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Evaluate and Improve Customer Retention at Authorized Automobile Workshops after Free Services

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ABSTRACT

To be successful in today's competitive world, companies are required to provide excellent after sales service to customers so that they are retained and become loyal. Customers will become loyal only when they feel satisfied with the experience of the company's products/services.

This study is an attempt to measure the customer experience at authorised automobile workshops. After buying a company product, customers have to visit authorised automobile workshops for preventive maintenance services. Therefore, this study aims to measure and improve customer retention at authorized automobile workshops after free services. A detailed analysis for an authorised car workshop of a multinational automobile company has been carried out using Likert scale survey analysis. Various factors like the proximity of service centre, time taken in servicing, low customer awareness of warranty benefits, high cost of repair, service quality/ personalized attention, workshop timing, availability of local technicians and satisfaction level for pleasantness and helpfulness considered.

The IBM SPSS 22 software is considered as analytical tool for the analysis. A detailed demographic, descriptive and co-relational analysis for the factors have been carried out.

Keywords:— *Customer Relationship, SPSS, Customer Satisfaction, Survey Analysis, Quality, TQM*

1. INTRODUCTION

1.1 Importance of Customer Satisfaction

Customer satisfaction measurement is one of the most important issues concerning business organizations of all types, which is justified by the customer orientation philosophy and the main principles of continuous improvement of modern enterprises. In fact, measurement constitutes one of the five main functions of the management science allowing for the understanding, the analysis, and the improvement. As it is rumoured, Lord Kelvin (19th century) said that "…if you cannot measure something, you cannot understand it…"

For these reasons, customer satisfaction should be measured and translated into a number of measurable parameters. In the recent decades, the importance of customer satisfaction for business organizations has been increased. Thus, customer satisfaction measurement is now considered as the most reliable feedback, taking into account that it provides in an effective, direct, meaningful and objective way the customers' preferences and expectations. In this way, customer

satisfaction is a baseline standard of performance and a possible standard of excellence for any business organization (Gerson, 1993).

To reinforce customer orientation on a day-to-day basis, a growing number of companies choose customer satisfaction as their main performance indicator. It is almost impossible, however, to keep an entire company permanently motivated by a notion as abstract and intangible as customer satisfaction. Therefore, customer satisfaction must be translated into a number of measurable parameters directly linked to people's job, i.e. factors that people can understand and influence (Deschamps and Nayak, 1995). Moreover, customer satisfaction measurement provides a sense of achievement and accomplishment for all employees involved in any stage of the customer service process. In this way, satisfaction measurement motivates people to perform and achieve higher levels of productivity.

The importance of customer satisfaction measurement is also justified by the fact that the field of Consumer Behavioural Analysis has cantered its interest in the post-purchase customer behaviour. More specifically, research is focused on the evaluation of the usage results of a product/service, and the way that this usage affects customer's post-purchase actions, as displayed in Figure 1 Generally, the main reasons for measuring customer satisfaction are summarized in the following:

Customer satisfaction constitutes the most reliable market information. This way, a business organization is able to evaluate its current position against competition, and accordingly design its future plans.

A large number of customers avoid expressing their complaints or their dissatisfaction from the product or service provided, either due to a particular attitude or because they are not sure that the company will perform any corrective action (Figure 2).

Customer satisfaction measurement is able to identify potential market opportunities.

The main principles of continuous improvement require the development of a specific customer satisfaction measurement process. This way, any improvement action is based on standards that take into account customer expectations and needs.

Customer satisfaction measurement may help business organizations to understand customer behaviour, and particularly to identify and analyse customer expectations, needs, and desires.

The application of a customer satisfaction measurement program may reveal potential differences in the service quality perceptions between the customer and the management of the business organization.

