



After-Sales Service and Customer Satisfaction in the Automobile Industry in an Emerging Economy

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Abstract

Purpose: The study examined the role of after-sales services on customer satisfaction using CFAO Motors as a case study. **Methodology:** A mixed approach was used in the data collection through questionnaire administration and interviews. The analysis made use of Kano's Model and Kendall's Coefficient of Concordance. **Results:** The result indicated that maintenance (M) = 43 and inspection (O) = 41 were the highest scores of the major categories under customer requirement on "must-be" requirement and "one-dimensional" requirement respectively. The customers ranked solving problems through maintenance, accuracy of documentation and competency of service technicians as the top three priorities of their assessment on after-sales services. The service technicians revealed that competition coupled with insufficient hands on the job as a major challenge to after-sales services while the Workshop Manager indicated that customers were reminded of their next servicing schedule through sticker which was placed in the car to show scheduled service time. **Conclusion:** The study concludes that CFAO Motor must be customer-centric organization through deployment of effective marketing strategies to build long term relationships with stakeholders to better its performance. **Originality:** This is the first time in the Ghanaian context where a mixed method and the application of the Kano Model have been used on automaker dealer after-sales services.

Subject Area

Marketing

Keywords

Kano Model, Customer Satisfaction, Service Quality, Automobile Industry

1. Introduction

There is no doubt that customer satisfaction is one of the essential objectives of any business not for its survival alone but its sustenance. Unfortunately, this is not easy to be achieved in reality due to intense competition and customer complexity. Customers have been spoiled with so many options to choose from which makes it difficult to meet their expectations. Customer satisfaction without quality enhancement features which are valued by the customers cannot be achieved. Quality appreciation from the customers via service encounters and post-purchase evaluations if not satisfied will make customer satisfaction a mirage. Customers have gone beyond features and functionality of a product/service to what will delight them.

Service quality, though basic, has become an essential part of any service provider through its product/service offering to its target market in which the automobile industry is no exception where customers are more interested in better after-sales services for value for money. It is of no secret that after-sales services is now an important part of the automobile companies' marketing strategy due to its benefits and rewards both in the short and long term to an organisation. The automobile industry in Ghana has its own peculiarity due to the high cost of purchasing a brand new car in Ghana where the majority of the individuals buy pre-owned vehicles.

Apart from the companies, organisations, institutions and individuals who go in for a brand new car are in the bracket of higher income earners group who will also be particular about the after-sales services' activities of the manufacturer/dealer. Most of them ask for warranty which to them serves as an insurance policy in case there is a fault which can be attributed or directed to the manufacturers end. After-sales services are the activities that a manufacturer/dealer offers after a purchase of a product or service has been made for the purpose of supporting customers while they use the product or service [1]. After-sales services in any form may give customer, product, technical or service support to the customer. The authors further indicate that it is also seen as key differentiator in terms of competition and revenue generation [2]. After-sales services provide a platform for manufacturers to get information from their customers on product/service performances [3].

A serious company may be out of business if it fails to appreciate value from the perspective of the customer [4]. After-sales services strategies are one of the driving forces in the automobile industry. Due to complexity nature of customers due to technological advancement in terms of information acquisition on product and services reliability of products has become an important part of any checklist of purchasing an automobile irrespective of the geographical location. To this end, after-sales services must be linked to extended warranty and service contract [5] [6] to elicit user satisfying requirements for e-Health awareness system using Kano Model revealed that eliciting user satisfying requirement increases the satisfaction level of potential user/customers of the proposed product

and also improves the perceived quality of such product in the eyes of the potential users/customers as evidenced from their satisfaction scores and self-stated importance ratings.

The automotive industry which has over 1.5 million circulating vehicles is still totally under developed [7]. The report further indicated that each year not less than 100,000 pre-owned vehicles are imported from several countries while 10,000 units are brand new cars. The automotive sector of Ghana currently belongs to the affluent class who has the financial means to purchase a brand new car. This placed an opportunity for automakers and dealers to explore the middle class market that might have access to credit facility to purchase a vehicle. The shrinking market makes after-sales servicing a must for the automaker, the dealers and the customers who are the owners of the vehicles [7].

Several studies have been conducted on after-sales services in the automobile industry capturing different variables on the prospect, growth, benefits/rewards and challenges [1] [2] [3] [5] [8]. Through a search of Google Scholar, abstracts from restrictive databases, Econs Papers, De Gruyter Open, Repec and other databases. The search found one published paper [5] on assessing customer satisfaction levels in the SME's automobile vehicle maintenance and repairs service delivery system in Cape Coast, Ghana. The focus of this paper was on how the road side mechanics or the garages go about their repair and maintenance works.

There is a gap in the Ghanaian context where there has not been any study on an Automaker dealer after-sales services using a mixed methods and the application of Kano's Model in a study, this gap is filled by studying the after-sales services using CFAO Motors Kumasi Branch customers with all the technical team as participants in the mixed method approach supported by the application of the Kano Model. CFAO Motors Ghana was set-up in 1909 a subsidiary of CFAO Automotive, the largest automobile network in Africa with its presence in 34 African countries. CFAO Motors Ghana offers a comprehensive range of after-sales services using leading-edge facilities and skilled personnel who receive training from the automakers on a regular basis [9]. The main objective of this study is to examine the role of after-sales services on customer satisfaction in the automobile industry. The remaining part of this paper is divided into four sections. Section 2: literature review; Section 3: methodology; Section 4: results and discussion; Section 5: conclusion and recommendation.

