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Customer Satisfaction and Expectation Towards After Sales Service of TVS Motors Ltd in Sivakasi

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Abstract

Customer satisfaction is a strategic goal of any organisation, since a satisfied customer is the core concern of any organisation; they pay close attention to the factors that influence customers' satisfaction. After sales service is one of the important factor that influence customer satisfaction in case of durable goods. After sales service is needed to prevent dissatisfaction, frustration and it will among present customers against the product and its manufacturers. This study basically focuses on after sales service offered by "TVS Motors Ltd". This study has considered different aspects of after sales service that has impact on customer satisfaction. The data required for study is collected through a structural questionnaire. It includes opinion of customers on various aspects of customer's expectations and customer satisfaction also.

Keywords: *Strategic goal, customer expectation, customer satisfaction, After Sales Service, TVS Motors.*

Introduction: After sales service has become an important marketing tool for the manufacturing industry globally, Nigeria inclusive. A rapidly changing business environment, increased use of technology, higher market competition, and higher potential profits in after sales service has changed the way companies view after sales services (Muhammad et al, 2011). It is no longer treated as a cost center, but instead, has become a major profit source with profitability ranging up to 45% of corporate revenues for many business environments (Saccani, et al., 2007). After sales service involve a continuous interaction between the service provider and the customer throughout the post-purchase product life cycle. At the time the product is sold to the customer, this interaction is formalized by a mutually agreed warranty or service contract. The exact terms of the warranty or service contract, the characteristics of the customer base, and the nature of the sold product influence the after sales service strategy of the service provider (Cohen et al., 2006; Oliva and Kallenberg, 2003) as cited in Muhammed, et al (2011). Goffin and New, (2001) discovered that after-sales services maximize the value extracted by customers over the entire product life cycle. Kurata and Nam, 2010; and Ahn and Sohn,(2009)) agreed that

after-sales services can create sustainable relationships with customers and contribute significantly to customer satisfaction by offering different after-sales services during the various stages of the primary product lifecycle, the provider can ensure product functionality and thereby customer satisfaction. This may lead to a fruitful relationship between the provider and the customer over time, allowing for more transactions. It is on this note that this research paper wishes to investigate the impact of after sales service dimensions on customer satisfaction and retention with special reference to LG Electronics in Ibadan metropolis, Nigeria. Two-wheelers are most popular especially among the people belonging to middle level group. Due to wide choice of brands there is stiff competition among the manufacturers and marketers to get attention of the buyers. People favor a specific model of motor cycle among different brands for numerous reasons like maintenance, price, appearance, fuel efficiency, durability and resale value. Today the two wheeler industry plays a important role in the Indian economy. India is the second largest two-wheeler manufacturers in the world. One of the most important features of economic development is the transformation of luxury goods into necessary goods. In recent times one such goods, which has been greatly demanded by the consumers, is the motor cycle possessing a mechanical device for conveyance is an indicator of good standard of living.

The Indian two wheeler market with a volume of about 3.7 million is the second largest manufacturer and producer of two-wheelers in the world. It stands next only to Japan and china in terms of the number of two-wheelers produced and domestic sales respectively. The Indian two-wheelers industry can be classified into three major segments namely-scooters, motorcycles and mopeds. The key players in the Indian two-wheeler markets are TVS, BAJAJ, HERO and HONDA. The Indian motorcycle industry can be broadly categorized into Indian motorcycles and Indo-Japanese motorcycles. Indo-Japanese motorcycles segment is dominated by Hero group, Bajaj and Escorts in collaboration with Japanese manufacturers like Honda, Kawasaki and Yamaha respectively. The Indian motorcycles are dominated by Bajaj (m80), Escorts and Royal Enfield.

Customer satisfaction is the individual's perception of the performance of the product or service in relation to his or her expectations. Customers will have drastically different expectations, of an expensive. The concept of customer satisfaction is a function of customer expectations. The overall objectives of providing value to customers continuously and more effectively than the competition is to have and to retain highly satisfied. In a competitive marketplace where business competes for customers, customer satisfaction is seen as a key differentiator and increasingly has been become a key element of business strategy.

Statement of the Problem: Today's consumer markets are too competitive. For maximizing the profit and widening the market share, the companies use various efforts for attaining their objectives. There also exist strong consumer advocacy movements all over the world. Most of the companies try to convert potential customer into a regular customer. For this, they try to provide maximum benefits and convenience to the customers through the excellent utilization of resource. The transformation of a potential customer into a

regular customer is not an easy task. They have to blend various marketing mixes in different ways. Satisfaction is a subjective concept and crucial concern for both customers and organisations, thus difficult to determine. It depends on many factors and varies from person to person and product to product. The importance of customer satisfaction in strategy development for customers and market oriented cannot be easily determined. Now a day it has become very important factor for each and every organization to enhance the level of customer satisfaction. Customer satisfaction, a term issued in marketing, it's a measure how product and service supplied by the company meet or surpass customer expectation. If customer expectations meet with the perceived value of goods and service then customer is satisfied but if the perceived value of goods and service is less than the customer expectations than customer is dissatisfied and if the perceived value exceeded the expected value of the goods and service than the customer is delighted. Hence, the researchers decide to take the study about Customer Satisfaction and Expectation towards After Sales Service of TVS Motors Ltd in Sivakasi area.

Scope of the Study: The study is limited to the customers of TVS motors vehicle buyers. The customer includes customers who enter the show room. This study will help us to understand customers, preference, satisfaction levels and their needs expected from the business owners.

Objectives of the Study:

- ❖ To study about the socio-economic and demographic profile of the respondents.
- ❖ To ascertain their expectation levels towards after sales service.
- ❖ To analyses their satisfaction level
- ❖ To identify the various factors influencing their satisfaction level
- ❖ To give suitable suggestions on the basis of the findings of the study and come out proper conclusion.

Review of Literature: A study on the customers Satisfaction and expectation towards after sales service of Two wheelers have attached the attention of many researchers in recent times, When formulating the problem for their study, the researcher should refer the studies already under taken previously.

Duggani yuvaraju and Durga Rao. S (2014) “Customer satisfaction towards Honda Two wheelers” in their study, made an attempt to examine customer satisfaction towards Honda two wheelers: A case study in Tirupati. In their study they use convenient sampling method for collecting data from 100 samples with the help of questionnaire. The results of performance of the Honda bikes are fully satisfied the customer’s needs of pick up, quality, services.

