RELATIONSHIP BETWEEN PRICING STRATEGIES AND VALUE PROPOSITION ENVIRONMENT BY KENYA POWER AND LIGHTING COMPANY PLC IN KENYA.

Sheila Karimi Nyaga1, Priscilla Muhoro 2, Caroline Igoki Mwangi 3, Dennis Otieno 4

1 PhD Student, 2, 3, 4 Institutional Affiliation, Business Administration, School of Business and Economics, Murang’a University of Technology, P.O.Box 75 10200 Murang’a

DOI: https://doi.org/10.56293/IJMSSSR.2024.5115

Abstract: This research aimed to investigate the relationship between pricing strategies and the value proposition environment within Kenya Power & Lighting Company PLC. Specifically, it seeks to determine the impact of pricing strategies on the value proposition environment, while also exploring the moderating role of Michael Porter's Five Forces. The target population consists of households and Small Medium Enterprises (SMEs) in Murang’a, Embu, and Nairobi Counties, which collectively represent a significant portion of electricity consumers in Kenya. The approximate population of these counties is 313,868 for Murang’a, 1,573,402 for Nairobi, and 184,002 for Embu. The study employed a proportionate sampling method, with percentages for various industries randomly chosen after careful consideration. The Krejcie & Morgan table was utilized to ensure representative sampling. Questionnaires were distributed concurrently across the three counties to ensure data collection consistency. Despite logistical challenges, 259 questionnaires were collected out of the total 384 distributed. Analysis revealed strong positive correlations between pricing strategies (r=0.327), and Michael Porter's Five Forces (r=0.657) with the value proposition environment. These correlations were statistically significant, as indicated by p-values ranging from 0.000 to 0.05. Regression analyses further supported the significance of these relationships. Pricing strategies explained 10.7% of the variation. The study underscores the critical role of strategic decision-making in shaping the value proposition environment within Kenya Power & Lighting Company PLC. It highlights the need for comprehensive strategies that consider technological aspects to enhance consumer value and promote sustainable growth in the electricity sector. The study recommends embracing pricing strategies for competitiveness, leveraging Porter's Five Forces framework for strategic insights, and fostering a culture of continuous monitoring and adaptation for sustained success.

Keywords: Electricity, Cost, Pricing, Strategies, Monopoly

I. BACKGROUND OF THE STUDY

Pricing is a significant component of the overall marketing strategy of a firm. Your marketing objectives and tactics, as well as your profitability and value proposition, are all impacted by the pricing that you choose for the items and services you provide. Pricing has to be determined in a way that emphasizes the value that it provides to the client. The cost of a product or service absolutely has to be related to its worth in some way in order to be considered reasonable. In a study by York, Adua, & Clark, (2022), the researchers studied the rebound effect of moving beyond empirical fuels. The study utilized a cross-sectional study, to evaluate how value proposition affects pricing strategies in a scenario where the component sold is historically in demand, and an essential aspect of employee and organizational culture. Pricing is thus seen to strongly contradict value in cases where the underlying concern is an issue such as climate change. In research by Nisar and Prabhakar (2017) however, used an ex-post facto research approach to evaluate the role of pricing in determining demand for market commodities. In contrasting to York, Adua & Clark (2022), Mohd Satar, Dastane, & Ma’arif (2019) established that indeed, it is possible for the relationship between pricing and value proposition to be positively correlated, and similarly inverse in the correlation.

The government of Kenya oversees and controls the energy industry in the country via a variety of regulatory mechanisms. One of options is through making use of the Energy Regulatory Commission (ERC), which was
given this name by the government. According to Hvelplund and Djrup (2019), this is the body that is tasked with making sure that the pricing of goods and the quality of services fall within acceptable parameters for the average person. The Kenyan government also controls the use and distribution of electricity via the employment of anti-trust legislation such as the Energy Act (2019), which stipulates the usage of power sources such as nuclear and geothermal energy. However, the existence of these regulatory systems simply makes it illegal for independent and private businesses to distribute electricity from a single source. The issue at hand is the collection of wind power for the purpose of putting it to commercial use (Constantinides & Slavova, 2020).

