

## **An Assessment of the Factors Influencing Consumers' Choice of Petrol Filling Stations in Tanzania**

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### **Abstract**

*The purpose of this study was to examine the factors influencing consumers' choice of petrol filling stations. A quantitative study from conveniently sampled 150 drivers in Dar es Salaam Tanzania was included in the study. A multiple regression analysis was used to analyze the data and hence determine the effect of independent variables on the dependent variable. The findings provide evidence that service quality, fuel quality, price, and brand were statistically significant and positively influence consumers' choice of petrol filling stations. However, the location was statistically not significant in influencing consumers' choice of petrol filling stations in Tanzania. The study findings provide a chance for the policymakers and Oil Marketing Companies (OMCs) to consider each factor and see how they can take advantage of increasing their customer base and maximize the return on their investment in the retail petroleum sector in Tanzania.*

**Keywords:** *Consumer Choice, Brand, Service Quality, Fuel Quality, Location, and Price*

### **Introduction**

Consumers are faced with consumption-related choices throughout their entire lives. Choice implies access or the ability to follow any of the available courses of actions without hindrance (Mwenda & Oloko, 2016). Some purchase choices are frequent and rather simple, while others are more infrequent, and complex, and demand more effort in terms of information search, funds, and time. Consumers make decisions essentially by allocating the available scarce funds across all imaginable goods and services to satisfy their current and future needs. At the time of purchase, consumers may have many factors which guide the purchase of certain products (Alvi, 2016). The case is made against the background that, in competitive market environments with many players having similar offerings and serving the same customers, it becomes very difficult for companies to attract and retain customers. A customer may have favourable preferences and attitudes toward a product but this does not inevitably translate into a purchase. A situation like this prompts researchers to consider and assess factors that could profoundly influence the ultimate purchase of a particular product and from a particular store outlet.

The liberalization of the petroleum sector in Tanzania has witnessed boosted investments by local and international Oil Marketing Companies (OMCs). This has led to growing petrol filling stations (PFS) in the country. As of 2014, there were 1181 licensed petrol filling stations in Tanzania and they have now increased to 2,032 in 2022 (EWURA, 2022). Despite fuel prices being regulated in Tanzania, competition is still intensifying. It is widely

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acknowledged worldwide that the oil and gas industry is highly competitive and rivalry extreme. This has led to OMCs providing an assortment of services consumers can choose from. These Oil Marketing Companies (OMCs) are interested in knowing consumers' choices and attitudes toward their products since they influence their purchase and consumption intentions.

It is severally known that consumers' preferences consider the why, how, what, where, how often, and under what conditions the buying is made (Schiffman & Kanuk, 1997). The researchers add that an understanding of consumer behavior is essential in marketing planning and that consumer actions are one of the most important keys to successful marketing. The customer is regarded as a black box as one cannot see what is going on in the customer's mind and why he responds to the marketing strategies and management, the response may be a decision to purchase or not to purchase (Srinivasan, 2015).

Despite the significant growth of the petroleum sector specifically in petrol filling stations across different regions of the world, there are relatively few studies that have focused on factors influencing consumers' choice of petrol filling stations. Also, some of the studies (e.g. Mwenda & Oloko, 2016; Sullivan, 2015; Alvi, et al., 2016) which have been conducted have revealed differing results. For instance, the study by Mwenda, et al. (2016) which was conducted in Kenya concluded that fuel prices do not influence consumers' choice of petrol filling station. These findings corroborate the findings by Alvi, et al. (2016) who also found that location, quality, and rewards do not have a significant impact on consumers' choice of petrol filling stations in India. However, the findings are in contrast to Kwame et al (2019) and StudyMoose (2019) who found a strong and positive relationship between service quality and customer choice. StudyMoose (2019) also found that location is one of the most important factors when deciding on the petrol stations to choose from. Additionally, studies by Sullivan (2015) in Australia and Srinivasan (2015) in India likewise revealed that price influences the consumer choice of petrol filling stations.