Adil Bashir (2013) “Consumer behavior towards online shopping of electronics in pakistan” in his research identified and got insight into consumer behavior towards online shopping of electronic goods with respect to Pakistan economy. Convenient sampling method is used to collect the data from 240 samples with the help of the questionnaire. The

result of the study is the main barrier in the process of online shopping is the safety issue. People of Pakistan are afraid to share their personal information and financial information on internet and the low level of trust on online stores therefore; sellers have to make proper strategies to increase the customer's level of trust on them.

Silja Hokkanen (2012) in his study "The impact of in store customer service on post purchase" analyzed how in store customer service can affect satisfied impulse purchaser' post purchase behavior in terms of store returns. The results of those study revealed that in-store customer service can positively affect impulse-buyers' post purchase evaluations of service, and by increasing the level of in-store service the sales personal can influence the customers' and move an initial impulse purchase into a permanent adoption. This in return can minimize store returns.

Charles- Henri Gros (2012) in his study "The influence of social media on consumers during their purchase decision making process" aims to explain how the influence of social media is reflected on consumers' purchasing decision-making process and if this influence differs at the various stages of this process. Non probability sampling is used for collecting data from 260 consumers. The research is that the influence of social media also differs depending upon cultural background such as nationalities. Indeed, the study indicated that consumers depending on their nationalities appeared more or less influenced by social media at the various stages of their purchasing decision-making processes.

Wiwat Jankingthong and pattanij Gonejanart (2012) in their study "Factors affecting Post purchase behavioural intentions in Tourism sector" analyzed the relationships of factors affecting post- purchase behavioral intentions in tourism sector on the basis of the investigated variables from recent relevant literature. The study identifies the key drivers of post-purchase behavioral intention as well as their relationships, thus representing a significant step forward in the explanation of post purchase behavioral intentions. The synthesis of this study is that factors influencing post-purchase behavioral intention include the direct effect of CSR, service quality, perceived value and tourist satisfaction which have a positive relationship with post-purchase behavioral intention and tourist complaints which have a negative relationship with post-purchase behavioral intention and the indirect effect of CSR, designation image, service quality and perceived value on post-purchase behavioral intention through tourist satisfaction and the indirect effect of designation image and service quality on post-purchase behavioral intention through service quality and perceived value, respectively.

Sheetal Soni and Abhishek Soni (2012) in their survey "consumer behavior towards two wheeler bikes" conducted on the consumer of two wheelers (based on responses from 100 two wheelers users from both urban and rural areas) in Jodhpur District of Rajasthan. Though the sample size is small, the study brings out some of the interesting observations about the general attitude of the Indian consumers towards their purchase decisions and behavior, which could be broadly applicable to many other consumer products as well. The conclusion of the study is the consumers expressed high satisfaction with their two wheeler

bikes. Advertising is considered to be powerful medium in the marketing of automobiles. Amongst the different media that are used, television is the most effective in influencing the consumers' buying decisions, keeping in view the ever increasing "growth rate" of population, prevailing standards of living and cost of vehicles, two wheelers bikes would continue to dominate the automobile industry in India.

Vetrivel.T (2012) in his study "Pre-purchase and post purchase behavior of customers with reference to TVS motors in erode district" analyzed pre-purchase and post-purchase Behaviour of customers with reference to TVS Motors in Erode district. This study was carried out for a period of 9 months in Erode district. The objective of this study is to be identifying the attitude of two wheelers owners towards TVS Motors. For these purpose 300 two wheelers owners were taken as sample for the study in order to get the needed information. The study is a descriptive type and convenient sampling is used. The data are collected from survey using questionnaire through interview schedule. From this survey, it was found that TVS vehicles are mainly preferred for its power & pickup, safely & comfort and design. Performance is a major factor for purchasing TVS brand. TVS motors has to update its technology to meet the changing customer needs and preference to cope up with the competitions in the market and adequate steps should be made to increase the quality in their services for better customer satisfaction.

Mallikarjuna Reddy (2010) in his study "consumer behavior towards two wheelers motor bikes" This study carried out with the help of the four important major factors, through this the behavior of the consumer is evaluated. For his study he selected as 100 samples for data collection. The result of the study is the consumers mostly prefer Hero Honda bikes. As far as mileage per litre of petrol is concerned, Hero Honda is ruling the market and finding favour with the consumers.

S. Saravanan and Prof. N. Panchanatham (2009), in their study they discussed the essentials for Promotion of a product .The result shows that a customer considers all factors at the time of purchasing a two wheeler, although majority of customers give importance to the brand image. This study also describes the socioeconomic factors which satisfy two wheelers customers and that the employees and students crave for show room services.

Khor Eng Tatt (2010) in his study "Factors influencing consumers buying behavior of Luxury branded goods" he conducted to focus on how consumer buying behavior reacts with regards luxury branded goods. The study also would like to understand further whether is there any interaction between the independent variable and moderating variable with the depend variable (consumer behavior). The details collected from 200 samples through questionnaire. Result analysis indicated that monthly does not moderate the interactions between the independent variable, brand Loyalty and dependent variable, Consumer buying behavior.

Jagadeshkumar (June 2005) in his study "A study on customer expectations, experience and satisfaction level towards services provided at two-wheeler exchange mela's with

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special reference to lotus TVS” Erode. A project report submitted to Faculty of management sciences.

Methodology Used:

Primary Data: Primary data collected from the respondents. Questionnaire prepared by keeping in view of the objective.

Secondary data: Secondary data have been collected from Standard Textbooks, Magazines, Journal and Internet.

Sampling Design: The scope of the study only extends to the Sivakasi. The numbers of respondents are high, so the researcher had adopted convenient sampling technique, 80 customers are taken for this study.

Tools and Techniques: Following tools and techniques are to be used for analyzing the data:

- Per cent Analysis
- Garret Ranking Method
- Chi-square Test
- Factor analysis

Hypothesis: The following are the hypotheses framed for the study:

- ✓ There is no significant association between level of satisfaction and occupation level.
- ✓ There is no significant association between level of satisfaction of respondents and age of the respondents.