2. Prior Research

A study was conducted to know the perception of the customers towards the service quality provided by the Honda automobiles. The result revealed that most of the respondents are satisfied with the service quality, knowledge of the service personnel, prices for services and delivery time of the vehicle [10]. In the context of United Arab Emirates explored how service managers and their customers perceive the after-sale service quality provided by automobile service cen-

ters. The findings revealed that managers must focus on strategy implementation to increase customer satisfaction [11].

In a study explored the after-sales service and its effect on customer satisfaction in the automotive industry in Ethiopia where 167 customers and 6 managers from two dealerships took part of the study. It was revealed that after sales services had effect on customer satisfaction in a positive direction. The way after-sale service was provided had a significant difference on the satisfaction among different customers [12]. A survey of 210 customers using a linear regression model showed that after-sales service satisfaction represents an antecedent of consumer satisfaction and word-of-mouth using an automotive industry as a case. The study recommended that managers must pay particular attention to elements that customers are willing to talk about to other people in their evaluation of the overall offering of the company [8].

A study investigated the service quality and repurchase behaviour in the Spanish automotive after sales business using 17,000 customer sample for 2 brands. The results showed that vehicle's warranty validity had a greater influence on behaviour while contractual retention strategies gain importance versus service strategies [13]. A study was conducting to investigate the automobile industry in Iran with the focus of determining the important factors that influence customer satisfaction in after-sales services. The study revealed that there was a meaningful and positive relationship between cost of services and customer satisfaction and same with quality of services of after-sales services and customer satisfaction [14].

Providing excellent customer service is the surest way to greater success for any organization [15]. Organisations must deploy competitive and marketing strategies to improve customer experience for its survival and retaining of loyal customers in this intense competitive environment [16]. Businesses need a strong marketing orientation to appreciate customer needs and deploy strategies to reach the target market through appropriate market segmentation if they are to attract, satisfy, and retain target customers [17]. A company that is truly customer oriented must build relationships in the areas of process, service, product and customer [18].

Customer satisfaction can be achieved through inspired and committed staff in delivering customer service in order to increase business performance through their productivity [19]. It is true that satisfaction drives loyalty and loyalty drives business performance [20]. Companies must provide concrete strategy that can meet the needs and wants of customers for better customer experience [21]. Totally satisfying the customer is the only thing that will secure loyalty and offer significant competitive advantage [22]. A company stands in a better position to meet the expectation of the customer if it meets the customer requirements [23]. Customer expectations have changed in today's economy where customers are constantly reevaluating their purchases and looking at options available to them [24].

3. Methodology

The population for the study includes all owners of vehicles who regularly service their vehicles with CFAO Motors whether under warranty or not to enjoy after-sales services as well as all service technicians and the Workshop Manager are included in the study population. The composition of the sample had owners of vehicles (68), service technicians (13) and workshop manager (1). The intake for after-sales services for the month of April, 2018 was 94 but the number of jobs completed was 91 which mean the sample size of 68 represents 72.3% of the job intake which is very much representative of the population. The study employed the mixed method by using both the qualitative and quantitative approaches as data collection method through Kano Model survey questionnaire for the customers of CFAO Motors and structured interview guide for the workshop manager and the service technicians.

3.1. Kano Model

Dr. Noriaki Kano from Tokyo Rika University developed the Kano Model in 1984 which aims to connect the requirements fulfilled by products or services with customer satisfaction and identifies three types of requirements that influence ultimate customer satisfaction. The first category is termed as “Must-Be” requirement, which is normally something basic feature of a product or service whose absence will completely makes the customer dissatisfied. The second category is termed as “One-Dimensional” requirements have the ability to increase the level of satisfaction of the customers. The third category is known as the “Attractive” requirement which is the excitement and something “nice to have”. The absence of this will not create any problem for the customer but the level of satisfaction can be maximized if this requirement is in place.

In applying the Kano Model it is imperative to use his questionnaire with adaptation to the study context to make it relevant and appropriate. Kano’s questionnaire has two dimensions of functional questions (positive) and dysfunctional or non-functional questions (negative) are asked with five distinct possible answers/options. There is the possibility of identifying the perceived level of user satisfaction for a given requirement through the responses from a questionnaire [25].

A Kano Evaluation Table or Matrix as shown in **Table 1** is derived from the categorization of each requirement depending on the combination of the answers to the functional and dysfunctional questions. These various categories stand also for the prioritization of each requirement. The Kano Model helps to extract from customers what they really expect from a product/service [25].

3.2. Customer Satisfaction Coefficient

Based on the Kano Model, a customer satisfaction coefficient can be calculated to obtain the percentages of customers who get satisfied with a given requirements and those who do not. The customer satisfaction coefficient can be a good

Table 1. Kano evaluation table.