Furthermore, even with the increasing number of petrol filling stations in Tanzania, no study has been done related to consumers' choice of petrol stations. Hence a need to analyze the factors that influence consumers' choice of petrol filling stations will help local and international investors to understand various demand-specific characteristics of consumers so they can improve the quality of their services as well as make informed investment decisions like where to build or lease petrol filling stations and what marketing strategies to adapt to maximize the return on their investment. Thus, this study intended to examine factors that influence consumers' choice of petrol filling stations in the Tanzanian context to fill this knowledge lacuna.

## **Literature review**

### ***Theory of Buyer Behavior***

This Theory of Buyer Behavior was developed by Howard and Sheth (1973). The theory provides a sophisticated integration of the various social, psychological, and marketing influences on consumer choice into a clear sequence of information processing (Foxall, 1993). The author's interest was to create a broad model that could be used to analyze a wide range of purchasing scenarios, and as such the term 'buyer' was preferred over 'consumer' to not

exclude commercial purchases (Loudon & Bitta, 1993). According to the Buyer Behavior theory, the input variables are the environmental stimuli that the consumer is subjected to and are communicated from a variety of sources. Significant stimuli are the actual elements of products such as brand, quality, services available, price, distinctive, availability, and others that the buyer confronts (Loudon & Bitta, 1993). On the other hand, symbolic stimuli refer to the representations of products and brands as constructed by marketers through advertising and act on the consumer indirectly such as quality, price, distinctive, availability, and service (Foxall, 1993). Further, social stimuli include the influence of family and other peer and reference groups. The influence of such stimuli is internalized by the consumers before they affect the decision process of buying certain products.

Loudon and Bitta (1993) add that consumer decision-making differs according to the strength of the attitude toward the available brands; this is largely governed by the consumer's knowledge and familiarity with the product class. In situations where the consumers do not have strong attitudes, they are said to engage in Extended Problem Solving (EPS), and actively seek information to reduce brand ambiguity. In such situations, the consumer will also undertake prolonged deliberation before deciding which product to purchase or indeed, whether to make any purchase. As the product group becomes more familiar, the processes will be undertaken less conscientiously as the consumer undertakes Limited Problem Solving (LPS) and eventually Routine Problem Solving (RPS) (Foxall, 1993). Figure 1 demonstrates the Buyer Behavior Theory.

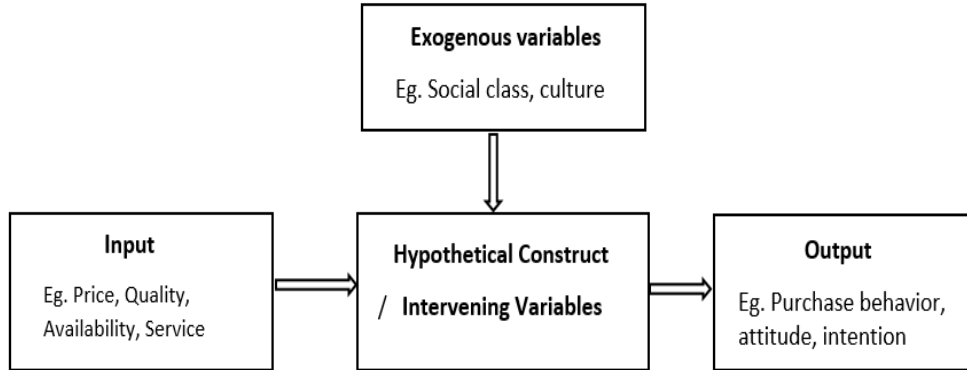


Figure 1: Theory of Buyer Behavior

Source: Loudon & Bitta (1993)

