

Evaluation of Customer Expectation and Satisfaction towards After-Sales Services using Kano Model

Bhushan Kumar Chawla^{1*} and Parmod Kumar Aggarwal²

¹Assistant Professor, Department of Commerce, Multani Mal Modi College, Patiala, Punjab. Email: bhusbankumarchawla11@gmail.com

²Associate Professor, Department of Economics, Punjabi University Patiala, Punjab. E-mail: parmod.aggarwal@rediffmail.com

*Corresponding Author

To cite this paper

Chawla, B.K., & Aggarwal, P.K. (2023). Evaluation of Customer Expectation and Satisfaction towards After-Sales Services using Kano Model. *Orissa Journal of Commerce*. 44(4), 44-56.

Keywords

Customer expectation, Customer satisfaction, After-sales services, Automobile industry, Kano model

JEL Classification

M300, M310, M390, M000, M100

Abstract: An effort has been made in the study to know the customer's expectation towards after-sales services and its impact on customer satisfaction in automobile industry. Data has been gathered from 220 respondents belonging to Punjab. The respondents were asked to answer the questions on the basis of Kano questionnaire. Kano Model and customer satisfaction coefficient is employed to know the customer expectations towards after-sales services and its impact on customer satisfaction. The result indicated that maintenance & repair service, spare parts service, car washing service, inspection service, insurance claim service and pick & drop service are highly expected by the customers of both companies. Overall total customer satisfaction coefficient is found positive only in the case of road assistance & towing service and pick & drop service whereas negative total customer satisfaction coefficient is found in all other services. It is concluded that every company should focus on services as per their customer requirements/expectations.

1. Introduction

In the highly competitive business landscape of today, every company aims for customer satisfaction as its primary and ultimate goal, as it is the key driver of organizational growth. It has always been a matter of priority for the companies. The aim of every company is to create and retain the customers and it is only possible when an organisation try to know about the customer expectation/requirement with their best efforts in the market. There are number of determinants that affects the expectation and satisfaction level of customers in manufacturing and service industry. An intensive understanding of customers' expectations and aptitude is a foundation for a genuine comprehension of customer satisfaction (Mohanty and Das, 2022). Customer satisfaction in manufacturing companies right now isn't just founded on the giving mere products to customers yet in addition in giving excellent after

sales services. Companies provide after-sales services to customers following the sale of their products. These services aim to enhance the overall customer experience by offering support and assistance throughout the product's life cycle, ensuring smooth usage (Gaiardelli *et al.*, 2007). According to Rigopoulou *et al.* (2008) after-sales services involve actions carried out to assist customers following a purchase transaction. Kurata and Nam, (2010) defined after-sales service as a “customer”, “technical”, and “product” support. This significant service is given to the customers to guarantee customer satisfaction with organization's products and services.. Sheth *et al.* (2020) has listed numerous advantage of after-sales services like “competitive advantage”, “customer satisfaction”, “long-term customer relationships”, and “new product creation & success”. In developed countries, much importance is given on after sales service to satisfy the customers because this service not only proves their competitive advantage but also helps the companies in profit generation and customer-retention. According to Jap (2001), customer satisfaction is a set of composition of different dimensions i.e. Brand name, quality of a product, and especially after sale services. Customers now seek more than just the fundamental aspects of a product or service; they are looking for superior quality and satisfaction from the provider. Hence, it is essential for every company to comprehend the requirements of their customers and the assistance provided to them during the post-sales phase. This understanding is crucial for delighting customers and attaining a competitive edge. Customer expectation/requirements towards after sales services is studied due to the developing significance of after sales services which exceptionally impact the satisfaction level of the customers. In this context, Automobile industry has earned a major part of revenue from after sales services especially from the passenger car segment. It play a significant role to boost the economic development of the nation. At present automobile industry is facing stiff competition due to new entrants of domestic and foreign car brands and increasing after sales expectations of customers. Thus, it is crucial for car automobile companies to comprehend the customer's expectation/requirement towards the after sales services to satisfy their customers.

1.2. Customer Expectation and Satisfaction Measuring Model- Kano Model

The Kano Model serves as a framework for prioritizing items within a product roadmap based on their capacity to fulfill consumer satisfaction. Dr. Noriaki Kano of Japan discovered the “Kano Model”, often known as “Kano Analysis,” in 1984. The model emphasizes the non-linear connection between the performance of a product and the satisfaction of the customer. This approach is effective for acquiring a comprehensive grasp of a customer's requirements. It was crafted to articulate a framework capable of recognizing and ranking customer preferences, guiding the product development journey for the manufacturer, and ensuring an increasingly satisfying consumer experience with each purchase from a new product line by the same manufacturer. The Kano model serves as a tool for examining customer preferences and formulating product specifications, facilitating the identification of consumer expectations regarding a given product. The central aim of client requisites diverges from the product's quality characteristics (Rotar and Kozar, 2017). The Kano model for customer satisfaction serves as a valuable instrument for classifying and ranking customer requirements according to their influence on overall customer satisfaction. The Kano model is one of several ways to customer need analysis that has been widely used in businesses as a useful tool for understanding consumer preferences. To include