Customer's requirement	Non-functional question (negative)				
	I like it	I expect it	I'm neutral	I can tolerate it	I dislike it
I like it	Q	A	A	A	O
I expect it	R	I	I	I	M
I'm neutral	R	I	I	I	M
I can tolerate it	R	I	I	I	M
I dislike it	R	R	R	R	Q

M = Must be, A = Attractive, I = Indifferent (no preference), R = Reverse (can be either way) and Q = Questionable (wrong answer).

means to assess customer experience of a product or service. The essence of the customer satisfaction coefficient indicates whether by meeting a customer requirement can increased satisfaction or dissatisfaction occurs whether fulfilling this customer requirement merely prevents the customer from being dissatisfied [26]. This is an indication of how strongly a product feature may influence satisfaction or in the case of its non-fulfillment can create customer dissatisfaction.

$$\text{Extent of satisfaction (SI)} = A + O / A + O + M + 1 \quad (1)$$

$$\text{Extent of dissatisfaction (DI)} = O + M / (A + O + M + I) \times (-1) \quad (2)$$

$$\begin{aligned} \text{Total satisfaction} &= [A + O / A + O + M + 1] + [O + M / (A + O + M + I) \times (-1)] \\ &= A - M / (A + O + M + I) \end{aligned} \quad (3)$$

The positive customer satisfaction (SI) ranges from zero to one. The closer the value is to one, the greater the impact of meeting the requirement on the customer satisfaction, but the closer the value is to zero, the lesser the influence. The negative customer satisfaction (DI) ranges from zero to minus one. The closer the value is to minus one, the higher the influence of the non-fulfilling of requirements on customer dissatisfaction. A zero score implies no influence on customer satisfaction whether or not the requirement is met or unmet.

The administration of the questionnaire took place at the premises of CFAO Motors, Kumasi Branch, the management of the branch allowed the study to administer the questionnaire at their reception while owners of vehicle were waiting for their vehicle to be serviced. This made it possible for them to personally fill the questionnaire. Initially it was difficult but they cooperated thanks to the management of the branch. It took the study almost three months from February to April, 2018 to administer the questionnaires.

3.3. Interview Guide

The study sought to explore information through an interview guide from the workshop manager and the service technicians of CFAO Kumasi office. The interview guide for the Workshop Manager had nineteen (19) questions while that of the service technicians had nine (9) questions. There was the need for the in-

interview to complement where the questionnaire might fall short in terms of in-depth information to the operations of the after-sales services of CFAO. Any interaction between two people based on discussing something of interest to the two parties can be termed as interview [27].

The interview contact was a face-to-face type using structured questions. The purpose of the interview was fact finding to obtain specific information from the interviewee. The interview with the Workshop Manager had two sessions of an hour each at his office during 12:30 pm to 1:30 pm which traditionally is his lunch break due to his tight schedules. The data production was in a form of notes taken and no audio or digital recording of any form was allowed to be used in the Workshop Manager's Office. The same interview procedures with the Workshop Manager was observed and adhered to in the interview with the service technicians. This time the interview used ten (10) sessions in one week interviewing thirteen (13) service technicians with each session of time duration of forty-five minutes which took place within the compound of the premises.

3.4. Data Analysis Procedure

The quantitative analysis made use of descriptive statistics such as frequencies and percentages on the socio-demographic profile of the respondents while Kendall coefficient of concordance on customer's perspective on after-sales services. The application of the Kano Model was used on the customer requirement and the level of satisfaction for the seven dimensions to evaluate customer's satisfaction or dissatisfaction.

The qualitative data analysis was purely interpretative in nature through citation and thematic generation where citation analysis was based on directly quoting parts of the interview and interpreting it while the thematic generation was the identification and drawing upon on the common themes across the interview with its interpretation.

3.5. Ethics

Research ethics deals with how a study treat those who participate in the study and how to handle the data after it has been collected is of essence in research and must be observed [28]. There is the need to observe issues on ethics in any research study [29]. The study made sure that all the respondents were briefed on the purpose of the study and giving them time to think about it if they want to be part of the study. Confidentiality and anonymity were not compromised so far as this study was concern.

4. Results and Discussion

4.1. Demographic Characteristics

The demographic characteristics considered the gender, age, educational background, use of vehicle and level of satisfaction of the sixty-eight (68) respondents. The composition of the gender had female representation of (32%, n = 22)

as compared to (68%, n = 46) this indicate that males attended more after-sales services than females; this can be attributed to the fact that more males owing vehicles based on their financial position. The age group of 41 - 60 years represent (39%, n = 26) as the highest frequency group followed by age range of 31 - 40 years with (35%, n = 24) with least group was over 60 years representing (7%, n = 5). The age group as a variable is an important indication of what choices to make in terms of lifestyle as younger people behave differently from elderly people.

The study sought to find out the educational background of the sample population which will give signals on their ability to follow instructions from the service technicians. All the respondents have had some level of formal education from the high school to the graduate level. Those with university education accounted for (54%, n = 37) while the diploma and the SHS leavers had a representation of (46%, n = 31). This is also refreshing as they have what it takes to fill the questionnaire in person. As much as servicing of the vehicle is important to the study it was also relevant to find out the use of the vehicle. It was revealed that the private use of the vehicle had the better representation of (53%, n = 36) as compared with (47%, n = 32). This implies that more private owners of vehicles in relation to this study are more conscious about sending their vehicles to approved servicing centers than the road side mechanics. Interestingly (98%, n = 68) was happy with the level of satisfaction from CFAO after-sales services.