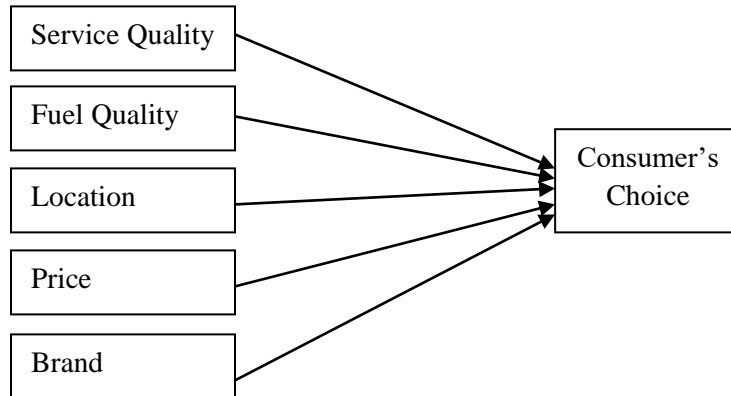
Like other theories, consumer buying behavior theory has suffered several criticisms. One of the authors who criticized this theory is Neman (1972). Neman criticized this model by suggesting that the model is simply the result of a Baconian induction of the influences on the consumer. This critique appears to ignore, however, the complex linkages that, Howard and Sheth (1973) have proposed between the discrete variables. There is, however, widespread questioning of the model's validity due to the lack of empirical work, employing 'scientific' methods, examining the organization of the model, and the inclusion of individual constructs (Haines 1970; Hunt & Pappas, 1972; Neman, 1972).

### Conceptual framework of the study

A conceptual framework is the basic structure of research that contains the basic concepts and ideas which a researcher intends to investigate (Krishnaswami & Ranganatham, 2007).

#### Predictor Variables

#### Outcome Variable



**Figure 2: Conceptual Framework**

### Hypothesis development

Service quality is one of the key marketing concepts which are particularly difficult to define measure, control, and communicate. Dale (2006), contends that service quality can be variously defined but essentially, it is to do with meeting customer needs and requirements and how well the service level delivered matches customer expectations. Service quality not only entices new customers away from competitive firms but also induces customers' repurchase intentions (Venetis & Ghauri, 2002; Wantara, 2015). Previous studies have indicated that service quality has been increasingly recognized as a critical factor in the success of any business (Parasuraman et al., 1988). In the petrol filling stations business, service quality has been considered one of the influential factors for attracting and retaining customers. Some studies have been conducted on petrol filling stations area such as Masinde (2008) identified service quality as one of the key influencing factors in consumers' decision to visit and refill at a particular petrol filling station. Therefore, to test the relationship between service quality and consumer choice of petrol filling stations in Tanzania, the following hypothesis was established:

**H<sub>1</sub>:** *Service quality has a positive influence on consumers' choice of petrol filling station.*

### Fuel quality

Quality has been defined in four categories, namely excellence, value for money, conformity to requirements or standards, and meeting of customer's requirements (Reeves & Bednar, 1994). Fuel quality has a direct link to the performance and life of vehicles hence most drivers consider fuel quality as one of the important factors before they drive into the petrol filling station. Some studies such as Saini and Matinise (2013), and Bisht and Rai (2015) found that fuel quality is one of the most influential factors in consumers' choice of petrol filling station.

Therefore, to investigate the relationship between fuel quality and consumer choice of petrol filling stations in Tanzania, the following was hypothesized thus:

*H<sub>2</sub>: Fuel quality has a positive influence on consumers' choice of petrol filling station.*

### **Location**

In the context of this study, a location is a fixed place where the petrol filling station has been constructed. The location of the petrol filling station is one of the factors that have been considered by the majority of the researchers (e.g. Aslani & Alesheik, 2011; Inderadi & Setiadi, 2020) to be a strategic factor and marketing strategy that influences consumers' choice. (Inderadi & Setiadi, 2020). Most of the investors in the petrol filling station business consider location as a critical factor before leasing or constructing a petrol filling station. Various studies such as Bisht and Rai (2015) and Alvi et al., (2016) conducted in India and Pakistan respectively have concluded that the location of petrol stations has a significant influence on consumers' choice of petrol filling station. In Tanzania, most of the petrol filling stations are concentrated in the urban area or big cities indicating that it plays important role in the sales performance of petrol filling stations in Tanzania. Based on the aforementioned review, it is hypothesized thus:

*H<sub>3</sub>: Location of petrol station has a positive influence on consumer's choice of petrol filling station.*

### **Price**

Price is a key component of the marketing mix and represents the amount charged or the value consumer exchanges for a product or service (Kotler & Armstrong, 2010). On the other hand, price is what a firm receives for selling its goods or services. Price is an important influence on consumer choice (Lichtenstein et al., 1993). In the context of petrol filling stations in Tanzania, the fuel price is regulated by EWURA on monthly basis. EWURA announces the cap price to be applied in the different regions of the country for petroleum products. Some of the petrol stations especially local OMCs tend to modify the price to attract and retain customers who are price sensitive. Therefore, to test the relationship between pump price and consumer choice of petrol filling stations in Tanzania, the following hypothesis was established:

*H<sub>4</sub>: Price has a negative influence on consumers' choice of petrol filling station.*

### **Brand**

A brand is an identifying symbol, mark, logo, name, word, and/or sentence that companies use to distinguish their product from others. A combination of one or more of those elements can be utilized to create a brand identity. The image of a brand is the set of beliefs a consumer holds about a particular brand (Kotler & Armstrong, 2010). Consumer perception of the brand is an important aspect of the marketing mix (Gabor & Contiu, 2012). Jin and Weber (2013) proposed that brands served primarily as a way for customers to identify and recognize goods and their manufacturers. An organization's brand image can be as important as the goods or

services it produces. A strong brand image is a powerful asset. A recognized and trusted brand identity makes people confident that the organization is dependable. Developing a corporate brand is important because a positive brand image will give consumers, and other interested stakeholders, confidence about the full range of products and activities associated with a particular company (Isik &Yasar, 2015). In the Petrol filling stations market in Tanzania, there are several local and international brands. The international brands are Total, Puma, etc. while there are several local brands such as ATN, Esther, Victoria, etc. Consumers in the Tanzanian market are exposed to various petrol filling station brand options to choose from. Therefore, it is important to study the effect of the brand of the company in influencing consumers' choice of petrol filling stations in Tanzania. With the support of previous theoretical reviews and empirical findings, the following hypothesis is stated:

*H<sub>5</sub>: Brand has a positive influence on consumers' choice of petrol filling station.*

### **Consumer's choice**

Consumer choice refers to the decisions that consumers make about products and services. Ge et al. (2015) proposed that consumers often make choices in settings where some alternatives are known and additional alternatives can be unveiled through search. When choosing from a set of alternatives, how each of these was discovered should be irrelevant from a normative standpoint. Consumers must often decide between choosing among a set of previously discovered alternatives and searching to discover additional alternatives before making a choice. Fuel consumers in Tanzania have various options to choose from among the available petrol filling stations. As of 2016, there were about 53 licensed Oil marketing companies (OMCs) operating more than 1456 petrol filling stations in Tanzania (EWURA, 2020). Therefore, it is important to understand the consumer's choice for a particular petrol filling station in Tanzania and the influencing factors.

### **Methodology**

A self-administered questionnaire was developed as a data collection tool for this study. The researcher developed a structured questionnaire by modifying from Cheng and Yeung (2010) and Pikkarainen, et al., (2004). The questionnaire was then administered to vehicle drivers who constituted the unit of analysis. The unit of analysis is the selected sample to be used in the study (Jonker & Pennink, 2010). This study was guided by positivism philosophy using a deductive research approach which according to Krishnaswami and Ranganatham (2007) involves developing hypotheses based on the existing theories and empirical pieces of literature. Thus, the study lends itself to an explanatory study design that is intended to identify causal relationships between predictor and outcome variables. Based on the nature of the problem and objectives, a survey method was adopted as it offers a systematic method of acquiring information on the topic from a large population in a short time (Creswell, 2014). Dar es Salaam City, one of the regions with the most (13.7%) petrol stations in the country was selected to be the study area. The sample for this study consisted of 150 vehicle drivers who purchase petroleum fuel in Dar es Salaam City. In this study, a non-probabilistic convenience sampling method was deployed where members were selected based on their availability and ease of access (Kothari, 2004). Drivers were approached during or immediately after fuelling and were asked to fill in the administered questionnaire.

### Measurement of variables and data analysis

For this study, variables were measured on a 5-point Likert Scale ranging from 1-Strongly disagree, 2-Disagree, 3=Neutral, 4=Agree to 5-Strongly agree. The measurement was established in the questionnaires to capture the relevance of quantifiable data. Data analysis is the process of collecting, modeling, and analyzing data to extract insights that support decision-making (Calzon, 2022). In this study, data were collected, organized, and analyzed and meaning was developed. The study used SPSS by employing descriptive and multiple regression analysis techniques.