quantitative indicators into customers' satisfaction, Kano indices are utilised. The Kano model is formed via consumer surveys, in which every product characteristic is signified by a collection of question pairings in a consumer survey. The Kano Model explains the relationship between consumer satisfaction and the fulfilment of consumer needs. Customers have a wide range of expectations for the qualities and features of goods, systems, services, and technology. A consumer may be excited about one element, while another may take it for granted or even abandon a thing because of it. The Kano model helps businesses to pinpoint the product and service features that make customers' hearts skip a beat with delight. With the Kano Model, the most critical factor under consideration when developing a new feature is the extent to which it can bring delight to users. According to the Kano conceptual model, the link between attribute presence or performance and consumer satisfaction is non-linear. This model classifies them as classifying them as:

- **Must-Be: Threshold attributes:** When these characteristics are present, they are taken for granted, but when they are absent, they cause discontent. Customers expect these characteristics and consider them basic. These are the elements that set the product apart from the competition.
- **One-dimensional: Performance attributes:** Satisfaction arises when these criteria are fulfilled, while discontentment is experienced when they are not fulfilled. Customer satisfaction rises as a result of their excellence. Better fulfilment directly correlates with a proportional rise in customer satisfaction, while the absence of or subpar performance of these factors reduces customer sense of satisfaction.
- **Attractive: Excitement attributes:** These traits are often not explicitly communicated by customers and tend to catch consumers by surprise. Customers are exhilarated by the presence of these traits, resulting in elevated levels of satisfaction. Nevertheless, the absence of these attributes does not give rise to dissatisfaction. It is presumed that the latent desires of customers find fulfilment through the exciting features. They aren't often anticipated; thus, they go unheard.
- **Neutral: Indifferent attributes:** These characteristics refer to features that are neither excellent nor negative and do not lead to consumer satisfaction or unhappiness. They do have an impact on decision-making. They have no impact on client satisfaction, either positive or bad.
- **Reverse attributes:** These characteristics pertain to a high level of achievement that leads to discontent, as well as the fact that not every consumer is the same. Some consumers, for example, appreciate high-tech items, whereas others desire the basic model of a goods and will be unsatisfied if it has plenty of additional features.

2. Review of Literature

Gencer and Akkucuk (2017) measured after sales service quality in automobile through Auto SERVQUAL model. It was found that study offer a 28 items scale model which is highly reliable to measure after sales service quality in automobile sector in many countries. Adusei and Koduah (2019) tested the impact of after sales services on customer satisfaction employing Kano Model in CFAO Motors. The research found that customer satisfaction increases when company provides maintenance and inspection after sales services to their customers. Kesh (2020) undertook a study on examining the

influence of after-sales service quality on customer satisfaction within the automobile sector, utilizing the SERVQUAL model. The study found a significant difference among the targeted companies towards the after sales service quality. Golrizgasti *et al.* (2020) assessed after sales service quality in home appliance industry by integrated SERVQUAL model with Kano Model. There was found negative differences towards the all dimensions of SERVQUAL model and were categorised into one-dimensional and attractive categories of Kano Model. Jain *et al.* (2019) evaluated service quality in automobile maintenance and repair industry with the help of modified SERVQUAL questionnaire. The finding of the study elaborated, the dimensions of modified SERVQUAL model are positively correlated with the customer service satisfaction that influence WOM positively. Hsies *et al.* (2015) integrated fuzzy SERVQUAL into improved Kano model aiming to identify the crucial service quality attributes of chain restaurants.. Chain Restaurants should exclude the care free quality to enhance and maintain customer satisfaction which ultimately able to strengthen competitive advantages. Shokouhyar *et al.* (2020) determined the influential factors of after sales service quality on customer satisfaction. SERVQUAL and Kano Model were used to categorise the influential factors of customer satisfaction in after sales service practices. Sheriff *et al.* (2020) found determinants of satisfaction for after sales service in automobile using AutoSERVPERF Model. The study showed that all the dimensions of AutoSERPERF model except tangible to be significant in delivering satisfaction to customers towards after sales service. Balinado *et al.* (2021) studied factors influencing customer satisfaction towards after sales service at Toyota automobile through SERVQUAL approach. Reliability and empathy factors of “after sales service quality” highly influence “customer satisfaction”. Chawla and Singh (2022) identified supportive after sales services expected by the customers which indirectly play essential role to satisfy the customers.