Analysis and Interpretation of Data:

Table 1 Gender Wise Classifications

Sex	Frequency	Per cent
Male	39	48.8
Female	41	51.2
Total	80	100

Source: Primary data

It is clear from the above table that, among the 80 respondents, 51.20% are female respondents and left over 48.80 are male respondents.

It is found that majority of the respondents (51.2 per cent) are coming under the category of female.

Table 2 Age Wise Classification of Respondents

Sl. No.	Age	Frequency	Per cent
1	20-27 years	69	86.2
2	28-34 years	8	10
3	35-42 years	2	2.5
4	51 years and Above	1	1.2
	Total	80	100

Source: Primary Data

It is significant to note from the above Table 2 that young people in the age bracket of 20 to 27 years dominate in the use of two wheelers. It is found that 86.20 per cent of the respondents are in the age bracket of 20 to 27 years followed by 28 to 34 years category, which constitutes 10.00 per cent of the total respondents.

It is found that majority of the respondents (86.2 per cent) are having 20-27.

Table 3 Marital Status

Sl. No	Marital status	No. of respondents	Per cent
1	Married	18	22.5
2	Unmarried	62	77.5
	Total	80	100

Source: primary data

The above table shows that out of 80 respondents, 18 respondents (22.5per cent) are married and the remaining 62 respondents (77.5 per cent) are unmarried.

It is found that majority of the respondents (77.5 per cent) are unmarried.

Table 4 Occupational Status

Sl. No.	Occupation	No. of Respondents	Per cent
1.	Student	54	67.5
2.	Employed	11	13.8
3.	Professional	7	8.8
4.	Business	5	6.2
5.	Others	2	2.5
6.	Retired	1	1.2
	Total	80	100

Source: Primary Data

The above table 4 gives a clear inference that out of 80 respondents, 67.5 per cent are students; 13.8 per cent are employed people; 8.8 Per cent are professional; 6.2 per cent are business people; others are 2.5% and remaining 1.2 per cent are retired people.

It is inferred that most of the respondents (67.5) are students. The above stratified status has also presented in the following diagram.

Table 5 Income Level of Respondents

Sl. No	Income Level	No. of Respondents	Per cent
1	Above 20000	25	31.2
2	Rs.15001-20000	22	27.5
3	Rs.10001-15000	14	17.5
4	Rs.5001-10000	4	5.0
5	Below Rs.5000	13	16.2
	Total	80	100.0

Source: Primary Data

From the above table 5 it is inferred that the 5% of the respondents are having an income of Rs.5001-10000 per month, 17.50% of the respondents are having an income of Rs.10001-15000 per month and 16.2% of the respondents are having an income of below Rs.5000 per month. 27.50% of the respondents are having an income of Rs.15001-20000 per month.31.20 % of the respondents are having an income of .Above Rs. 20,000 per month.

It is inferred that majority 31.20% of the consumers are having income above 20,000 per month.

Table 6 Educational Qualification of the Respondents

Sl. No	Education	No. of Respondents	Per cent
1	Not Studied	1	1.2
2	Up to 12th Std	2	2.5
3	UG	14	17.5
4	PG	61	76.2
5	Others	2	2.5
	Total	80	100.0

Source: Primary Data

From the above table 6 it is inferred that 17.5% of the respondents are Graduates, 76.2% of the respondents are qualified post graduates and 2.5% of the respondents are qualified up to 12th standard, 1.2 per cent of the respondents are not studied, 2.5 per cent of the respondents are diploma (others) levels.

It is inferred that most of the respondents (76.2%) are studied up to Post graduate level.

Table 7 Earning Members in the Family

Sl. No	Earnings Members	No. of Respondents	Per cent
1	One	7	8.8
2	Two	28	35.0
3	Three	32	40.0
4	Four	13	16.2
Total		80	100.0

Source: Primary data

From the above table it reflects that out of 80 respondents, 28 respondents (35%) having Two earning members in their family, 32 respondents (40%) having Three earning members in their family. 7 respondents (8.8%) having one earning members in their family and 13 respondents (16.20%) having four earning members in their family.

It is understood that majority of the respondents (40%) have three member in their family under income earning members category.

Table 8 Number of Vehicle Owned by the Respondents

Sl. No	No. of Vehicles	No. of Respondents	Per cent
1	Only 1 Two-Wheeler	4	5.0
2	2 Two-Wheeler	31	38.8
3	1 Two-wheeler & 1 Four-Wheeler	23	28.8
4	More than 2 Two-wheeler & More than 1 Four-Wheeler	22	27.5
Total		80	100.0

Source: Primary Data

From the above table it is found that 5.0% of the respondents are having only 1 two-wheeler, 38.8% of the respondents are having 2 Two-wheeler, 27.5% of the respondent are having more than 2 two wheelers & Four-Wheeler and 28.8% of the respondents are having 1 Two-Wheeler & 1 Four wheeler.

It is under stood that majority of the respondents (38.8 per cent) are having two 2 wheelers.

Table 9 Model of Vehicle Owned by the Respondents

Sl. No	Brand	No. of Respondents	Per cent
1	TVS Flame SR 125	1	1.2
2	TVS Scooty Pep Plus	26	32.5
3	TVS Jupiter	1	1.2
4	TVS Star city	28	35.0
5	TVS Scooty Streak	3	3.8

6	TVS Apache 180 RTR	4	5.0
7	TVS sport	15	18.8
8	TVS star city plus	1	1.2
9	TVS XL	1	1.2
	Total	80	100.0

Source: Primary Data

From the above table it is inferred that 35% of the respondents having TVS Star city, 32.5% of the respondents having TVS Scooty Pep Plus, 18.8% of the respondents having TVS sport, 3.8% of the respondents having TVS Scooty Streak, and .5% of the respondents having TVS Apache 180 RTR.

Table 9 reveals that, most of the respondents are having TVS Star city.

Table 10 Usage of Vehicle

Sl. No.	Years	No. of respondents	Per cent
1	Below 1 year	4	5
2	1-2 years	31	38.8
3	3-4 years	23	28.8
4	More than 4 years	22	27.5
	Total	80	100

Source: Primary Data

From the above table it is found that out of 80 respondents, 5 per cent of the respondents are using vehicle for below 1 year, 38.8 per cent of the respondents have been using 1-2 years, 28.8 per cent of the respondents have been using 3-4 years and remaining 27.5 per cent of the respondents are using more than four years.