### Validity and Reliability tests

To ensure validity, several measures were employed. First, the questionnaires were compared and constructed by modifying various questionnaires from past studies and models by Cheng et al. (2010), and Pikkarainen et al., (2004). Thereafter questions were reviewed by the key experts in the field for clarity, and brevity, and to avoid ambiguity. Reliability testing is aimed at determining the consistency and stability of instruments with the measured constructs (Sekaran, 2003). Margono (2015) proposes that a data collection instrument is considered reliable if it measures the same phenomenon repetitively, and yields fairly consistent results. The degree of reliability of this study was determined through the use of the Cronbach Alpha coefficient. The coefficient ranges from 0 to 1 with a coefficient of 0.7 and above suggesting a high level of internal reliability. Table 1 demonstrates the reliability of the measurement scales.

**Table 1: Data Reliability**

Variable	Number of Items	Cronbach's Alpha
Service Quality	10	0.850
Fuel Quality	2	0.821
Location	5	0.732
Price	3	0.874
Brand	6	0.974
Consumer's Choice	10	0.811

### Analysis and Results

#### *Sample characteristics*

The profile of the respondents was presented in Table 2 with the use of SPSS. The table showed that 40.7 percent of the respondents were business people. Most respondents were males (84%) and fell in the age group between 21-30 years old. Over half of the respondents had secondary education (52.7%). Respondents' driving status indicated that 38 percent were commercial drivers. 31.3 percent were personal drivers while 30.7 percent were motorcycle drivers. Therefore, the statistics point out that, the majority of the respondents did not own the cars they were driving.

**Table 2: Demographic Profile of the Respondents**

Demographics	Attribute	Frequency (n)	Percent (%)
<i>Occupation</i>	Students	2	1.3
	Professionals	26	17.3
	Farmers	9	6
	Business Persons	61	40.7

	Entrepreneurs	23	15.3
<i>Sex</i>	Male	126	84
	Female	24	16
<i>Age</i>	18- 20 years	5	3.3
	21 - 30 years	79	52.7
	31 - 40 years	51	34
<i>Education</i>	Primary Education	27	18
	Secondary Education	79	52.7
	College Diploma	21	14
	University Degree	21	14
	Postgraduate Degree	1	0.7
<i>Driving Status</i>	Personal Driver	47	31.3
	Commercial Driver	57	38
<i>Ownership</i>	Self-Owned	65	43.3
	Company Owned	19	12.7
	Employed	66	44

### Petrol filling station and the choice

The respondents were asked to indicate the petrol stations they used to buy fuel from most often. The results are indicated in Table 3. The table revealed that the top three leading petrol stations are Puma Filling Stations (32.7%) followed by Victoria (16%) and Total Filling stations (14.7%). The rest constitute the remaining 36.6 percent.

**Table 3: Petrol Filling Stations**

Petrol Station	Frequency(n)	Percent (%)
GBP	8	5.3
Lake Oil	11	7.3
Mount Meru	18	12
Oilcom	9	6
Oryx	2	1.3
Puma	49	32.7
Total	22	14.7
TSN	1	0.7
Victoria	24	16
Others	6	4
<b>Total</b>	<b>150</b>	<b>100</b>

### Inferential analysis results

To statistically test the influence of the presented hypothesized independent variables on a dependent variable, the collected data were subjected to multiple regression analysis. The hypothesized independent variables were service quality, fuel quality, location, Price, and brand, while the dependent variable was the consumer's choice of petrol filling station. The



variables were subjected to model summary (Table 4) to determine the model fitness and Analysis of Variance (ANOVA) to determine the significance of the model.

**Table 4: Model Summary Results**

Model	R	R Square	Adjusted Square	R Standard Estimate	Error of Durbin-Watson
1	.898	.888	.878	1.471	.806

- a. *Dependent Variable: Consumer Choice of Fuel Station*
- b. *Predictors: (Constant), Service Quality, Fuel Quality, Price, Location, and Brand.*

According to Table 4, the result of the coefficient of determination ( $R^2 = 0.88$ ) suggests that about 88.8 percent of the variations in consumers' choice of fuel petrol filling station are explained by the predictor variables. Durbin Watson's statistic shows a score of 0.806, which implies that the variables under the analysis are positively auto-correlated. There is thus a positive relationship between the variables under the study. This means that the predictor variables were good in predicting the consumers' choice of fuel petrol stations in this study.