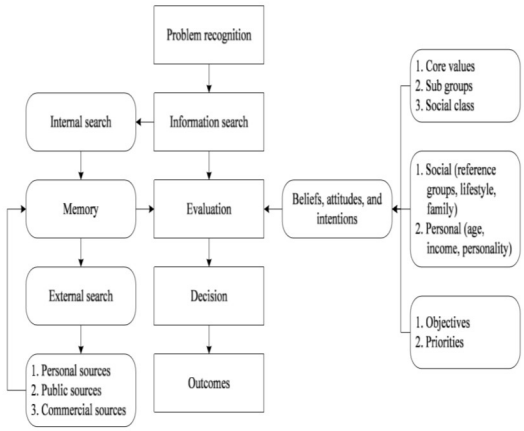

Figure 1: The individual buying decision process

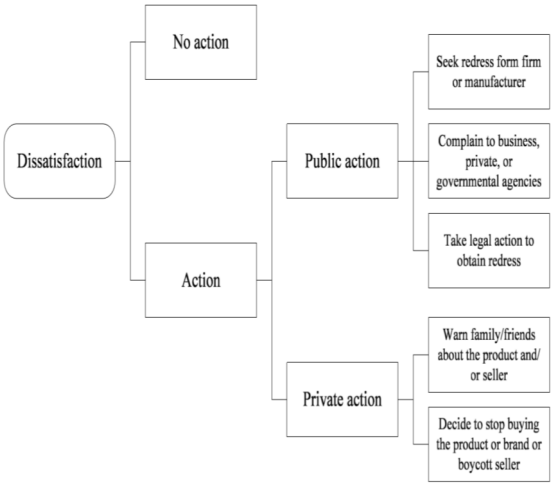

Figure 2: Dissatisfied customers complaint behaviour

Market-driven business organizations place special emphasis on customer satisfaction. Edosomwan (1993) defines these organizations as follows:

"A customer- and market-driven enterprise is one that is committed to providing excellent quality and competitive products and services to satisfy the needs and wants of customers in a well-defined market segment…Such an enterprise analyses its market capabilities and provides products and services to satisfy market needs. It considers its customers as the final judges who determine product and service satisfaction level, delivery, price, and performance"

The most important advantages of a customer satisfaction measurement survey may be summarized in the following:

Customer satisfaction measurement programs improve the communication with the total clientele, provided that they constitute continuous and systematic efforts of the business organization.

Business organizations may examine whether the provided services fulfil customer expectations. Furthermore, it is possible to examine whether new actions, efforts, and programs have any impact on the organizations' clientele.

The critical satisfaction dimensions that should be improved are identified, as well as the ways through which this improvement may be achieved.

The most important strengths and weakness of the business organization against competition are determined, based on customer perceptions and judgments.

The personnel of the business organization is motivated to increase its productivity given that all improvement efforts, regarding the offered services, are evaluated by the customers themselves.

Finally, it should be mentioned that although customer satisfaction is a necessary but not a sufficient condition for the financial viability, several researches have shown that there is a significant correlation among satisfaction level, customer loyalty, and profitability

2. LITERATURE REVIEW

This section presents the literature related to customer retention and its prediction methods, identifying the factors related to customer retention. The literature of customer retention and its prediction methods are given with related studies.

Few studies in tourism and transport have discussed the connection service between metro systems with urban airports or proposed strategies to assist in improving performance for long-term development. Author links open overlay panel. ***Chui-HuaLiu et al; 2013*** address this problem using the novel method of hybrid MCDM (multiple criteria decision-making), including DEMATEL (decision-making trial and evaluation laboratory), DANP (the DEMATEL-based analytic network process) and VIKOR, to examine the influential relationships among dimensions and criteria of the empirical case and to ultimately present the best improvement schemes, which are valuable for both practitioners and researchers and for those destinations attempted to integrate the urban transport with tourism development.

Yao Cenglin et. al. (2012) state about grey relational analysis method. By using the grey relational analysis method, it could perfectly combine various factors in terms of customer satisfaction. And through the vertical contrast, car sales enterprises could find specific factors which will improve customer satisfaction, thereby increase sales volume and benefits. Gray relational analysis method has become a kind of good method and means to analyse and evaluate the enterprises.

According to international practice, as for cybernetics, the quantity of information is

often presented by shade. Sufficient and definite (known) information is presented as white, and insufficient and indefinite information is presented as black, as for the only partly definite information is presented as grey.

Therefore, in cybernetics system, information unknown system is called black system, information completely determined system is called white system, and everything between the two whose information is still not completely determined or known is called the gray system.

Shao-I Chiu et. al. (2011) present TCSI model to the automobile industry in Taiwan. The purpose of the research is to introduce the establishment of Taiwan's *customer satisfaction index*, and use the four largest automobile companies (Ford, Yulon, Kuozui, and CMC) to analyse customer satisfaction and loyalty. Using Structural Equation Modelling (SEM) to perform result analysis we shall attempt to find the largest benefit indexes for the influence of satisfaction to provide corporations with a reference to make improvements.

Through data analysis it was concluded that the TCSI is very suitable and that the overall model had an explanation ability rate of over 76%, proving that it is meaningful and useful to use the TCSI to measure the customer satisfaction of Taiwan's automobile industry. In addition according to the results of the research on the Taiwan automobile industry TCSI the customer places emphasis on the actual perceived quality of the car as well as the image of the company.

