya. Differentiation strategy moderately affected the performance of the escalator and elevator firms in Kenya. It was also concluded that even though Focus strategy had a positive and significant correlation with the performance of Escalator and Elevator Firms in Kenya, the variable was also found to have an inverse and insignificant relationship.

The study also concludes that firm size and more specifically the operating revenue have a moderating effect on the relationship between competitive strategies and performance of escalator and elevator firms in Kenya. Notably, firm size increased the effect of differentiation strategy on performance followed by cost leadership strategy. Considering this observation, this study further concludes that as firm increase in size, their overheads increases and therefore competing on the basis of price may not be sustainable. Firms will therefore need to focus on developing unique products (differentiation) by applying approaches like innovation, smart pricing, levering on proprietary technologies, and enhancing brand equity.

6.0 Recommendations

In regards to the cost leadership variable, this study recommends that firms in the escalator and elevator industry should give more pre-eminence to the economies of scale, vertical integration, outsourcing, and streamlined process to enhance their productivity. Differentiation strategy being

second in importance, the study recommends that the management should pay attention to aspects like brand image, proprietary technology, higher value products and services.

A positive moderating effect of firm size on the ability of firms to apply cost leadership and differentiation strategies was established. Competitive Authority of Kenya (CAK) may need to observe the nature of competition amongst the firms to create a level playing field. Additionally, Directorate of Occupational, Health and Safety Services (DOSHS), Kenya Bureau of Standards (KeBS), Energy and Petroleum Regulatory Authority (EPRA) and National Construction Authority (NCA) need to examine whether customers are getting value for money or quality is being compromised in pursuit of low pricing.

In addition to competitive strategies, policy makers can contribute to improving firm performance by fostering a supportive regulatory environment. Clear and consistent regulations can provide a level playing field for escalator and elevator firms, encouraging fair competition and innovation. Moreover, policies can also create opportunities for more foreign firms to be established within the industry which currently occupy only 16% of the firms that participated in the study. This will provide the much-required foreign direct investment in the country.

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