4.2. Kano Requirements Categorization Table

The section considers the application of the Kano Model on customer requirements and its frequency analysis as shown in **Table 2**.

In terms of maintenance requirement the highest frequency was 43 which represent 63% under the category (M) which means their requirement is “Must have” (M). This is very crucial to the performance of after-sales services as “must have” is important not only from the customer perspective but for the company as well. The customer expects that the reported problem as a reason why the customer sent the car for servicing in terms of maintenance must be solved. This implies that if this requirement is not fulfilled the customer will be extremely dissatisfied (nonlinear impact on overall customer satisfaction). On the other hand as the customer takes this requirement for granted, their fulfillment will not increase the customer satisfaction (asymmetric impact on overall customer satisfaction). This is good as majority of the customers are happy that this requirement was met by CFAO Motors Kumasi Branch. More has to be done by CFAO Motors as 35% of the customers see this requirement as one-dimensional considering its consequences. This result aligns with [10] stressing the need of managers coming out with strategies that aligns with the perception of the customer’s appreciation of quality.

In terms of spare parts requirement the highest frequency was 34 which represent 50% under the category (O) which means their requirement is one-dimensional (O). Spare parts are essential element of the maintenance and

Table 2. Customer requirements analysis using Kano Model.

After-sales services	M	O	A	I	R	Q	Total	Category
Maintenance	43	24	1	0	0	0	68	M
Spare parts supply	32	34	2	0	0	0	68	O
Online service (telephone)	36	27	5	0	0	0	68	M
Car washing	31	24	11	2	0	0	68	M
Inspection	22	41	4	1	0	0	68	O
Warranty	31	33	4	0	0	0	68	O
Training (driving orientation)	29	34	4	1	0	0	68	O
Documentation	30	35	21	1	0	0	68	O

Source: Author's computation, 2018.

upkeep of every roadworthy vehicle, this means that CFAO Motors cannot get this wrong and must make sure that spare parts are available and if possible affordable. Customers see this requirement as important as they do lead to increase in satisfaction with its presence but leads to dissatisfaction if this is not met. This implies that the higher the level of fulfillment, the higher the customer's satisfaction and vice versa. In fact, one-dimensional requirements are usually explicitly demanded by the customer (symmetric impact on overall customer satisfaction). Interestingly 47% of the customers see this as "must-be" requirement which is a decisive competition factor that CFAO Motors must work on. This result confirms the result in [12] indicating that after-sales services had a positive effect on customer satisfaction.

In terms of online service/telephone requirement the highest frequency was 36 which represent 53% under the category (M) which means their requirement is "must have" (M). Communication is important when it comes to building strong customer service relationships. This means that CFAO cannot get this wrong there must be a lot of avenues for them to air their views. This must get the necessary attention from the management of CFAO Motors, as unmet communication issues if not fulfilled will lead to dissatisfaction while its fulfillment will not lead to satisfaction as customers see it as basic requirement. This is crucial for repeat purchase as the result supports the assertion in [19] that inspired and committed staff in delivering customer service through their productivity can increase a business performance.

In terms of car washing which falls under "must have" (M) which had a highest frequency of 31 had a representation of 46% of the total respondents. This is below 50% but it is still a basic requirement that customers take it for granted as its fulfillment does not lead to satisfaction but if not being met leads to dissatisfaction. The priority of sending your car for servicing is maintenance not car wash. It must not be a major requirement but for the purposes of customer segmentation some customers must see it as a wow factor as 16% of the customers

see it as attractive requirement and the other 35% sees it as one-dimensional requirement. The outcome support [23] that a company have a good stead ahead of competition if it can meet the expectation of its customers

In terms of inspection requirement the highest frequency was 41 which represent 60% under the category (O) which means their requirement is one-dimensional (O). Inspection in any form so far as the customer is concern is the duty of the technical people but the customer demands that the requirement must be fulfilled as this has symmetric impact on the overall customer satisfaction level. Which implies that the higher the level of fulfillment, the higher the customer's satisfaction and vice versa. People make a system work and inspection is people driven as indicated in [21] that right attitude of company's staff affect service quality positively hence companies must provide concrete strategy that can meet the needs and expectations of customers.

In terms of warranty requirement the highest frequency was 33 which represent 49% under category (O) which means their requirement is one-dimensional (O). Warranty is a major driving force from customer's perspective about after-sales services considering the financial risk of buying a brand new vehicle with a huge financial commitment that is the warranty serves as an insurance policy for the customer. This requirement is (O) meaning from the customer's perspective the existence of warranty can be a prerequisite to motivate them to purchase a brand new car. Its absence will lead to customer dissatisfaction as its impact on the overall customer satisfaction is symmetric. Interestingly 32% of the customers see this as "must-be". As a one-dimensional requirement it must be satisfied which is in line with [22] emphasizing that customer loyalty offer competitive advantage to a company if customers have a positive experience with a brand. This further aligns with [8] recommending that managers must pay particular attention to elements that customers are willing to talk about to other people in their evaluation of the overall offering of a company.