Michael D. Johnsona et. al. (2002) arguments from the economics, psychology, sociology and marketing domains to predict systematic differences in aggregate customer satisfaction across both industries and countries. These predictions were tested using a database created from three broad-based national satisfaction surveys in Sweden, Germany and the United States. The results reveal that, across countries, satisfaction is highest for competitive products, lower for competitive services and retailers, and lower still for government and public agencies. However, the differences vary by country. Satisfaction is also predictably lower in Sweden and Germany compared to the US, and shown to change systematically in Sweden over time. Methodological differences do not appear to limit the comparability of the aggregate satisfaction measures. Overall, the study supports the use of national indices for making meaningful comparisons of satisfaction on a broad scale.

Raid Al-Aomar et, al. (2018) assesses the adoption of lean techniques across the supply chains of hotels. Literature indicates a growing awareness of sustainability issues and lean adoption for value creation in the hospitality industry. Though, there are limited exploratory studies that outline sustainability in terms of lean techniques in the context of a hotel supply chain. Present study addresses this gap using a structured study plan with specific research questions. To this end, a theoretical framework of lean assessment for value creation is first developed and a

SIPOC-based construct of a hotel supply chain is used to identify and categorize hotel waste. An empirical study is then conducted to answer research questions and assess the extent of using lean techniques. Study results and the developed framework can be subsequently used by practitioners and researchers in conceptualization and assessment of lean adoption across the supply chains of hotels in different contexts.

Yaoguang Hu et. al. (2019) proposes an approach integrating ANP with BSC in maintenance net work for service provider selection, which is applied to the field of agriculture. Maintenance network design entails strategic network decisions, including the selection of the number, location, and capacity of entities in each network level. However, the network structure of the service chain strongly influences later maintenance decisions of flow management throughout the service chain. Therefore, in addition to

strategic locating and capacity-setting costs, the resulting service station locating, staff holding, and transportation costs should be considered in the network design stage.

3. RESEARCH METHODOLOGY

3.1 Problem Statement

If a customer is retained at a workshop station after free services, then they can get proper preventive maintenance services for their products. This will impact on their satisfaction with products and the probability of becoming loyal is increased. Therefore, every automobile company is trying hard to give excellent service to the customer so that they can be retained at workshops even after free services.

This study is focused on a giant automobile company, sixth largest four-wheeler manufacturers in India named as Ford Motors. The case company has over 347 service networks in the country and is known for having the best service facilities in the country. The case company has state of the art facilities, consumer centred processes and is recognised as a provider of quality care to all stake holders such as consumers, dealers, employees and society in general. The company has sold 73636 four wheelers in the year of 2019 on the market but consumer retention in workshops is comparatively low beyond. Thus, the company is losing lots of service business opportunities. Since product usage life is in general reducing due to changes in taste and the availability of new featured products, consumer retention plays an important role in generating product self-referral sales.

As consumers move away from authorised workshops post FSC period, their chances of buying products in the future also drop. The case company intends to improve their business efficiency through higher consumer retention in workshops for service and repair; they also aim to increase product referrals sales by providing creative positive consumer experiences with their products. The company is facing fierce competition in the market, so keeping existing customers in its fold is one of the key priorities for management.

Therefore, this study aims to ***"Measure and Improve Customer Retention at Authorised*** Automobile ***Workshops after Free Services"***

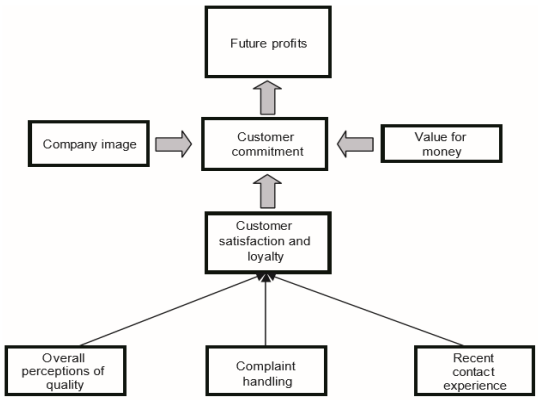

Figure 3: Sample Customer satisfaction model

The models (or more accurately, set of hypotheses) can be relatively simple or more complex, as shown in the fictitious examples outlined in Figures 3 and 4. Unfortunately, many of the model's agencies promote are proprietary, and they are difficult to evaluate either because detailed resultsare not published or because they involve the use of proprietary data analyses whose 'black box' sophistication is protected by company copyright. However, there are two well-documented research tools that have been used extensively in customer satisfaction research. These are Simalto and SERVQUAL.