II. PROBLEM STATEMENT

The Kenyan electricity sector, monopolized by government entities, has led to a perceived loss of value for consumers due to the disparity between payments and the quality of service provided. These entities, tasked with producing, distributing, and retailing electricity, seem to prioritize minimum service delivery, resulting in lower standards and an inability to meet the growing power demand. Despite calls for competitive electricity supply and distribution services, Kenya Power & Lighting Company remains the sole provider, struggling to meet increasing demand. This monopoly makes it challenging for new entrants. A functional value proposition in this sector requires a customer-centric approach, which is hindered by the existing monopolies. While research has explored competitive advantage strategies used by Kenya Electricity Generating Company PLC, further research is needed on private sector power generation and the overall electricity production industry in Kenya. Despite the majority of Kenya's electricity supply being renewable, the cost of electricity remains high, impacting the quality of life for families due to the price inelasticity of the electric bill. Addressing these challenges is crucial for improving the value proposition and ensuring affordable, sustainable power for the population.

III. RESEARCH OBJECTIVE

To establish the relationship between pricing strategies and value proposition environment by Kenya Power and Lighting Company PLC in Kenya.

IV. LITERATURE REVIEW

Pricing Strategies and Value Proposition Environment

The use of energy in Kenya's homes is the primary driver of the country's electrical industry. In point of fact, there is a rise in consumption when there is an increase in the number of homes that are linked to the electricity grid. Consumption on a local scale is also dependent on factors such as the accessibility of alternative forms of power generation, such as wind and geothermal. According to Salinger et al. 2020, even if the majority of today's electricity is generated by hydrogenation, the power balance is expected to be impacted in the not-too-distant future by an increase in both the competence of geothermal generators and the number of sites where geothermal energy is produced. In addition, investigation of the subsurface led to the discovery of coal seams; the exploitation of these seams would have a substantial impact on the existing composition of the electrical mix.

Kenya is a net importer of oil and gas, which are the other alternatives to electricity. Despite the fact that many rounds of exploration have been conducted over the last fifty years in the hopes of discovering hydrocarbons, Kenya’s economy is not yet one that produces oil and gas. The only oil structures in the nation are a refinery in Mombasa with a capacity of 70,000 barrels per day and a pipeline that runs from Mombasa to Nairobi and then on to the south-western part of the country. As a result of the recent oil discoveries, a number of other potential oil amenity projects have come under consideration. Because of this, customers in various sections of the nation are now able to enjoy the same level of connection that is available in Nairobi and other major cities throughout the country (Osano & Koine, 2016).

According to Mohd Satar, Dastane, & Ma’arif (2019), businesses really need to have a long-term pricing plan that not only takes into consideration the many aspects of the economy but also the requirements of their customers. In the study, Mohd Satar, Dastane, & Ma’arif (2019) reviewed a case study on 11 Street, a Malaysian company. Pricing a product or service in a manner that is mostly determined by the consumer's estimation of its worth is an example of the value-based pricing technique. Value-based pricing is a client-focused pricing strategy that means
businesses set their prices depending on how much they feel a product is worth to the consumer. Pricing based on value, as opposed to pricing that takes into account the expenses incurred in producing a product or service, is referred to as cost-plus pricing (Mohd Satar, Dastane, & Ma’arif, 2019). Companies that focus primarily on the sale of commoditized goods have a more difficult time capitalizing on the value-based pricing strategy than those that provide distinctive or very desirable features or services of their own.

According to Nisar and Prabhakar (2017), maintaining competitive pricing is a highly crucial business strategy for both large and small businesses, particularly those involved in online commerce. This is in contrast to Mohd Satar, Dastane, & Ma’arif (2019) who argues that the competitiveness stems from the quality of the product, and not the price set by the marketers. In order to account for the price model of the products, a pricing strategy takes into consideration a range of factors, such as the actions taken by competitors, the circumstances of the market, the trends seen among consumers, and other variable expenditures. Pricing strategies include competition-based pricing, cost-plus pricing, dynamic pricing, penetration pricing, price skimming, and value pricing. Other pricing tactics include price skimming and value pricing. Nisar and Prabhakar (2017) also determined that when determining a price for their own products based on the level of competition in the market, companies look at the prices of comparable products offered by other businesses. This approach of pricing places a significant emphasis on market data rather than maybe considering the costs of manufacturing or the value of the thing being priced. It is an approach that is not official, but it allows one to have total control over one's position in the market.