In terms of training requirement the focus was on driving orientation with the highest frequency of 34 which represent 50% under the category (O) which means their requirement is one-dimensional (O). Driving orientation is important due to its educational input to driver safety tips and precautions on the road. This is also important for the driver to be extra careful as warranty cannot be utilized if the fault is not from the manufacturer's end. This implies that a better driving orientation will make the customers more safety conscious to keep their cars in good shape and to avoid unnecessary accidents and vice versa. As stressed in [4] serious company may be out of business if it fails to appreciate value from the perspective of the customer. This affirms the assertion in [22] that totally satisfying the customer is the only thing that will secure loyalty and offer significant competitive advantage.

In terms of proper documentation requirement the highest frequency was 35 which represent 51% under the category (O) which means their requirement is one-dimensional (O). Documentation is important not only from the customer perspective but for the company as well. The customer needs proper documen-

tation to track benefit and challenges of the after-sales services visits which can serve as a diagnostic template for repurchase and doing business with CFAO Motors in the future. This is a requirement that customers are expecting that its demand must be met as this will lead to customer satisfaction and vice versa. CFAO Motors can use their documentation to build long term relationships with their customers and the possibility to do cross sales with the availability of the documents. As revealed in [24] companies live or die from repeat business. This is a message that is in line with the result as a top priority requirement of a customer must be given all the necessary attention for repeat purchase in a period where customers are constantly reevaluating their service encounters and experiences.

4.3. Total Customer Satisfaction Coefficient

Table 3 shows the extent of satisfaction and the extent of dissatisfaction dimension where the difference between the two accounts for the total customer satisfaction. Increase in satisfaction can be inferred that the customers' expectations are being met while increase in dissatisfaction means the customers' expectations are not being met.

Table 3 shows under the satisfaction dimension column that maintenance, spare parts supply and documentations recorded the top three satisfactions by the customers with the corresponding coefficient of 0.99, 0.97 and 0.96 respectively while the dissatisfaction dimension had documentation, inspection and training (driving orientation) with its corresponding coefficient of -0.82 , -0.66 and -0.56 respectively. Overall total customer satisfaction coefficient ranked maintenance first with a coefficient of 0.62 followed by online service that had 0.46 with spare parts supply having 0.44. This suggests that the current performance levels are manageable, though it can be improved. On the other hand management of CFAO Motors must focus its energy on those variables with least total customer satisfaction such as documentation (0.14), inspection (0.27) and car washing (0.30) and try to better those areas to stay competitive considering two of the variables are (O) and one is (M).

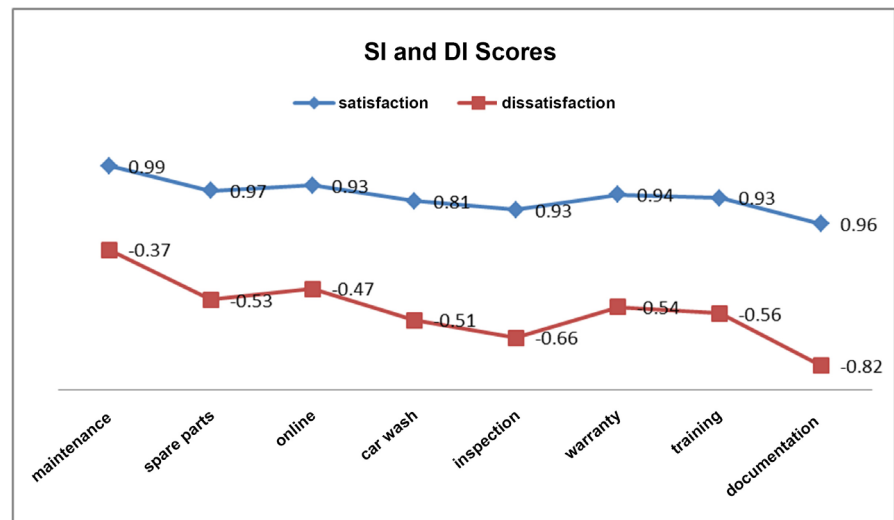
The result as indicated in **Table 3** can be summed by the assertion in [17] indicating that businesses with a strong customer focus strive to achieve high levels of customer satisfaction and customer loyalty. In addition, as stated in [20] long term customer relationship creates value for the customer as satisfaction drives loyalty so as loyalty drives business performance.

As can be seen from **Figure 1**, the level and extent of customer satisfaction when the requirements are met (SI) is higher than their degree of dissatisfaction when such requirements are not met (DI). This observation cuts across all the eight requirements. The gap is widest for maintenance (0.62) and the narrowest for documentation (0.14). For both (SI) and (DI), spare parts, car wash, documentation, there is a fall in satisfaction and dissatisfaction respectively. The satisfaction and dissatisfaction levels for online services, warranty and training are almost running parallel with the dissatisfaction levels. In general, the respondents

Table 3. Customer requirements and customer satisfaction.

After-sales services		Satisfaction dimension	Dissatisfaction dimension	Total customer satisfaction
Maintenance	M (43)	0.99	-0.37	0.62
Spare parts supply	O (34)	0.97	-0.53	0.44
Online service (telephone)	M (36)	0.93	-0.47	0.46
Car washing	M (31)	0.81	-0.51	0.30
Inspection	O (41)	0.93	-0.66	0.27
Warranty	O (33)	0.94	-0.54	0.40
Training (driving orientation)	O (34)	0.93	-0.56	0.37
Documentation	O (35)	0.96	-0.82	0.14

Source: Author's computation, 2018.