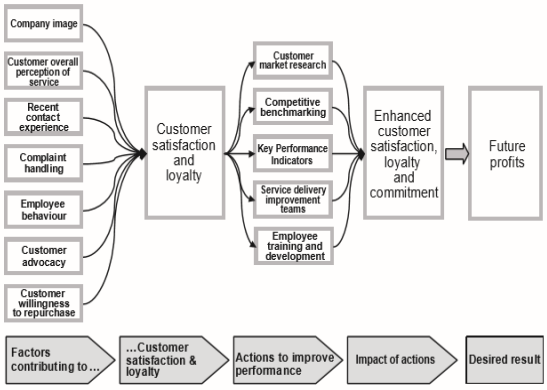

Figure 4: More complex customer satisfaction model

3.2.1 Simalto

Simalto (an acronym for simultaneous multi-attribute level trade-off) is a research scale that was developed in 1977 to help more clearly measure the elements of service delivery. It is based on a 'trade-off' approach. Respondents are usually given a grid (this method works best in a face-to-face situation) on which a series of attributes (element of service, such as availability of service or time to answer the phone) are listed in rows and different levels of service or product service option.

One of the benefits of this approach is that the question of price can form part of the exercise. Usually questions to do with price are treated separately, but using Simalto respondents can be asked to either select different levels of service for a particular price, or indicate what level of price they are prepared to pay for the level of service they have indicated. Another benefit of this approach is that the 'levels' can be constructed using the consumer's language. Often these 'levels' have been developed and pre-tested in qualitative research, so each 'level' will be clear and unambiguous to the respondent.

3.2.2 SERVQUAL

SERVQUAL is a research methodology designed to identify the gaps between what customers expect from an excellent product or service provider and what they perceive the service to be from their current supplier of that product or service. In particular, it looks at five different dimensions of service quality:

- tangibles (the physical appearance of people and facilities);
- reliability (people or companies doing what they say they will, on time and to specification);
- responsiveness (a willingness to help and meet individual requirements);
- assurance (displaying trust and confidence and having the necessary skills to get the job done);
- empathy (understanding customer needs and providing individualized service).

Rating scales used

The third key aspect of questionnaire design is the rating scale and since CSM is about measuring satisfaction and the rating scale is the tool used to do the measuring, it is a very critical element. The three most commonly used scales in customer satisfaction research are Likert scales, verbal scales and numerical scales. The Likert and verbal scales are similar in that they both use words to describe the points on the scale. The numerical scale, as expected, uses numbers.

The Likert Scale

The Likert scale (named after its creator) is used to determine how much a respondent agrees or disagrees with a particular statement or opinion. For example, the question might be, 'How much do you agree or disagree that your car insurance is good value for money? Would you agree completely, agree a little, neither agree nor disagree, disagree a little, or disagree completely?' The strength of this scale is that if it is being used for a range of attributes, comparisons of customer perceptions can be made across the battery of statements. There are a couple of things to bear in mind when using a Likert scale for customer satisfaction surveys. First, if some of the attributes are stated negatively rather than positively (for example, 'You never have to queue when you visit this store'), some respondents may get confused when trying to apply an agree–disagree scale. Second, even if the respondents are not confused, it can be difficult to interpret the results. For example, if half the respondents disagree strongly that 'You never have to queue', what does this really mean? Is there actually a queuing problem?

4. DATA ANALYSIS

4.1 General

This chapter has been divided in three sections. The first sections describe the demographic variables, second section gives the detail analysis while the third section measures the correlation between the factors.