It is under stood that majority of the respondents (38.8 per cent) are using between 1 to 2 years.

Table 11 Intimation for the Service Due Date

Sl. No.	Intimation received	No. of Respondents	Per cent
1	Yes	69	86.2
2	No	11	13.8
	Total	80	100

Source: Primary Data

It shows that out of 80 respondents, 86.2 per cent of the respondents are received intimation through calls or letters for service due date from their service provider to get motor vehicle service. Remaining 13.8 per cent respondents are not received intimation for the service due.

It is lucid from the above data that most of the respondents (86.2 per cent) are received intimation for the service due.

Table 12 Free Service Offered

Sl. No.	Free service	No of Respondents	Per cent
1	Yes	66	82.5
2	No	14	17.5
Total		80	100

Source: Primary Data

It shows that out of 80 respondents, 82.5 per cent of the respondents are received free service intimation by TVS Motors Ltd. offered. Remaining 17.5 per cent respondents are not received intimation for the free service offered.

It is found that most of the respondents (82.5 per cent) are received free service intimation for the free service offered by TVS motors Private Limited.

Table 13 Cleanliness and Comfort of Service Reception and Customers Waiting Area

Sl. No.	Opinion	No of Respondents	Per cent
1	Fair	14	17.5
2	Good	51	63.8
3	Excellent	15	18.8
Total		80	100

Source: Primary Data

From the above table it is found that out of 80 respondents 17.5 per cent of the respondents are opined that cleanliness and comfort at fair level, 18.8 per cent of the respondents are opined that cleanliness and comfort at excellent level and 63.8 per cent of the respondents good with their cleanliness and comfort of service reception and customers waiting area. It is under stood that majority of the respondents (63.8 per cent) having Good with their cleanliness and comfort of service reception and customers is waiting area.

Table 14 Expectation of Service from TVS Motors Vehicle

Sl. No.	Expect service	No of Respondents	Per cent
1	better service	72	90
2	better settlement and claim	7	8.8
3	better returns	1	1.2
Total		80	100

Source: Primary Data

From the above table it is found that out of 80 respondents 90 per cent of the respondents has expected better service from TVS motors vehicle, 8.8 per cents of the respondents has

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 expected better settlement and claim from TVS motors vehicle and, 1.2 per cents of the respondents has expected better return from TVS motors vehicle.

It is under stood that majority of the respondents (90 per cent) have been expected better service from TVS motors vehicle.

Table 15 Price of Spare Parts from TVS Motor

Sl. No.	Price levels	No of Respondent	Per cent
1	High	24	30
2	Reasonable	51	63.75
3	Low	5	6.25
Total		80	100

Source: Primary Data

From the above table it is found that out of 80 respondents 30 per cents of the respondents felt that the price level is high, 63.75 per cents of the respondents felt that the price level is reasonable and 6.25 per cent of the respondents felt that the price level is Low. It is lucid from the above data that majority of the respondents (63.75 per cents) felt that the price of spare parts is reasonable.

Table 16 Overall Opinions about Service Charges and Repair Charges

Sl. No.	Repair Charges	No of respondents	Per cent
1	High	9	11.25
2	Reasonable	69	86.25
3	Low	2	2.5
Total		80	100

Source: Primary Data

It is explained that out of 80 respondents 11.25 per cent of the respondents felt that service or repair charges are high, 86.25 per cent of the respondents felt that service or repair charges are reasonable and 2.5 per cent of the respondents felt that service or repair charges are low.

It is found that most of the respondents (86.5 per cent) felt that service or repair charges are reasonable.

Table 17 Overall Satisfaction

Sl. No.	Level of satisfaction	No of Respondents	Per cent
1	Yes	64	78.8
2	No	16	20
Total		80	100

Source: Primary Data

It shows that out of 80 respondents, 78.8 per cent of the respondents are highly satisfied with their present two wheelers. Remaining 20 per cent respondents are not satisfied with their present two wheelers

It is lucid from the above data that majority of the respondents (78.8 per cent) are highly satisfied with their present two wheelers.

Table 18 Overall Suggestions for the Improvement of TVS Motors Vehicle

Sl. No.	Over all opinion	Frequency	Per cent
1	Quality	18	22.5
2	Different colors	10	12.5
3	Attractiveness	22	27.5
4	Mileage	13	16.2
Total		80	100

Source: Primary Data

From the above table it is found that out of 80 respondents 22.5 per cent of the respondents suggested for further improvement in quality vehicle, 12.5 per cent of the respondents, suggested for making different colors, 27.5 per cent of the respondents, suggested for the improvement in attractiveness of the vehicle, 16.2 per cent of the respondents, suggested for the improvement in mileage in TVS motors. It is lucid from the above data that most of the respondents (27.5 per cent) suggested for the improvement in attractiveness

Attracted Features in TVS Motors Private Limited among all other brands- Garrett Ranking Analysis: The respondents are asked to rank the attracted features of TVS among all other brands. To identify the most preferred features of TVS motors, the researcher has used Garrett ranking test. The following table shows the details of scores given by the respondents for the features attracted in TVS Motors private Limited among all other brands.

Table 19 Attracted features in TVS motors private limited among all other brands

Sl. No.	Features	Rank				Total
		I	II	III	IV	
1	Brand Image	19	12	16	33	80
2	Service network	19	21	24	16	80
3	Price	32	11	26	11	80
4	Mileage	10	36	14	20	80
Total		80	80	80	80	320

Source: primary data

Garrett Scores Explanations: The Garret ranks are calculated by using appropriate Garret ranking formula. Then based on the Garret ranks, the Garret Table value is ascertained. The

Garret Table value and scores of each purpose in multiplied to record scores in Table 3.19 Finally by adding each row; the total Garret scores are obtained.

$$100 (R_{ij} - 0.5)$$

Per cent Position = -----

N_j

Where

R_{ij}= Rank given for the ith variable by the jth respondents

N_j = Number of variables ranked by the jth respondents.