**Figure 1.** Comparison of SI and DI.

seem to be more satisfied with having these requirements than being dissatisfied with not having them in the after-sales services, but the difference is substantial. There seem to be some proportionality in the degree of satisfaction and dissatisfaction levels for almost all requirements as they seem to run parallel. The requirements appear to have similar behavior and the quality and seem to drive similar levels of influence in terms of their impact on customer's satisfaction and dissatisfaction, that is, as satisfaction goes up so do dissatisfaction and vice versa. This result also reveals how valuable these requirements are to the customers. For all requirements, there is parallel rise and fall in customer's satisfaction and dissatisfaction when the requirements satisfaction and dissatisfaction when the requirements are present or absent respectively.

4.4. Assessment of Priority Requirements by the Customers

The section assesses the customer satisfaction from the customer perspective using Kendall's Coefficient of Concordance for the mean ranking. **Table 4** has

Table 4. Kendall's Coefficient of Concordance on customer's rating on self-stated importance.

Theme	Mean rank	Ranking
Maintenance		
Solve the problem	15.30	1 st
Time it takes for maintenance	9.82	16 th
Cost/price of maintenance	9.36	18 th
Overall maintenance service	12.44	7 th
Spare parts supply		
Access to spare parts in the store	13.10	5 th
On time supply	9.61	17 th
Price of spare parts	9.84	15 th
Online/telephone service		
Accuracy to solve the problem	11.76	10 th
On time feedback	9.82	16 th
Telephone service	10.74	14 th
Warranty Service		
Clearness of information	13.22	4 th
Length of warranty service	12.38	8 th
Warranty implemented as promised	11.28	12 th
Documentation service		
Accuracy of document	14.45	2 nd
Relevance of requested information	11.10	14 th
Overall documentation service	11.80	9 th
Training/driving orientation		
Contents of orientation	11.18	11 th
Duration of orientation	9.21	20 th
Overall satisfaction of training/driving orientation	9.22	19 th
Service technician		
Competency of the service technician	13.24	3 rd
Politeness of after-sales service technician	11.27	13 th
Overall satisfaction of CFAO after-sales service	12.57	6 th

Source: Author's computation, 2018. Note: N = 68, Cronbach's Alpha = 0.990 or 99%, and W^a = 22%.

seven themes with twenty-eight questions. The seven themes are maintenance, spare parts supply, online/telephone services, warranty services, documentation service, service technicians and training and driving orientation.

The discussion is done under each of the seven themes where customers see it as a priority requirement. In the maintenance theme four considerations were

made out of the four the customers revealed that the importance of maintenance through servicing has to do with its ability to resolve the problem reported which had a mean score of 15.30 which is ranked 1st among twenty-two items considered as relevant in after-sales service activities. This aligns with [19] stressing that inspired and committed staff can enhance customer satisfaction to improve business performance.

The spare parts supply theme came up with access to spare parts as a priority requirement with a mean score of 13.10 which ranked 5th of the overall assessment of customer satisfaction. The customers indicated that even if the price of the spare part is high at least it is available which is better than non-availability. The result confirms the advised in [18] the need to build stronger customer relationship to avoid customer switching. On the online/telephone services, the customers were of the view that the accuracy to solve the problem through effective utilization of a communication platform was a priority and had a mean score of 11.76 which ranked 10th of the overall assessment of customer satisfaction. The result supports the assertion in [17] that effective customer segmentation has the potential to enhance the profitability of a company. In addition it confirms the claim in [15] that the surest way to greater success for any organization is through the provision of excellent customer service.

Warranty services had three considerations for customer assessment which had a mean score of 13.22 which was ranked 4th of the overall assessment. Customers revealed that the clearness of information helps them to understand the warranty document and are able to take advantage of it if the need be. The importance of this result aligns with [23] affirming that some elements are crucial if customer satisfaction is to be achieved. Out of the three considerations under the documentation theme accuracy of document was the priority of the customers. Documentation in terms of records of the particulars of the owners of the automobile to track the health of their cars was critical to the owners as a priority requirement which had a mean score of 14.45 and was ranked 2nd in the overall customer satisfaction assessment. This support the assertion in [16] stating that customer-centric businesses are likely to attract and retain satisfied and loyal customers.

Training/driving orientation was not a top priority requirement so far as the customers were concerned. The contents of the orientation were considered ahead of the other two with a mean score 11.18 but ranked 11th out of the 22 considerations of the after sales service customer satisfaction assessment. As indicated in [21] the need to improve customer satisfaction through service encounter. This can be inferred that though a poor product can be sold with a better service encounter experience. In terms of service technicians several issues were considered including the competency of the service technician, their politeness and interpersonal relationship among others. The competency of the service technicians to the customers received a major attention as it had a mean score of 13.24 and ranked 3rd in the overall customer satisfaction assessment. This result aligns with [20] stressing the need for businesses to forge a strong

connection with its customers.