4.2 Demographic Variables

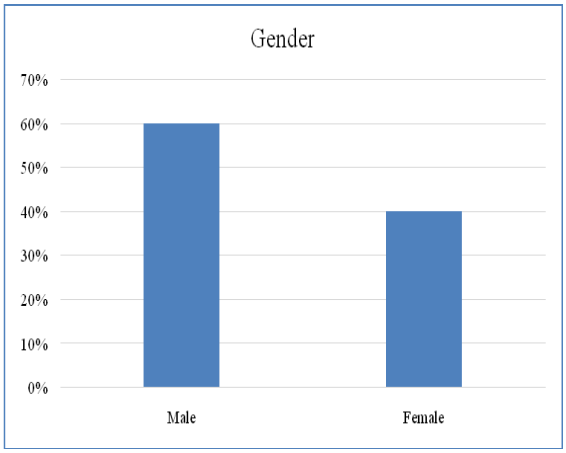

Figure 5: Respondents Profile: Gender

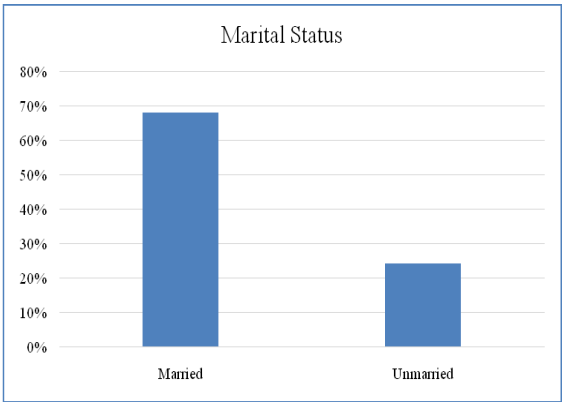

Figure 6: Respondents Profile: Marital Status

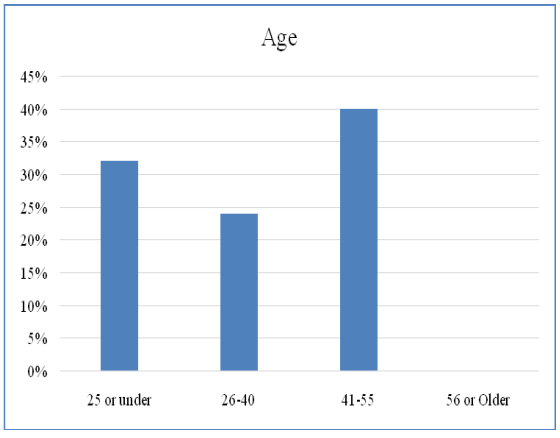

Figure 7: Respondents Profile: Age

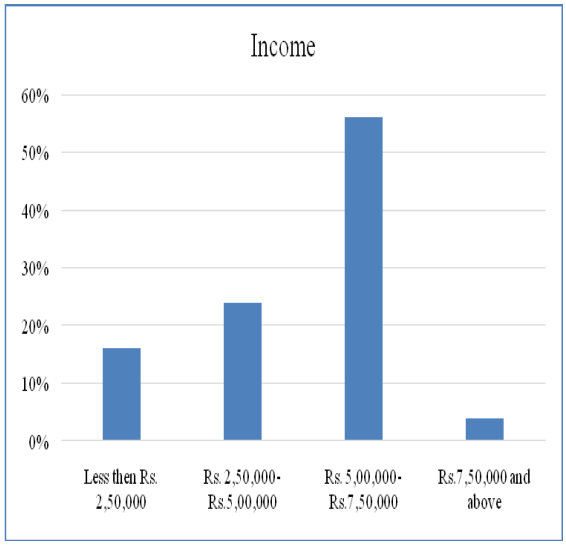

Figure 8: Respondents Profile: Income

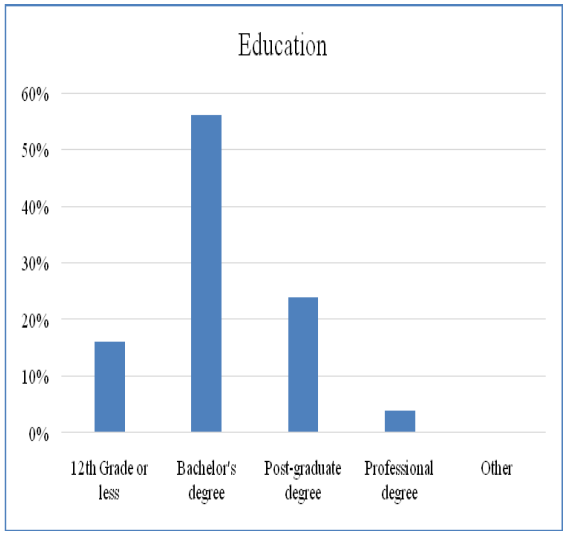

Figure 9: Respondents Profile: Educational Status

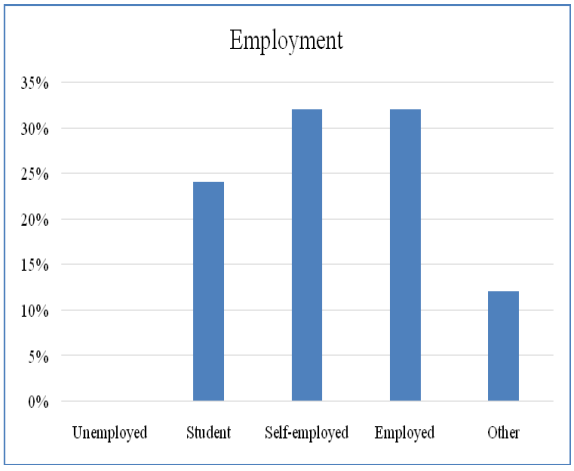

Figure 10: Respondents Profile: Employment

4.3 Data Analysis

4.3.1 Reliability and Validity Tests

Table 1: One Sample Test

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The location of service centre is easily accessible.	14.807	24	.001	2.080	1.79	2.37
Facing the traffic jam problem, when reaching to service station	7.562	24	.01	1.720	1.25	2.19
The service station is too far from my house.	11.476	24	.005	2.040	1.67	2.41
Ease of obtaining an appointment	14.177	24	.04	2.680	2.29	3.07
Quickly acknowledging your arrival	10.115	24	.001	2.160	1.72	2.60
On-time delivery	10.902	24	.002	2.080	1.69	2.47
Service staff, educate customers on warranty and free service benefits during their visits	14.562	24	.001	2.360	2.03	2.69
The staff person explained the warranty terms in understandable words	12.063	24	.01	2.080	1.72	2.44
The staff person explained the availability of additional free services	12.699	24	.005	2.160	1.81	2.51
reasonable overall cost of repair service	22.459	24	.045	3.640	3.31	3.97
Availability of reasonable cost spare parts	13.856	24	.005	2.400	2.04	2.76
Quality of work performed	17.180	24	.002	2.720	2.39	3.05
Willingness of staff to go out of their way to satisfy the service	13.438	24	.04	3.480	2.95	4.01
Professionalism of the representative	15.052	24	.05	2.840	2.45	3.23
Having convenient hours of service	10.614	24	.03	2.600	2.09	3.11
Flexibility in timing of service station	14.421	24	.001	1.640	1.41	1.87
Satisfactorily pick-up and drop-off facility	30.984	24	.045	4.000	3.73	4.27
Technicians are available on the doorstep for small problems.	10.155	24	.001	1.560	1.24	1.88
Pleasantness and helpfulness of Staff	44.000	24	.045	4.400	4.19	4.61
The service provider willing to understand my problem	13.856	24	.002	2.400	2.04	2.76
After service, centres take the feedback	44.000	24	.04	4.400	4.19	4.61

Table 2: Frequency Table (Proximity of Service Centre, F1)

The location of service centre is easily accessible.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	16.0	16.0	16.0
	2	16	64.0	64.0	80.0
	3	4	16.0	16.0	96.0
	4	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Facing the traffic jam problem, when reaching to service station					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	56.0	56.0	56.0