Table 20 Per cent Position and Garret Value

Sl. No.	$100 \frac{(R_{ij} - 0.5)}{N_j}$	Calculated Value	Garret Value
1.	100 (1-0.5)/4	12.5	73
2.	100 (2-0.5)/4	37.5	57
3.	100 (3-0.5)/4	62.5	44
4.	100 (4-0.5)/4	87.5	28

Source: Computed Value

Table 21 Calculation of Garrett Score

Sl. No.	Features	Rank				Total
		1	2	3	4	
1.	Brand Image	19*73=1387	12*57=684	16*44=704	33*28=924	3699
2.	Service network	19*73=1387	21*57=1197	24*44=1056	16*28=448	4088
3.	Price	32*73=2336	11*57=627	26*44=1144	11*28=308	4415
4.	Mileage	10*73=730	36*57=2052	14*44=616	20*28=560	3958

Source: primary data

Table 21 shows the Garret scores. The Garret ranks are calculated by using appropriate Garret ranking formula. Then based on the Garret ranks, the Garret Table value is ascertained. The Garret Table value and scores of each purpose in multiplied to record scores in Table 4.16 Finally by adding each row; the total Garret scores are obtained.

Table 22 Attracted features in TVS motors private limited among all other brands

Sl. No.	Features attracted to satisfied TVS Motors private Limited	Garrett Scores	Average	Rank
1.	Brand Image	3699/80	46.24	IV
2.	Service network	4088/80	51.10	II
3.	Price	4415/80	55.19	I
4.	Mileage	3958/80	49.48	III

Source: Computed Value

The above table 22 shows that the Garratt scores and the average scores of attracted features of TVS Motors private Limited among all other brands. The average scores are ranked according to their values. The first rank is given to Price, Second rank goes to service network, Third rank for Mileage and Fourth rank to brand image of TVS Motors private Limited among all other brands.

Customer Satisfaction towards Service Features of TVS Motors Pvt. Ltd: To know the satisfaction level of the respondent's towards after sales service. Satisfaction towards service features of TVS motors pvt Ltd the study has been made. For this purpose opinion of the respondents are gathered to identify the most preferred service features of TVS motors, the researcher has used Garrett ranking test. The following table shows the details of scores given by the respondent's satisfaction for the selection of service features.

Table 23 Satisfaction towards service features of TVS motors pvt Ltd

Sl. No.	Service	Rank				Total
		I	II	III	IV	
1	Information in time	10	46	15	9	80
2	Quick issues of reimbursement	32	7	12	29	80
3	Claim & settlement	25	8	17	30	80
4	Customer relationship	13	19	36	12	80
Total		80	80	80	80	

Source: Computed Data

Table 24 Per cent Position and Garret Value

S. No	$100 \frac{(R_{ij}-0.5)}{N_j}$	Calculated Value	Garret Value
1.	$100 (1-0.5)/4$	12.5	73
2.	$100 (2-0.5)/4$	37.5	57
3.	$100 (3-0.5)/4$	62.5	44
4.	$100 (4-0.5)/4$	87.5	28

Source: Computed Value

Table 25 Calculation of Garrett Score

Sl. No.	Purposes	1	2	3	4	Total
1.	Information in time	$10*73$ =730	$46*57$ =2622	$15*44$ =660	$9*289$ =2601	6613
2.	Quick issues of reimbursement	$32*73$ =2336	$7*57$ =399	$12*44$ =528	$29*28$ =812	4075
3.	Claim & settlement	$25*73$ =1825	$8*57$ =456	$17*44$ =748	$30*28$ =840	3869

4.	Customer relationship	13*73 =949	19*57 =1083	36*44 =1584	12*28 =336	3952
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Source: Computed Primary data

Table 25 shows the Garret scores. The Garret ranks are calculated by using appropriate Garret ranking formula. Then based on the Garret ranks, the Garret Table value is ascertained. The Garret Table value and scores of each purpose in multiplied to record scores in Table 4.16 Finally by adding each row; the total Garret scores are obtained.

Table 26 Satisfaction towards service features of TVS motors pvt Ltd

Sl. No.	Purposes	Total Scores	Average	Rank
1.	Information in time	6613/80	82.66	I
2.	Quick issues of reimbursement	4075/80	50.94	II
3.	Claim & settlement	3869/80	48.36	IV
4.	Customer relationship	3952/80	49.4	III

Source: Computed Result

The above table shows that the Garratt scores and the average scores of Satisfaction level towards service features of TVS motors pvt Ltd. The average scores are ranked according to their values. The first rank is given to Information in time, Second rank goes to Quick issues of reimbursement, Third rank for Customer relationship and Fourth rank to Claim & settlement of Satisfaction towards service features of TVS motors pvt Ltd.

Likert Scaling Technique: In order to analyze factors influencing their satisfaction level, likert five point scaling technique has been used. Likert scaling technique is one of the techniques used to find out which one of the aspects has the most positive outlook. For this analysis, the researcher has prepared 10 factors in statements on a five point scale and asked the members to give their opinion. In this study, he has used totally 80 statements.

The weight age is given for each column ranging from five to one point in order to find out the total scores and mean scores.

The researcher has assigned following weight to the respondent’s opinion Highly Satisfied (HS) = 5 points; Satisfied (S) = 4 points; Neutral (N) = 3 points; Dissatisfied (DS) = 2 points; Highly Dissatisfied (HDS) = 1 points.

Table 27 Factors influencing their Satisfaction Level

Sl. No.	Factors	HS	S	N	DS	HDS	Total
1	Delivery time	20	58	2	0	0	80
2	Availability spares	14	47	19	0	0	80
3	Attitude of service provider	33	20	14	13	0	80
4	Cost of service	35	30	15	0	0	80

5	Warranty service	27	45	7	1	0	80
6	Water service	28	49	3	0	0	80
7	Free service	15	41	11	13	0	80
8	Oil service	13	23	33	9	2	80
9	Customer service	10	36	20	1	13	80
10	General service	17	23	16	11	13	80
Total		212	372	140	48	28	