#### Analysis of variance (ANOVA)

The Analysis of Variance (ANOVA) was conducted focusing on presenting and indicating the significance of the model used in the study. Table 5 summarizes the ANOVA results.

**Table 5: Analysis of Variance (ANOVA)**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.113	5	0.623	87.581	.000 <sup>b</sup>
	Residual	309.625	143	2.165		
	Total	312.738	148			

- a. *Dependent Variable: Consumer Choice of Fuel Station*
- b. *Predictors: (Constant), Service Quality, Fuel Quality, Price, Location, Brand.*

Table 5 indicates that the model is significant. In due regard, independent variables are significant in predicting the dependent variable ( $F=87.581$ ,  $p < 0.001$ ). This shows that the regression model has a good fit in the data.

#### Multiple regression analysis results

Multiple regression analysis for variables under study is shown in Table 6.

**Table 6: Multiple Regression Analysis Results**

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	t	Sig.	95% Confidence Interval for B	
							Lower Bound	Upper Bound
1	(Constant)	2.367	0.771		3.072	0.000	0.844	3.891
	Service Quality	0.843	0.029	0.025	0.287	0.001	-0.050	0.066

Fuel Quality	0.157	0.245	0.054	0.642	0.000	0.327	0.641
Location	-0.072	0.093	-0.066	-0.778	0.438	-0.256	0.111
Price	-0.257	0.488	0.044	0.526	0.000	0.708	1.221
Brand	0.136	0.075	0.041	0.472	0.015	0.113	0.184

a. *Dependent Variable: Consumer choice of Petrol Station*

The model specification of the study is described and shown below:

$$CC = 2.367 + 0.843SQ + 0.157FQ + 0.257PR - 0.072LO + 0.136BR$$

*Whereby*

CC= Consumers' Choice

SQ = Service Quality

FQ = Fuel Quality

PR =Price

LO= Location

BR = Brand

As shown in Table 6, unstandardized coefficients indicate how the dependent variable varies with each independent variable when other independent variables are kept constant. The unstandardized coefficient ( $\beta$ ) for the service quality variable is 0.843, which implies that a unit increase in the service quality of petrol filling stations leads to an increase in consumers' choice by 84.3 percent. Likewise, the unstandardized coefficient ( $\beta$ ) for the fuel quality variable is equal to 0.157, clarifying that fuel quality leads to a unit change in consumers' choice of fuel filling station by 15.7 percent. On the other hand, the unstandardized coefficient ( $\beta$ ) of the price variable is equal to 0.257, equivalent to 25.7 percent. This indicated that, a unit increase in the price of fuel results in a 27.5 percent decrease in consumers' choice of fuel petrol stations.

Moreover, the unstandardized coefficient ( $\beta$ ) for the location variable is equal to -0.072. This suggests that a unit change in the location of the petrol station leads to a decrease in the number of consumers to a specific fuel petrol station by 7.2 percent. Furthermore, the unstandardized coefficient ( $\beta$ ) for the brand variable is equal to 0.136. This implies that a unit increase in the brand of petrol filling station leads to an increase in consumers' choice of petrol filling station by 13.6 percent.

## **Discussion of the findings**

### ***Service quality and consumer's choice of petrol filling station***

The findings on service quality showed a positive influence on consumers' choice of petrol filling station and it is statistically significant in explaining the consumer's choice of petrol filling station with ( $t=0.287$ ,  $p<0.001$ ). From these results, it can be concluded that service quality is a significant determinant factor of the consumers' choice of petrol filling station in Tanzania. However, it can also be noted from Table 4.11 that, service quality (reliability, assurance, tangibles, empathy, and responsiveness) has a positive parameter coefficient which

entails that, as service quality improves the number of consumers at given petrol filling station increases. Thus, the better the services provided, the higher the number of customers attending petrol filling stations. These findings are in line with Sarkar (2009) who studied the determinants of consumers' choice of fuel filling station and found that service quality strongly and directly impacts the consumers' choice of petrol filling station. These findings are also consistent with other studies done previously such as Kakunu (2012) and Mulenga (2019) but inconsistent with Leone (2011), Alvi, et al. (2016), and Mokhtarian and Tang (2011) who found out that, service quality is not a significant determinant of consumers' choice of petrol filling station.