**Conceptual Framework**

The provided conceptual framework encompasses pricing strategies, Porter's Five Forces, and the value proposition, which are applied in the context of the Kenyan electricity sector. Pricing strategies include, Cost-plus pricing, Price Skimming and Penetration Pricing. These strategies are essential for staying abreast of pricing and cost of electricity, improving efficiency, and developing new solutions to meet customer needs. Porter's Five Forces - supplier effect, buyer effect, new entrants, substitutes, and rivalry among competitors - provide a comprehensive analysis of the competitive dynamics in the sector. This framework sheds light on the market conditions and strategic decisions that companies must consider to maintain competitiveness. The value proposition, encompassing cost value, customer satisfaction, and continuous improvement, is integral in attracting and retaining customers. In the monopolistic Kenyan electricity sector, these elements are crucial in delivering value to consumers despite the challenges posed by the monopoly.

The Kenyan government's Feed-in Tariffs (FiTs) policy, implemented to encourage private investment in renewable energy, plays a significant role. By providing favorable tariff structures and assured Power Purchase Agreements (PPAs), it fosters a mutually beneficial relationship between investors and the Kenya Power & Lighting Company. However, despite these efforts, the monopoly in the sector remains a significant barrier to entry, thereby hindering competition and the delivery of a strong value proposition to consumers.
V. METHODOLOGY

Research design

This study adopted a mixed-method research design. The approach is pragmatic and uses both descriptive/qualitative and quantitative data. Scholars maintain that pragmatism provides the philosophical foundation for social science research, in general, and mixed-methods research, in particular (Morgan, 2014a). Daniel, Kumar, and Omar (2018) describe quantitative research design as a blueprint for data collection, measurement and analysis. They further suggest that the plan and structure of the investigation are used to obtain answers to research questions. It constitutes the overall structure of the research. A qualitative approach was used. According to Kumar (2018), the qualitative study describes characteristics associated with a subject population, which includes asking questions such as who, when, what, and how. Descriptive designs show profiles of persons, events or situations (Daniel et al., 2018). He further states that descriptive design could be used to get information regarding the status of a given situation. Qualitative and quantitative analysis was selected for this study because they help describe the problem under investigation and the relationship between the variables.

The target population consists of households and Small Medium Enterprises (SMEs) in Murang’a, Embu, and Nairobi Counties, which collectively represent a significant portion of electricity consumers in Kenya. The approximate population of these counties is 313,868 for Murang’a, 1,573,402 for Nairobi, and 184,002 for Embu. The study employed a disproportionate sampling method, with percentages for various industries randomly chosen after careful consideration. The Krejcie & Morgan table was utilized to ensure representative sampling. Questionnaires were distributed concurrently across the three counties to ensure data collection consistency. Despite logistical challenges, 259 questionnaires were collected out of the total 384 distributed.

Data Collection and Analysis

The researcher collected data through one primary method: questionnaires. The questionnaires were carefully designed with simple questions to be answered by respondents. The questionnaires shall include online surveys. Questionnaires were offered to the relevant sources to be filled, and responses were mailed to the researcher. The questionnaire had open-ended and closed questions to give objectivity in determining or reinforcing the claims the researcher had already coined earlier. Data analysis formed a critical part of the study. Analysing the information was a step towards correctly inferring meaning from the data. Descriptive and inferential statistics were computed (Denis, 2018). Descriptive analysis involved measures of central tendency (mean, mode and median) and dispersion (variance, standard deviation). Inferential statistics included statistical tests, ANOVA and regression analyses.

VI. RESULTS AND FINDINGS

The study sought to determine the relationship between technological strategies and value proposition environments, focusing on Kenya Power & Lighting Company PLC in Murang’a, Embu and Nairobi Counties. Various constraints on pricing strategies were analysed, and the findings were summarised in the table below.