Source: Primary data

Table 28 Calculation of Likert Scaling Technique

Sl. No.	Factors	HS*5	S*4	N*3	DS*2	HDS*1	Total/80	Mean Scores
1	Delivery time	20*5= 100	58*4= 232	2*3= 6	0*2= 0	0*1= 0	338/80	4.23
2	Availability spares	14*5= 70	47*4= 188	19*3= 57	0*2= 0	0*1= 0	315/80	3.94
3	Attitude of service provider	33*5= 165	20*4= 80	14*3= 42	13*2= 26	0*1= 0	313/80	3.91
4	Cost of service	35*5= 175	30*4= 120	15*3= 45	0*2= 0	0*1= 0	340/80	4.25
5	Warranty service	27*5= 135	45*4= 180	7*3= 21	1*2= 2	0*1= 0	338/80	4.22
6	Water service	28*5= 140	49*4= 196	3*3= 9	0*2= 0	0*1= 0	345/80	4.31
7	Free service	15*5= 75	41*4= 164	11*3= 33	13*2= 26	0*1= 0	298/80	3.72
8	Oil service	13*5= 65	23*4= 92	33*3= 99	9*2= 18	2*1= 0	274/80	3.43
9	Customer service	10*5= 50	36*4= 144	20*3= 60	1*2= 2	13*1= 13	269/80	3.36
10	General service	17*5= 85	23*4= 92	16*3= 48	11*2= 22	13*1= 13	260/80	3.25

Source: Computed Value

Table 29 Factors influencing their satisfaction level

Sl. No.	Characteristics	Mean Scores	Rank
1	Delivery time	4.23	III
2	Availability spares	3.94	V
3	Attitude of service provider	3.91	VI
4	Cost of service	4.25	II

5	Warranty service	4.22	IV
6	Water service	4.31	I
7	Free service	3.72	VII
8	Oil service	3.43	VIII
9	Customer service	3.36	IX
10	General service	3.25	X

Source: Primary data

From the above Table 29 it is clear that, Water service got First rank; Cost of service has been ranked as Second rank; Delivery time has secured third rank; Warranty service got Fourth rank; Availability spares has been ranked as Fifth rank; Attitude of service provider has secured Sixth rank; Free service got Seventh rank; Oil service has been ranked as Eighth rank; Customer service got Ninth rank and General service has secured Tenth rank.

Table 30 Characteristics of TVS motor vehicles

Sl. No.	Characteristics	HS	S	N	DS	HDS	Total
1	Price of vehicle	5	50	9	0	0	64
2	Engine and performance	12	35	9	8	0	64
3	Maintenance	19	41	4	0	0	64
4	Color	23	24	17	0	0	64
5	Cost of spares	8	40	16	0	0	64
6	Mileage	32	25	7	0	0	64
7	Style	25	37	1	1	0	64
8	Weight	19	22	15	8	0	64
9	Capacity of petrol	28	33	2	1	0	64
10	Brakes	13	30	10	3	8	64
11	Kick Starters	24	23	14	1	2	64
12	Utility box	12	18	34	0	0	64
Total		220	378	138	22	10	

Source: Primary data

Table 31 Calculation of Likert Scaling Technique

Sl. No.	Characteristics	HS*5	S*4	N*3	DS*2	HDS*1	Total/80	Mean Scores
1	Price of vehicle	5*5=25	50*4=200	9*3=27	0*2=0	0*1=0	252/64	3.94
2	Engine and performance	12*5=60	35*4=140	9*3=27	8*2=16	0*1=0	243/64	3.80
3	Maintenance	19*5=95	41*4=164	4*3=12	0*2=0	0*1=0	271/64	4.23
4	Color	23*5=115	24*4=	17*3=	0*2=0	0*1=0	262/64	4.09

			96	51				
5	Cost of spares	8*5=40	40*4= 160	16*3= 48	0*2=0	0*1=0	248/64	3.88
6	Mileage	32*5=160	25*4= 100	7*3= 21	0*2=0	0*1=0	281/64	4.39
7	Style	25*5=125	37*4= 148	1*3= 3	1*2=2	0*1=0	278/64	4.34
8	Weight	19*5=95	22*4= 88	15*3= 45	8*2=16	0*1=0	244/64	3.81
9	Capacity of petrol	28*5=140	33*4= 132	2*3= 6	1*2=2	0*1=0	280/64	4.38
10	Brakes	13*5=65	30*4= 120	10*3= 30	3*2=6	8*1=8	229/64	3.58
11	Kick Starters	24*5=120	23*4= 92	14*3= 42	1*2=2	2*1=2	258/64	4.03
12	Utility box	12*5=60	18*4= 72	34*3= 102	0*2=0	0*1=0	234/64	3.66

Source: Primary data

Table 32 Characteristics of TVS motor vehicles

Sl. No.	Characteristics	Mean Scores	Rank
1	Price of vehicle	3.94	VII
2	Engine and performance	3.80	X
3	Maintenance	4.23	IV
4	Color	4.09	V
5	Cost of spares	3.88	VIII
6	Mileage	4.39	I
7	Style	4.34	III
8	Weight	3.81	IX
9	Capacity of petrol	4.38	II
10	Brakes	3.58	XII
11	Kick Starters	4.03	VI
12	Utility box	3.66	XI

From the above Table 32 it is clear that, Mileage got First rank; Capacity of petrol has been ranked as Second; Style has secured third rank; maintenance got Fourth rank; color has been ranked as Fifth; Kick starters has secured Sixth rank; Price of vehicle got Seventh rank; Cost of spares has been ranked as Eighth; Weight got Ninth rank and Engine and performance has secured Tenth rank; utility box has secured Eleventh rank; Brake has been ranked as Twelfth.

Association among Level of Satisfaction towards occupation level: To know the association among level of satisfaction towards occupation levels has been made with the following hypothesis.

Hypothesis 1: “There is no significant association among level of satisfaction towards occupation level”. To test the hypothesis Chi-Square Test is applied and the result is presented in the following table.

Table 33 Associations between Level of Satisfaction and Occupation Level

Occupation		Level of satisfaction	
		No opinion	Agree
Professional	Count	0	7
	Expected count	2.28	4.73
	% within Occupation	0%	100%
Business	Count	3	2
	Expected count	1.63	3.38
	% within Occupation	60%	40%
Employed	Count	8	3
	Expected count	3.58	7.43
	% within Occupation	72.73%	27.27%
Student	Count	15	39
	Expected count	17.55	36.45
	% within Occupation	27.78%	72.22%
Retired	Count	0	1
	Expected count	0.325	0.675
	% within Occupation	0%	100%
Others	Count	0	2
	Expected count	0.65	1.35
	% within Occupation	0%	100%
Total	Count	26	54
	Expected count	26	54
	% within Occupation	32.5	67.5

Source: Computed data

From the above table it is found that out of 80 respondents 39 respondents are students towards agree factors of TVS motors in level of satisfaction. The result of chi-square test is presented in the following table.