#### ***Fuel quality and consumer's choice of petrol filling stations***

The findings on fuel quality showed a positive influence on consumers' choice of petrol filling station and it is statistically significant in explaining the consumer's choice of petrol filling station with ( $t=0.642$ ,  $p<0.001$ ). The study findings by Inderadi and Setiadi (2020) are in line with the findings of this study whereby fuel quality was found to be one of the key determinants of consumers' choice of fuel filling station. The findings are, however, in contrast with Datamonitor (2010) whose results showed that the quality of fuel had a negative influence on the consumers' choice.

#### ***Location and consumer's choice of petrol filling station***

The results on location were found to be statistically insignificant with  $p=0.438$ . Further, in terms of parameter coefficient, it can be seen that it has a negative as the location of the fuel petrol station far from the area of living the number of customers decrease at a given petrol station in the study. Therefore, even if the location is not a statistically significant determinant of consumers' choice it should not be ignored since it has some negative influence as far as consumers' choice is concerned.

Solomon et al. (2010) argued that the starting point of a purchase decision is customer need or problem recognition and the location is part of them. The findings revealed that the location of the fuel filling station is very important in consumers' choice or decision of where to purchase petrol products. Once the location of the petrol station has been recognized, consumers need adequate information on the issues related to the quality of products, service quality, and price of the petrol products. Therefore, according to him, after consumers know the location of the petrol station, the second stage is information search. It is the process by which the consumers survey the environment for appropriate data to make a reasonable decision on where to get the services. Thus, the study tallies with the findings of this study as presented above. Therefore, the decision involved in the development of preference for and choice of an object will vary depending on the complexity of the needs and the alternative means of satisfying them.

#### ***Price and consumer's choice of petrol filling stations***

The findings showed that fuel prices have a negative influence on consumers' choice of petrol filling station and it is statistically significant in explaining the consumer's choice of petrol filling station with ( $t= 0.526$ ,  $p<0.001$ ). The findings are in line with Mwenda and Oloko (2016) and Inderadi and Setiadi (2020) who studied the determinants of consumers' choice of petrol filling stations and found that prices are strong determinants of consumers' choice. This means that, as the price of fuel products increases, the customers' purchase decreases to the

consumers' choice ratio. Therefore, while competitive prices and low pricing are beneficial to consumers generally, certain pricing behavior can be designed to frustrate and interfere with the process of competition in the longer term. This type of undesirable pricing behavior may have short-term benefits for the consumer but will ultimately lead to higher prices or other anti-competitive effects (Government of Canada, 2012).

### ***Brand and consumer's choice of petrol filling station***

The findings on brand showed a positive influence on consumers' choice of petrol filling station and it is statistically significant in explaining the consumer's choice of petrol filling station with ( $t= 0.472$ ,  $p<0.015$ ). The findings are supported by the study conducted by Parmeswaran (2009), which posits that brand' is possibly the most universal term in modern marketing, second only to positioning and brand building is seen as the instant road to salvation and fat bottom lines measure the degree to which a person believes that using the brand of a particular product would get the maximum satisfaction from what he/she purchased. He adds that businesses exist in a state of continuous change. They have to adapt and transform themselves at a pace equal to, or quicker than the world in branding their business. Having a brand can differentiate a business from competitors and drive customer loyalty. It does not only build a unique personality for a business but also attracts a defined type of customer resulting in increased turnover and customer loyalty. Therefore, a successful brand can offer opportunities for a business to grow.

### **Theoretical implications**

The study findings revealed that brand, service quality, and fuel quality have a positive influence on consumers' choice of petrol filling stations. According to the Buyer Behavior Theory, the input variables are the environmental stimuli that, the consumers are subjected to, and are communicated from a variety of sources. Significant stimuli are actual elements of products such as brand, quality, services available, price, distinctive, availability, and others that the buyer confronts. Consumer decision-making differs according to the strength of the attitude toward the available brands; this is largely governed by the consumer's knowledge and familiarity with the product class. In situations where the consumer does not have strong attitudes, they are said to engage in extended problem-solving (EPS), and actively seek information to reduce brand ambiguity. Therefore, these findings are consistent with previous literature on consumers' choices.