Table 1: Descriptive Statistics of Pricing Strategies and Value Proposition Environment

<table>
<thead>
<tr>
<th>Cost-Plus Pricing</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeliness and accuracy in billing are critical in building customer confidence,</td>
<td>4%</td>
<td>10%</td>
<td>14%</td>
<td>41%</td>
<td>31%</td>
<td>4.073</td>
<td>0.893</td>
</tr>
<tr>
<td>winning their trust, meeting their expectations and key in enhancing their</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfaction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural electrification projects increase the cost of</td>
<td>9%</td>
<td>15%</td>
<td>19%</td>
<td>30%</td>
<td>27%</td>
<td>4.023</td>
<td>0.877</td>
</tr>
<tr>
<td>electricity to the consumer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The prepaid metering system has enhanced consumer control of electricity</td>
<td>4%</td>
<td>0%</td>
<td>10%</td>
<td>57%</td>
<td>29%</td>
<td>4.062</td>
<td>0.878</td>
</tr>
<tr>
<td>thus improving customer satisfaction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Price Skimming
Changes in the economy have affected the setting of electricity tariffs.

Penetration Pricing
Under the time of use tariff, customers are given a 50 percent discount on the applicable energy charge rate after attaining defined consumption thresholds.

The encouragement of lower connection charges has increased customers.

The prepaid service has continued to attract customers as they are able to manage their electricity consumption.

The respondents' collective opinions highlighted several key aspects regarding electricity services. Foremost, they emphasized the significant value of timeliness and accuracy in billing, recognizing its pivotal role in fostering customer confidence, trust, and satisfaction (Mean=4.073, SD=0.893). Additionally, the implementation of prepaid metering systems was praised for enhancing consumer control over electricity usage, thereby boosting satisfaction levels (Mean=4.062, SD=0.878). Despite acknowledging the benefits of rural electrification projects, respondents noted their impact on increasing electricity costs for consumers (Mean=4.023, SD=0.925). Moreover, they recognized the influence of economic changes on electricity tariff setting (Mean=4.035, SD=0.925).

However, opinions varied regarding the effectiveness of the time-of-use tariff, with some indicating dissatisfaction with the associated discount structure (Mean=3.888, SD=1.034). Conversely, lower connection charges were seen as a positive incentive, contributing to increased customer engagement (Mean=3.68, SD=1.070). Overall, the collective responses reflected a generally positive sentiment, with an overall mean rating of 4.022 and a standard deviation of 0.911. The perceptions and opinions of electricity consumers play a pivotal role in shaping service delivery strategies and policies in the energy sector. Understanding these perceptions can help electricity providers tailor their services to meet consumer expectations and enhance overall satisfaction.

In a recent study, respondents expressed their views on various aspects of electricity services, including billing accuracy, rural electrification projects, prepaid metering systems, tariff setting, and customer incentives. These perceptions provide valuable insights into consumer preferences and priorities, shedding light on areas for improvement and innovation in the energy sector.

Table 2: Correlation analysis

<table>
<thead>
<tr>
<th>Value Proposition</th>
<th>Pearson Correlation</th>
<th>Pricing Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Proposition</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td>Pricing Strategies</td>
<td>.327**</td>
<td>.226**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.042</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>259</td>
<td>259</td>
</tr>
</tbody>
</table>

The correlation coefficient of 0.327** between pricing strategies and the value proposition environment suggests a statistically significant relationship between pricing strategies and value proposition (Wu et al., 2021). While statistically significant, the relationship between pricing strategies and the value proposition environment appears to be less pronounced. Nonetheless, the positive correlation implies that as Kenya Power and Lighting Company
PLC adjust its pricing strategies, there is a corresponding but less substantial impact on the value proposition environment in the electricity sector.

Table 3: Regression Model Results on pricing strategy

Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.327a</td>
<td>.107</td>
<td>.104</td>
<td>.94458</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Pricing Strategies

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>27.508</td>
<td>30.830</td>
<td>.000b</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>257</td>
<td>.892</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>258</td>
<td>256.811</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Value Proposition Environment
b. Predictors: (Constant), Pricing Strategies

Coefficients*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>T</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.661</td>
<td>.243</td>
<td>10.928</td>
</tr>
<tr>
<td>PricingStrategies</td>
<td>.346</td>
<td>.062</td>
<td>.327</td>
<td>5.552</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Value Proposition Environment

Further, in order to determine whether Pricing Strategies was a significant predictor of Value Proposition Environment in Kenya Power and Lighting Company PLC in Kenya, Analysis of Variance (ANOVA) was computed and the results are as shown. The table provides evidence that value proposition environment in Kenya Power and Lighting Company PLC in Kenya, was significantly predicted by Pricing Strategies, as proven by $F (1, 258) = 30.830, p <.05$. Therefore, the null hypothesis that 'there is no statistically significant relationship between pricing strategies and value proposition environment in Kenya Power and Lighting Company PLC in Kenya.' was rejected.