The F test for concordance (W) between the rankings of the themes of the after-sales services variables is (22%) which is a bit low yet acceptable. This suggests that there is a mix reaction in terms of what a customer sees as a priority requirement to him/her. This can be explained due to demands of customers in different segments with corresponding different product expectations. The entire survey instrument was checked and examined for reliability using Cronbach Alpha. The scale reliability of the questionnaire was 0.99 which is within the acceptable range and greater than the cut-off point of 0.70 as suggested in [30] which indicating almost a perfect internal consistency of the questionnaire items.

4.5. After-Sales Service Activities as Seen by Workshop Manager and Service Technicians

The section is organised in two parts, one on the interview with the Workshop Manager and the other on the interview with the thirteen (13) service technicians. The interview method was necessary to get in-depth knowledge and understanding about the after-sales services activities of CFAO Kumasi Office. A Workshop Manager and thirteen (13) Services Technicians participated in the face-to-face interviews.

4.5.1. Excerpt from the Interview with the Workshop Manager (WM)

CFAO advertised through the media/physical edifice and sales team as indicated by WM when asked about how CFAO reach to their potential customers. It is clear from the WM response that CFAO uses different platforms and route to the market to reach its existing and potential customers. Making use of advertisement is good in terms of coverage but cost can be a barrier as it is difficult to get the potential customer through the advertisement. The use of sales team is appropriate and practical due to its personal touch; it is an avenue where customers objections can be resolve to improve the customer encounter and believability of product/service offerings. Lastly the physical edifice of automobile companies is critical to convey a message. The result confirms the assertion in [17] that businesses need a strong marketing orientation to appreciate customer needs and deploy strategies to reach the target market.

Can you highlight on standard procedures followed in the process? *Of course yes, I will touched on two for now. There are set of standard procedures to be followed by the sales department which is intended to build value for the customer and also each service technician interacts with the customers as well as repairing their vehicles as stressed by WM.* The response implied that there are benchmarks and checklist to be followed for consistency purpose in its marketing activities by interacting with the customers to get the voice of the customers in the service delivery which is critical in the form of service encounter. As advised in [23] the result aligns with the advised in that by meeting a customer requirement a business stands in a good stead to meet the customer's expectation.

WM indicated that *“a sticker reminder is put in the car to show scheduled service time. It is not a practice of CFAO to give incentives to car owners to return their cars for servicing. This cannot be sustained and is a cost to the company”*. This was a response to how customers are reminded of their next maintenance. It is good to know that there is a customer feedback and instruction on the next service time as adherence to the servicing maintenance will keep the car in good shape. It is refreshing and insightful as CFAO has realized that marketing focus should be directed in the longer period and try to make gains in the short term. The response by the Workshop Manager is in alignment with [15] [18] stressing on excellent customer service delivery.

The response was on the interaction of CFAO with its customers, this is what WM said *“We use different platforms of information technology to communicate with our customers”*. Communication is a critical element in the marketing of goods and services. It is not surprising that CFAO sees the need to communicate with the customers. Marketing communication is the medium where an organization uses in communicating with its stakeholders, it is the same medium in which customer’s feedback and complaints are channeled to an organisation to know whether the customers are satisfied or dissatisfied. Effective communication with customers can be achieved through inspired and committed staff as suggested in [19], which the result supports it.

WM said that *“CFAO believes in a true customer satisfaction and has the commitment to curb the problem(s) in their vehicles. Moreover it is an opportunity to get customer’s feedback as they provide in-depth details about how the vehicle is performing”*. The response by the Workshop Manager is assuring as a true customer service and care has the greater possibility to excite customer that can lead to customer satisfaction. It is not enough for it to be a statement but must be implemented as part of their after-sales services strategy. The result confirms the findings in [14] stressing that there is a positive relationship between service quality of after-sales and customer satisfaction.

According to WM *“Strangely it is lack of knowledge about the vehicle but mostly complain about wear-out breaks. Notwithstanding this our customer satisfaction level is adequate. It is important to say here that lack of enough money to purchase parts is normally stated by the customers”* this was a reaction on what customers complained about. An opportunity is created from the Workshop Manager’s response admitting that there has to be an intensive driver training/orientation so as to be conscious about keeping basic instructions on how to effectively use the vehicle efficiently. The result confirms the assertion in [11] pointing to the need that management of businesses must synchronize their strategy with the perception of their customers to increase customer satisfaction.

WM was affirmative on the need for a unified perception of service quality by the managers and their customers and responded *“Absolutely yes because communication is a key note in customer relation and this sustains the customer’s satisfaction. Interestingly, this has influence the relationship with our customer and can say that the profit from after-sales services had been good for*

business sense as customer care is considered highly in CFAO's operations globally". As rightly said by the Workshop Manager effective communication is important if a product or service delivery is to reach the target market. This result aligns with [8] [12], that there is a positive correlation between after-sales services and customer satisfaction.