	2	8	32.0	32.0	88.0
	3	1	4.0	4.0	92.0
	5	2	8.0	8.0	100.0
	Total	25	100.0	100.0	
The service station is too far from my house.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	32.0	32.0	32.0
	2	9	36.0	36.0	68.0
	3	7	28.0	28.0	96.0
	4	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Table 3: Frequency Table (Time Taken in Servicing, F2)

Ease of obtaining an appointment					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	16.0	16.0	16.0
	2	4	16.0	16.0	32.0
	3	13	52.0	52.0	84.0
	4	4	16.0	16.0	100.0
	Total	25	100.0	100.0	
Quickly acknowledging your arrival					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	24.0	24.0	24.0
	2	13	52.0	52.0	76.0
	3	4	16.0	16.0	92.0
	5	2	8.0	8.0	100.0
	Total	25	100.0	100.0	
On-time delivery					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	32.0	32.0	32.0
	2	9	36.0	36.0	68.0
	3	6	24.0	24.0	92.0
	4	2	8.0	8.0	100.0
	Total	25	100.0	100.0	
The staff person explained the warranty terms in understandable words					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	28.0	28.0	28.0
	2	10	40.0	40.0	68.0
	3	7	28.0	28.0	96.0
	4	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Service staff, educate customers on warranty and free service benefits during their visits					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	8.0	8.0	8.0
	2	15	60.0	60.0	68.0
	3	5	20.0	20.0	88.0
	4	3	12.0	12.0	100.0
	Total	25	100.0	100.0	
The staff person explained the availability of additional free services					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	20.0	20.0	20.0
	2	13	52.0	52.0	72.0
	3	5	20.0	20.0	92.0
	4	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

Table 4: Frequency Table (High cost of repair F4)

Reasonable overall cost of repair service					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	4.0	4.0	4.0
	2	1	4.0	4.0	8.0
	3	5	20.0	20.0	28.0
	4	17	68.0	68.0	96.0
	5	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Availability of reasonable cost spare parts					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	12.0	12.0	12.0
	2	11	44.0	44.0	56.0
	3	10	40.0	40.0	96.0
	5	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Table 5: Frequency Table (Service quality/ personalized attention (F5)

Quality of work performed					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	8.0	8.0	8.0
	2	6	24.0	24.0	32.0
	3	14	56.0	56.0	88.0
	4	3	12.0	12.0	100.0
	Total	25	100.0	100.0	
Willingness of staff to go out of their way to satisfy the service					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	20.0	20.0	20.0
	4	18	72.0	72.0	92.0
	5	2	8.0	8.0	100.0
	Total	25	100.0	100.0	
Professionalism of the representative					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	10	40.0	40.0	40.0
	3	12	48.0	48.0	88.0
	5	3	12.0	12.0	100.0
	Total	25	100.0	100.0	