The regression coefficients were also computed. The findings showed that the coefficient for pricing strategies was 0.346. The model can be presented as follows: $Y=2.661+0.346X1+\epsilon$

The results indicated that a unit increase in pricing strategies contributed to 0.346 increase in the and value proposition environment in Kenya Power and Lighting Company PLC in Kenya. The p-value was found to be 0.000<0.05 which showed a significant relationship between pricing strategies and value proposition environment in Kenya Power and Lighting Company PLC in Kenya. Hence, the study rejected $H_0$ There is no statistically significant relationship between pricing strategies and value proposition environment in Kenya Power and Lighting Company PLC in Kenya. We, therefore, conclude that pricing strategies have a statistically significant

VII. DISCUSSION OF FINDINGS

The study conducted on the Kenyan electricity distribution sector revealed that pricing factors exert the greatest influence on the value proposition environment. This finding resonates with Mojahan's (2018) argument, which highlights various cost factors that significantly impact government services, including tax rates, currency fluctuations, inflation, labor costs, demand and supply dynamics, regulatory frameworks, government activities, and economic recessions. These factors collectively pose significant challenges to the value proposition environment within Kenya Power. Indeed, the complex interplay of cost factors presents a considerable threat to the stability and competitiveness of the electricity distribution sector in Kenya. High costs associated with operating in the market can deter potential entrants, thereby reinforcing the monopoly position of established players like Kenya Power. This monopoly status not only enables the utility to negotiate favorable terms with the government but also limits consumer choice and hampers market efficiency.

Cost considerations thus warranted thorough investigation to discern their overall impact on the value proposition environment. The study revealed that costs introduce underlying complexities that permeate every aspect of the value proposition landscape. Economic uncertainties, political dynamics, and regulatory interventions further exacerbate pricing shifts, contributing to a destabilized market environment within the electricity sector. The uncertain economic climate in Kenya underscores the volatility and unpredictability of pricing dynamics within the electricity market. Fluctuations in currency rates, inflationary pressures, and labor costs all contribute to the overall cost structure faced by electricity utilities. These factors not only impact operational expenses but also influence tariff rates imposed on consumers, thereby shaping the perceived value proposition.

VIII. CONCLUSION OF THE STUDY

In establishing a clear value proposition environment, there is need for Kenya Power Company to practice professionalism that will guarantee quality value to the customers. The monopolization of the organization otherwise needs to be reviewed, and there be a clear strategy to ensure competitiveness in the provision of electricity, and a steady supply to all Kenyans whenever they need it. It is such clear expectations that make monopolies less of an important phenomenon in the country. The cost aspect of electricity in Kenya has some economic connotation to it. The most significant threat to value proposition in the Kenyan electricity sector is the issue of economic stability. Stabilizing the Kenyan economy is a government prerogative. Regardless, it is important for the Kenyan public to appreciate the different issues related to demand and supply that affect the cost of electricity as well. These factors are necessary in determining the practical implications of cost hikes in the Kenyan energy sector. Electricity tariffs in Kenya often mirror the economic conditions in the country. There are different concerns and suggestions on how to improve the electricity costs or even to stabilize the same. Regardless, the economic concerns in the country often make it difficult to stabilize the said costs.

IX. RECOMMENDATIONS OF THE STUDY

The determination of electricity costs in Kenya by the EPRA (energy and petroleum regulation agency) should be done in a manner that is consistent with demand and supply concerns in the country. Rosenow & Eyre (2022) argues that prices must be reviewed upwards, when necessary, but in a similar light, be reviewed downwards where economic factors allow for the same. The energy costs in the country are reviewed regularly. Nonetheless, these costs often tend to be geared towards the economic reality of the country with little consideration for subsidies. From the study, it was clear that respondents favored a situation where the government would make the cost of power and other energy needs more favorable to members of the public.

X. REFERENCES