4.5.2. Excerpt from the Interview with the Service Technicians (ST) (13)

All the thirteen (13) service technicians indicated that they provided check-ups for customers as it is one of the important requirements for their customers and remain a key part of our responsibilities as service technicians. Furthermore on the frequency of the check-up on customers, "all the 13 service technicians responded that vehicles owners brings their vehicles for servicing when it covers every 5000 kilometers (km) or for a period of three months of using the vehicle". However, ST 2, ST 3, ST 4, ST 10 and ST 13 responded that *"it is when the vehicle is due for service, ST 4 further stated that the type of vehicle and its current state influenced it servicing as some do servicing for the coverage of 1000 km, 5000 km, 10,000 km and 20,000 km"*. It is refreshing to note that all the service technicians appreciated the essence of the check up as seen as a major customer requirement. As seen from the response majority of the service technicians acknowledge that 5000 km mileage is the standard for check-up though other factors influence the check-up time. The result supports the claim in [21] that companies must provide concrete strategy that can meet the needs and wants of customers for better customer experience and better experience.

All the 13 technicians had an opinion of the question put before them. There were some similarities and contrast in their responses. ST 1 and ST 8 in particular stated that they advised the customers to be mindful of replacing faculty parts with by using genuine parts. On the other hand several technicians including ST 3, ST 4, ST 5, ST 6, ST 7 and ST 9 stressed that they assist customers of the benefits of claiming the warranty during the period if the fault is from the manufacturer. ST 10 and ST 11 indicated that they assist in educating them on the need for regularly servicing their vehicles with the dealer rather than outside mechanic. ST 13 was of the opinion that there is the need for customers to understand the warranty claim process better". There is evidence from all the thirteen participants that they assist customers in claiming the warranty as the need be. This is part of customer care and service which tend to build effective customer relationship. The result supports the findings in [20] [22] [23] showing the essence of positive relationship between customer service delivery and customer satisfaction.

The response on the advantages of warranties revealed that *"all the thirteen ST's affirmed two types as implied and extended warranty. ST 1, ST 2, ST 3 and ST 8 confirmed that the warranty period is three years or coverage of 100,000 km while in terms of major advantages ST 1 indicated that this is for them to send their vehicles to the dealer, ST 2, ST 8, ST 9, ST 10, ST 11 and ST 12 indicated that it is for the protection of the company against competition; ST 3, ST 4,*

ST5, ST6 and ST7 asserted that it was for better customer satisfaction through possible retention and loyalty for repurchase of services or products. Interestingly ST13 revealed that this help to ensure that repair costs are covered without undue financial stress³. Warranty serves as collateral on the part of the owner of the car which in turn assures the customers of their purchases. The result confirms the assertion in [1] [10] [11] [13] the importance of warranties as a collateral and a competitive tool used in the automobile industries.

All the thirteen STs acknowledge that indeed CFAO has a warehouse and currently have four repair centers for it's after sales services and regular repair services. The response by the service technicians is not new as most service centers have warehouses. Warehouses play a major role in any supply chain activities this is where a lot of items are stored. The value enhancers are critical to meet the changing needs of customers. Companies that can take advantage of it must have an agile and responsive operational set up to deal with uncertainties. The result is in line with [24] stressing that today's customers have more options to choose from product/service offerings in the market which makes operational agility and responsiveness a key differentiator in the competitive environment.

On the issues of challenges in implementing after-sales service this is what they said, "ST2, ST3, ST6 and ST7 stressed that lack of repairs and shortage of parts was a challenge as it delayed servicing and at times customers have to buy parts from the market which its genuineness cannot be guaranteed. ST3, ST12 and ST13 indicated that insufficiency hands on the job coupled with lack of qualified and experience engineers to handled major task. ST8, ST10, ST11 and ST12 said that they are worried as so many customers do not come in for genuine parts and go for fake and affordable ones as there are a lot of spare parts in the market. ST4, ST5, ST12, ST6, ST9, ST10, ST11, and ST13 all stated that a lot of automobile companies to compete with. ST1 said that customer complain of high costs of parts is a key challenge". The challenges need to be resolved to stay in competition in terms of customer satisfaction and the market position of CFAO for protection in terms of consolidated its position. The answer to the response is in line with [16] indicating that businesses must deploy competitive strategies to stay relevant to enhance customer experience through service encounters.

5. Conclusions and Recommendation

The study has revealed insightful information from the customers and the participants of the study from the context of CFAO Motors Kumasi Branch. After-sales services' activities are crucial part of any serious strategy to get a competitive advantage over others. The fulfillment or non-fulfillment of customers' requirements affects the value customers place on a given requirements. This underpins the importance of meet requirement as it influences the overall customer satisfaction. Customer satisfaction is the antecedent towards product quality as companies will prefer to have loyal customers who will patronage their goods and services than dissatisfy customers. Using after-sales services well im-

proves the financial fortunes of a company. After-sales services improve and enhance customer satisfaction through effective service quality in the automobile industry. The use of Kano Model has revealed that CFAO Motors must focus on value enhancers and value drivers for customers. The study concludes that CFAO Motor must be customer-centric organization in order to build a long term relationships with its customers through the deployment of effective marketing strategies to better the business performance.

The study recommends that the management of CFAO must make a conscious effort of meeting customer requirements by focusing on the (M), (O) and (A) dimensions as indicated by the Kano Model analysis in order to meet customers' requirements of a product/service offering. Maintenance and repair works plays a key role in after-sales services and those who drive this are the service technicians. It is imperative for management to commit resources to improve their skills and competencies to resolve issues through periodic training for service technicians. Furthermore, management must undertake an audit on value stream mapping to appreciate value enhancers and put less investment in non-value added activities.

Conflicts of Interest

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

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