Table 6: Frequency Table (Workshop timing F6)

Having convenient hours of service					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	16.0	16.0	16.0
	2	10	40.0	40.0	56.0
	3	6	24.0	24.0	80.0
	4	2	8.0	8.0	88.0
	5	3	12.0	12.0	100.0
	Total	25	100.0	100.0	
Flexibility in timing of service station					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	40.0	40.0	40.0
	2	14	56.0	56.0	96.0
	3	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Satisfactorily pick-up and drop-off facility					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	5	20.0	20.0	20.0
	4	15	60.0	60.0	80.0
	5	5	20.0	20.0	100.0
	Total	25	100.0	100.0	

Table 7: Frequency Table (Availability of local technicians at doorstep F7)

Technicians are available on the doorstep for small problems.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	56.0	56.0	56.0
	2	9	36.0	36.0	92.0
	3	1	4.0	4.0	96.0
	4	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Table 8: Frequency Table (Careless Attitude F8)

Pleasantness and helpfulness of Staff					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	15	60.0	60.0	60.0
	5	10	40.0	40.0	100.0
	Total	25	100.0	100.0	
The service provider willing to understand my problem					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	12.0	12.0	12.0
	2	11	44.0	44.0	56.0
	3	10	40.0	40.0	96.0
	5	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
After service, centres take the feedback					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	15	60.0	60.0	60.0
	5	10	40.0	40.0	100.0
	Total	25	100.0	100.0	

Table 9: Kendall's tau_b Correlation

F1	Correlation Coefficient	1.000						
	Sig. (2-tailed)							
	N	25						
F2	Correlation Coefficient	-.133						
	Sig. (2-tailed)	.471						
	N	25						
F3	Correlation Coefficient	.407*	.112					
	Sig. (2-tailed)	.031	.545					
	N	25	25					
F4	Correlation Coefficient	-.077	.314	.297				
	Sig. (2-tailed)	.681	.084	.111				
	N	25	25	25				
F5	Correlation Coefficient	.018	.147	-.145	-.268			
	Sig. (2-tailed)	.924	.426	.441	.149			
	N	25	25	25	25			
F6	Correlation Coefficient	-.316	-.045	.060	.107	-.145		
	Sig. (2-tailed)	.088	.805	.745	.557	.433		
	N	25	25	25	25	25		
F7	Correlation Coefficient	-.064	.100	-.135	.136	.006	.135	
	Sig. (2-tailed)	.737	.588	.478	.467	.975	.466	
	N	25	25	25	25	25	25	
F8	Correlation Coefficient	-.143	.215	.087	.282	-.037	.254	.434*
	Sig. (2-tailed)	.466	.262	.658	.145	.852	.187	.028
	N	25	25	25	25	25	25	25

Table 10: Spearman's rho Correlation

F1	Correlation Coefficient	1.000						
	Sig. (2-tailed)							
	N	25						
F2	Correlation Coefficient	-.155						
	Sig. (2-tailed)	.458						
	N	25						
F3	Correlation Coefficient	.440*	.134					
	Sig. (2-tailed)	.028	.523					
	N	25	25					
F4	Correlation Coefficient	-.093	.353	.337				
	Sig. (2-tailed)	.659	.083	.099				
	N	25	25	25				
F5	Correlation Coefficient	.019	.164	-.153	-.296			
	Sig. (2-tailed)	.928	.432	.466	.151			
	N	25	25	25	25			
F6	Correlation Coefficient	-.355	-.050	.064	.126	.161		
	Sig. (2-tailed)	.082	.814	.761	.550	.443		
	N	25	25	25	25	25		
F7	Correlation Coefficient	-.067	.102	-.142	.149	.006	.150	
	Sig. (2-tailed)	.751	.627	.500	.478	.978	.474	
	N	25	25	25	25	25	25	
F8	Correlation Coefficient	-.149	.229	.090	.297	-.038	.269	.449*
	Sig. (2-tailed)	.478	.271	.667	.149	.857	.193	.024
	N	25	25	25	25	25	25	25

When we consider the relation between factor F1 and F2 it shows the negative relation in both the correlation i.e. -0.133 and -0.155 respectively for Kendall's tau_band Spearman's rho Correlation. It means that the factors are opposite to each other i.e. there is no relation between them.

The factor F1 shows the positive correlation with F3 and F5 with having Kendall's tau_b coefficient of 0.407, 0.018 and Spearman's coefficient are 0.440, 0.019 respectively. While having a negative relation coefficient (i.e. -0.077, -0.316, -0.064, -0.143 Kendall's tau_b and -.093, -

0.355, -0.067, -0.149 Spearman's Co-efficient) with F4, F6, F7 and F8 respectively.