### **Policy implications**

These findings provide a guide to policymakers to consider factors such as fuel quality and prices by setting appropriate regulations through EWURA to protect final consumers as well as maximize their satisfaction. This is so advised since most fuel consumers are price-sensitive though they are also wary of adulterated fuels. Moreover, the fuel quality should therefore continue to be of paramount significance to EWURA for the sake of protecting final consumers.

### **Practical implications**

The study findings help OMCs to increase their customer base and improve their sales volume at their petrol stations. OMCs should improve their service quality and fuel quality and control the overhead costs to enable them to sell fuel at affordable prices to increase their market

share. Moreover, the findings of this study revealed that most consumers seem to prefer to refuel their vehicles at well known international brands of petrol stations. Based on this, OMCs should focus on building their brands and positioning them well in consumers' minds. Investors who want to enter into the petroleum retail business as dealers to operate petrol filling stations should prioritize taking the stations which have strong and reputable brands.

### **Conclusion and recommendations**

This study sought to examine the factors influencing consumers' choice of petrol filling stations in Tanzania. The study findings have revealed that service quality, fuel quality, price, and brand were significant factors influencing consumers' choice of petrol filling stations in Tanzania while the location was found to be an insignificant factor. Moreover, among other factors, the finding revealed that service quality has the most positive significant influence on consumers' choice of petrol filling station compared to other factors. Despite the fuel cap price regulated by EWURA, most consumers showed to be price sensitive. Some petrol filling stations, especially those owned and operated by local OMCs have been lowering the fuel price below the regulated cap price to attract price-sensitive customers. Based on the conclusion, findings, and implications of this study, the following recommendations are made:

#### ***OMCs should ensure the delivery of quality services***

The findings of this study revealed that service quality has a significant influencing factor in consumers' choice of petrol filling station. This implies that Oil Marketing Companies (OMCs) should focus on ensuring they provide good service quality at the petrol filling stations. Most customers seem to prefer most of the stations which handle customer complaints quickly, clean stations with well-groomed and friendly staff as well as quick service at the pumps. This implies that, apart from focusing on the quality of the fuel, OMCs should ensure good service quality is provided to attract and retain more customers.

#### ***OMCs should set affordable pump prices***

Among other factors, this study revealed that consumers' choices of petrol stations are significantly influenced by fuel prices. Despite fuel cap prices being regulated by EWURA, most fuel consumers are price sensitive and are attracted by low prices. Oil marketing companies should therefore ensure they lower their overhead costs for them to be able to set fuel prices reasonably below EWURA cap prices. This will help to attract more customers and maximize their sales revenues.

#### ***OMCs should ensure fuel quality throughout the value chain***

This study revealed that fuel quality is the third most influential factor in consumers' choice of petrol filling stations. In Tanzania, the fuel is centrally imported by the government using the Tanzania Bulk Procurement System (BPS). All the fuel entering the country is of the same quality standard approved by the Tanzania Bureau of Standards (TBS). However, after being distributed to OMCs, the internal processes such as storage, transportation, and dispensing process to the final consumers may affect the quality of fuel and cause serious problems to the vehicles. Also, some of the OMCs or dealers of these OMCs illegally adulterate fuel where they mix either diesel or kerosene with petrol to maximize profits at the expense of consumers. It is thus recommended that oil marketing companies should ensure the entire

internal value chain processes complies with all quality standards to ensure the final consumers receive good quality fuel hence encouraging repeat purchases.

***Investors should operate petrol stations under reputable brands***

The study findings have revealed that the brand of the company significantly influences the consumers' choice of petrol filling stations. Investors running or who wish to operate petrol filling stations under dealership agreements with OMCs should put this into consideration. The majority of consumers prefer to refuel their vehicles at petrol filling stations which are operated under reputable international brands such as Puma, Oryx and Total, and the like. Taking such steps will help maximize sales revenues and return on investments.

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