Table 34 Chi-square Test Result

	Value	df	Asymp.sig.(2-sided)
Pearson Chi-Square	15.20158853	5	0.010
Likelihood Ratio	17.46092767	5	0.004

Linear-by-Linear Association	0.20443451	1	0.651
N of Valid Cases	80		

Source: Computed data

From the above table it is found that the significant value of the chi-square value 15.20 for the 5 degrees of freedom is 0.010, which is less than the acceptable level of 0.05. Hence the null hypothesis is rejected and it is concluded that there is a significant association among level of satisfaction towards occupation level.

Association among Level of Satisfaction towards Age Level: To know the association between level of satisfaction and age of the respondents has been made with the following hypothesis.

Hypothesis 2: “There is no significant association among level of satisfaction of respondents towards age of the respondents”.

Table 35 Association between Level of Satisfaction and Age Level

Age		Level of satisfaction	
		No opinion	Agree
20-27 years	Count	26	43
	Expected Count	22.425	46.575
	% within Age	37.681159	62.31884
	% within group	100	79.62963
	% of Total	32.5	53.75
28-34 years	Count	0	8
	Expected Count	2.6	5.4
	% within Age	0	100
	% within group	0	14.81481
	% of Total	0	10
35-42 years	Count	0	2
	Expected Count	0.65	1.35
	% within Age	0	100
	% within group	0	3.703704
	% of Total	0	2.5
51 years and Above	Count	0	1
	Expected Count	0.325	0.675
	% within Age	0	100
	% within group	0	1.851852
	% of Total	0	1.25
Total	Count	26	54
	Expected Count	26	54
	% within Age	32.5	67.5

	% within group	100	100
	% of Total	32.5	67.5

Source: Computed data

From the above table it is found that out of 80 respondents 43 respondents are students towards agree factors of TVS motors in level of satisfaction. The result of chi-square test is presented in the following table.

Table 36 Chi-square test result

	Value	Df	Asymp.sig.(2-sided)
Pearson Chi-Square	6.1406333	3	.105
Likelihood Ratio	9.4704968	3	.024
Linear-by-Linear Association	4.2263374	1	.040
N of Valid Cases	80		

Source: Computed data

From the above table 36 it is found that the significant value of the chi-square value 6.14 for the 3 degrees of freedom is 0.105, which is more than the acceptable level of 0.05. Hence the null hypothesis is accepted and it is concluded that there is no significant association between levels of satisfaction towards age of the respondents.

Factor Analysis: Mathematically factor analysis is somewhat similar to multiple regression analysis. In factor analysis, each variable is expressed as a linear combination of the underlying factors. The amount of variance a variable shares with all the other variables included in the analysis is referred to communality. The co-variation among the variables is described in terms of a small number of common factors plus a unique factor for each variable. These factors are not over observed. If the variables are standardized, the factor model may be represented as

$$X_{ij} = A_{ij}F_1 + A_{i2}F_2 + A_{i3}F_3 + \dots + A_{im}F_m + V_iU_i$$

Where

X_{ij} = i^{th} standardized variable

A_{ij} = Standardized multiple regression coefficient of variable i on common

Factor j

F = common factor

V_i = standardized regression coefficient of variable i on unique factor iU_i = the unique factor for variable i

M = number of common factors

The unique factors are uncorrelated with each other and with the common factors. The common factors themselves can be expressed as a linear combination of the observed variables.

$$F_i = W_{i1}X_1 + W_{i2}X_2 + W_{i3}X_3 + \dots + W_{ik}X_k$$

Where

$F_{i=}$ estimate of i^{th} factor

$W_{i=}$ weight or factor score coefficient and K = number of variables

It is possible to select weights or factor score coefficient so that the first factor explains the largest portion of the total variance. Then a second set of weight can be selected, so that the second factor accounts for most of the residual variance, subject to being uncorrelated with the first factor. This same principle could be applied for selecting additional weights for the additional factors. Thus, the factors can be estimated so that their factor scores, unlike the value of the original variables, are not correlated. Furthermore, the first factor accounts for the highest variance in the data, the second factor the second highest, and so on.

Rotated factor matrix with communalities: In order to analyses the Opinion about factors influencing your satisfaction levels factor analysis has been used. Factor analysis has been used through SPSS package. The following table shows the rotated components matrix.

Table 38 Rotated factor matrix with communalities

Sl. No.	Statement	Component			
		Factor I	Factor II	Factor III	Communality
1	Free service	.880	.166	.051	.540
2	Customer Service	.848	-.324	-.128	.651
3	General service	.824	-.278	.025	.764
4	Attitude of service providers	.815	.258	.181	.822
5	Availability spares	.746	.301	-.066	.826
6	Delivery time	-.675	.033	.289	.817
7	Water service	.296	.852	-.048	.805
8	Cost of service	-.351	.819	.169	.816
9	Oil service	.211	.118	-.870	.840
10	Warranty service	.269	.446	.745	.757

Source: Computed Primary data (Rotated Matrix)

Factor analysis has been through SPSS package. Table 38 shows the rotated factor matrix. In this matrix, the factors are grouped under three categories. The group wise analysis is shown in the individual tables.

Table 39 Factor I - Service Factors

Sl. No.	Statement	Factor loading	Communality
1	Free service	.880	.540
2	Customer Service	.848	.651
3	General service	.824	.764
4	Attitude of service providers	.815	.822
5	Availability of spares	.746	.826

Source: Computed Primary data

In the first factor consists of five factors namely free service (.880), customer service (.848), general service (.824), attitude of service providers (.815), availability (.746) have been examined. Free service has the highest factors loading. Hence factor second is characterized as “Service factors”

Table 40 Factor II – Service cost Factors

Sl. No.	Statement	Factor loading	Communality
1	Water service	.852	.805
2	Cost of service	.819	.816

Source: Computed Primary data

In the second factor consists of two factors namely Water service (.852), cost of service (.819), have been examined. Water service has the highest factors loading. Hence factor second is characterized as “Service cost factors”

Table 41 Factor III – Warranty Service Factors

Sl. No.	Statement	Factor loading	Communality
1	Warranty service	.852	.805

Source: Computed Primary data

In the third factor consists of one factors namely Warranty service (.852) has been examined. Hence factor second is characterized as “Warranty service factors”

Findings of the Study:

The summary of findings is as follows:

- It clearly indicates that, the two wheelers companies should take into account the requirements of young people while designing the two wheelers.
- It is found that majority of the respondents (51.2) are coming under the category of female.
- It is found that majority of the respondents (77.5 percent) are unmarried.