Similarly, the factor F2 has the positive relation with F3, F4, F5, F7 and F8 with 0.112,0.314, 0.147, 0.100, 0.215 for Kendall's tau_b and 0.134, 0.353, 0.164, 0.102, 0.229 and 0.262 for Spearman's coefficient respectively. The factor shows the negative relation with F6 (-.045, -.050)

Factor F3 has positive relations with F4, F6 and F8 (0.297, 0.6, 0.087 for Kendall's tau_b and 0.337, 0.064 and 0.09for Spearman's coefficient respectively) and negative relation with F5 and F7 (-0.145, -0.135 for Kendall's tau_b and -0.153, -0.142 for Spearman's coefficient respectively)

Factor F4 has positive relation with F6, F7 and F8 (0.107, 0.136, 0.283 for Kendall's tau_b and 0.126, 0.149 and 0.297 for Spearman's coefficient respectively) and negative relation with F5 (-0.0268 for Kendall's tau_b and -0.0296 for Spearman's coefficient respectively)

Factor F5 has positive relation with F6 and F7 (0.145, 0.006 for Kendall's tau_b and 0.161, 0.006 for Spearman's coefficient respectively) and negative relation with F8 (-0.037 for Kendall's tau_b and -0.038 for Spearman's coefficient)

Factor F6 has positive relation with F7 and F8 (0.135, 0.254 for Kendall's tau_b and 0.15, 0.269 for Spearman's coefficient respectively). While F7 and F8 shows positive relation with 0.434 and 0.449, Kendall's tau_b and Spearman's coefficient respectively.

5. CONCLUSION

To increase customer retentionnat authorised workshops, continuous evaluation of the provision of services to customers must be put in place by companies. This also will give a company some competitive advantages. The evaluation of customer behaviour associated with customer intention is significant due to the critical role it plays in designing the Annual Maintenance Contract (AMC). After getting their feedback and knowing their feelings, the company can make a more elective AMC product for customers with a view to increasing rates of retention. It is necessary for decision makers to acknowledge the electiveness of AMC assessment factors prior to implementation. But in existing literature, no discussion is available where evaluation of customer retention has been measured related to their experience at authorised workshops after getting free services by using the Likert scale evaluation method with descriptive analysis. The following conclusion can be made

- While considering the Proximity of Service Centre (F1) the satisfaction level is very poor as
- the location of service centre is not easily accessible.
- the consumer is facing the traffic jam problem, when reaching to service station.
- the service station is too far from consumer's house.
- While considering the Time Taken in Servicing (F2),
- The most of the consumers are satisfied from ease of obtaining appointment.
- While we discussing about quickly acknowledging your arrival and On-time delivery, the 76% and 68% consumers are not satisfied with the performance. While considering the Low customer awareness of warranty benefits (F3), The customer is not satisfied as they
- don't educate customers on warranty and free service benefits during their visits
- the staff person doesn't explain the warranty terms in understandable words,
- the staff person explained the availability of additional free services.

- While considering the High cost of repair (F4), The most of the consumers are satisfied from reasonable overall cost of repair.While we discussing about availability of reasonable cost spare parts, the 56% consumers are not satisfied with the performance.
- While considering the Service quality/ personalized attention (F5). About 32% respondents are not satisfies the service in this regard. When asking about 20% respondents are not satisfied as asked for the Willingness of staff to go out of their way. When having the response of staff person Professionalism. About 40% respondents are not satisfied.
- While considering the Workshop timing, the most of the consumers are not satisfied as they don't get convenient hours of service. But they are happy with pick-up and drop-off facility.
- While considering the Availability of local technicians at doorstep, about 92% are not able to take the service on their door step.
- Considering the attitude, the satisfaction level for Pleasantness and helpfulness of Staff is about 100%, service provider willingness is 44% and after service feedback is 100%.
- The factor F1 shows the positive correlation with F3 and F5 and a negative relation coefficient with F4, F6, F7 and F8 respectively.
- The factor F2 has the positive relation with F3, F4, F5, F7 and F8 negative relation with F6
- Factor F3 has positive relations with F4, F6 and F8 and negative relation with F5 and F7
- Factor F4 has positive relation with F6, F7 and F8 and negative relation with F5
- Factor F5 has positive relation with F6 and F7 and negative relation with F8
- Factor F6 has positive relation with F7 and F8
- While F7 and F8 shows positive relation

On the basis of this study, time taken in servicing, service quality and personalized attention, workshop timing and low customer awareness of warranty benefits which are cause factors according to industry experts should be improved using training of staff. Also, the customer opinions are that careless attitude is also a cause group factor, not low customer awareness of warranty benefits.

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