- It is inferred that majority of the respondents (67.5) are students. The above stratified status has also presented in the following diagram
- It is inferred that most (31.20%)of the consumers are having income above 20,000 per month
- It is inferred that majority of the respondents (76.2%) are studied up to Post graduate level.
- It is understood that most of the respondents (40%) have three earning member in their family.
- It is under stood that most of the respondents (38.8 percent) are having two 2 wheelers.
- It is observed that, most of the respondents are having TVS Star city.
- It is under stood that majority of the respondents (38.8 percent) have been using between 1 to 2 years.
- It is lucid from the above data that most of the respondents (86.2 per cent) are received intimation for the service due.
- It is found that most of the respondents (82.5 per cent) are received intimation for the free service offered by TVS motors Private Limited.
- It is under stood that majority of the respondents (63.8 percent) having an opinion that cleanliness and comfort of service reception and customers waiting area of TVS is Good.
- It is under stood that majority of the respondents (90 percent) have been expected better service from TVS motors vehicle.
- It is lucid from the above data that majority of the respondents (63.75 per cent) are feeling the price of spare parts are reasonable.
- It is found that majority of the respondents (86.5 per cent) are feeling that feel service or repair charges are Good.
- It is lucid from the above data that majority of the respondents (78.8 per cent) are highly satisfied with their present two wheelers.
- It is lucid from the above data that majority of the respondents (78.8 per cent) are highly satisfied with their present two wheelers.
- It is lucid from the above data that most of the respondents (27.5 per cent) suggested for further improvement to attractiveness in TVS motors vehicle.

Likert Scaling Technique:

The researcher used ranking technique in the following details:

- It is clear that, Water service got First rank; Cost of service has been ranked as Second; Delivery time has secured third rank; Warranty service got Fourth rank; Availability spares has been ranked as Fifth; Attitude of service provider has secured Sixth rank; Free service got Seventh rank; Oil service has been ranked as Eighth; Customer service got Ninth rank and General service has secured Tenth rank.
- It is clear that, Mileage got First rank; Capacity of petrol has been ranked as Second; Style has secured third rank; maintenance got Fourth rank; color has been ranked as

Fifth; Kick starters has secured Sixth rank; Price of vehicle got Seventh rank; Cost of spares has been ranked as Eighth; Weight got Ninth rank and Engine and performance has secured Tenth rank; utility box has secured Eleventh rank; Brake has been ranked as Twelfth.

Garrett Ranking Analysis:

- It is coherent that the Garratt scores and the average scores of Satisfaction towards service features of TVS motors pvt Ltd. The average scores are ranked according to their values. The first rank is given to Information in time, Second rank goes to Quick issues of reimbursement, Third rank for Customer relationship and Fourth rank to Claim & settlement of **Satisfaction** towards service features of TVS motors pvt Ltd.
- It is found that the Garratt scores and the average scores of features attracted to satisfied TVS Motors private Limited among all other brands. The average scores are ranked according to their values. The first rank is given to Price, Second rank goes to service network, Third rank for Mileage and Fourth rank to brand image features attracted to satisfied TVS Motors private Limited among all other brands

Chi-Square Test and Its Result:

- ✓ Pearson's chi square test is applied to test whether there is no relationship among level of satisfaction towards occupation levels. It is found that the significant value of the chi-square value 15.20 for the 5 degrees of freedom is 0.010, which is less than the acceptable level of 0.05. Hence the null hypothesis is rejected and it is concluded that there is a significant association among level of satisfaction towards occupation level.
- ✓ Pearson's chi square test is applied to test whether there is no relationship among level of satisfaction towards age levels. It is found that the significant value of the chi-square value 6.14 for the 3 degrees of freedom is 0.105, which is more than the acceptable level of 0.05. Hence the null hypothesis is accepted and it is concluded that there is no significant association between levels of satisfaction towards age of the respondents.

Recommendations:

- ❖ 20 per cent respondents are not satisfied with their present two wheelers. They may go for different brand, So Company should make arrangement to retain their customers by Motivate their customer by appropriate use of buying motive technique
- ❖ Since chi-square analysis shows that there is no relationship between age and level of satisfaction, income and level of satisfaction. it is suggested that users should select a two wheelers which is affordable and economical.
- ❖ It is explained that out of 80 respondents, 11.25 per cent of the respondents felt that service or repair charges are fair, company should enquire and analyze about the service rendered by the show room.
- ❖ It is suggested that the company may adopt fuel saving techniques so that the vehicles can have long life and smooth running.

- ❖ The company shall concentrate on quality products also instead of concentrating on low priced vehicles alone because 63.75 per cent of the respondents has been feeling reasonable price in spare parts. Only customers expects quality vehicles from the TVS Motors private Limited
- ❖ Mileage and power are two controversies part of the two wheelers. If we need mileage then we have to compromise with engine power and vice versa. User should be clear about their necessity.
- ❖ After sales service is important but users are not giving importance to it at the time of purchase so they are dissatisfied by service rendered by the show room. It is suggested that the users should enquire and analyses about the service rendered by the show room before purchasing two-wheelers.

Conclusion: In a competitive marketplace where business competes for customers, customer satisfaction is seen as a key differentiator and increasingly has been become a key element of business strategy. The study could be more effective if the geographical area and sampling size is increased. Anyhow possible amount of clear picture is formatted from the report. The study is further suggested for further improvements and to identify the various factors to improve their proceedings of TVS Motors private limited. If the above recommendations are carried out promptly and properly there is no doubt the producer, middlemen and consumers will get mutual benefit and satisfaction. It will lead an establishment of a strong brand image of TVS Motors private limited.

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