Previous researches have witnessed that many authors have attempted to apply the Kano model across service sector. For example, healthcare sector, banking sector, Education sector etc. But very few studies have made an effort of applying it in the manufacturing sector i.e. automobile sector. Moreover, many author have attempted studies on servqual model to examine the customer satisfaction towards after sales services. An effort has been made in this study to know the customer’s expectation towards after sales services and its impact on customer satisfaction in automobile sector using Kano model. The Kano model serves as a tool for examining customer desires and formulating product specifications, enabling the identification of consumer expectations regarding a product. It involves foreseeing the future needs of customers, determining what should be offered, and identifying what should be avoided to ensure their satisfaction (Maattanen *et al.*, 2014; Agrawal *et al.*, 2023).

The researches has chosen Kano model to know the customer expectation towards after sales service” and its impact on “customer satisfaction” in automobile sector because Kano model has following advantages;

1. It measure customer satisfaction on a specific service to know the importance level of that service by the customers.
2. To know the specific requirement of customers towards the services.
3. To know the customer expectations before actual experience.
4. It can be used with disconfirmation theory.

3. Objective of the Research

The current research aims at evaluating the customer's expectation/requirement towards after-sales services and its impact on customer satisfaction. A comprehensive framework of Kano Model is elaborated in this paper to know the customer expectations.

4. Research Methodology

The research relies on information obtained from both primary and secondary sources. The secondary data has been gathered from published and unpublished sources. The primary information has been gathered from the customers of car automobile companies which are selected on the basis of highest market share or sale data. Top two companies are selected for analysis namely; Maruti Suzuki and Hyundai Motors. The sample of the study has been gathered from the five districts of Punjab namely; "Amritsar", "Jalandhar", "Ludhiana", "Mohali" and "Patiala" which are chosen based on having the highest numbers of authorized service centers for the respective companies. The total 220 customers have been interacted with the help of Kano questionnaire. Purposive sampling has been used to interact the customers in authorized automobile car service centers. Kano Model and Customer Satisfaction Coefficient has been used to analyses the data of the study.

4.1. Kano Questionnaire

Kano questionnaire is designed to know the customer expectations/requirements which includes analytical pair of "functional" (Positive) and "dysfunctional" (Negative) questions about each requirement of customers which help in exploring customers mind that create awareness about actual customer expectations/requirements. Kano questionnaire includes;

1. The Functional question "How do you feel if this feature is present?"
2. Dysfunctional question "How do you feel if this feature is not present?"

The Customers have to choose one of the five possible options to express their state of mind:

- ✓ "I like it"
- ✓ "I expect it"
- ✓ "I am neutral"
- ✓ "I can tolerate it"
- ✓ "I dislike it"

4.1.1. Evaluation Table

The subsequent phase is to summarize the responses of customers using Kano evaluation table. It analyses and categories into customer's requirements as must be (M), one-dimensional (O), attractive (A), indifferent (I), reverse (R), and questionable (Q). The quickest way to evaluate the customer's requirements through the table as shown below;

4.1.2. Defining Category of Service

The categories of the services are assessed through the frequency of customer's responses. The result are interpreted as per the frequency of the answer given to M, O, A, I, R and Q i.e. the maximum value

Table 1: Kano Questionnaire

Customer's requirement		Dysfunctional question				
		I like it	I expect it	I am neutral	I can tolerate it	I dislike it
Functional Question	I like it	Q	A	A	A	O
	I expect it	R	I	I	I	M
	I am neutral	R	I	I	I	M
	I can tolerate it	R	I	I	I	M
	I dislike it	R	R	R	R	Q

Source: Berger *et al.* 1993, Bilgili, 2008,

should be adopted. If, the same two frequency occurred in the results then the subsequent priorities should be taken into account M>O>A>I (Sauerwein *et al.* 1996).

4.2. Customer Satisfaction Coefficient

The Kano Model employs the Customer Satisfaction Coefficient to examine the level of satisfaction or dissatisfaction that customers experience in relation to their specified requirements. It is calculated in the form of percentage of customers who get satisfied or those who do not. It can be calculated with the help of following formulas (Bilgili, 2008)

$$\text{Customer's Satisfaction} = A+O/A+O+I+M \tag{a}$$

$$\text{Customer's Dissatisfaction} = O+M/ (A+O+I+M)*(-1) \tag{b}$$

$$\text{Total Customer Satisfaction} = (a) + (b) = A-M/A+O+I+M$$

The customer satisfaction coefficient, ranging from zero to one, signifies the extent of positive customer satisfaction. A value nearing one indicates a high impact of the service on customer satisfaction, whereas a value approaching zero implies a lesser influence. The customer dissatisfaction coefficient, which is a negative value ranging from zero to minus one, signifies its impact on customer satisfaction. The closer it is to minus one, the greater the influence on customer dissatisfaction due to the non-fulfillment of requirements. Conversely, when closer to zero, it indicates minimal influence, regardless of whether the requirement is met or unmet.

4.3. After Sales Services used in the Study (Variables of the Study)

Secondary sources have been used to identify the after sales services. As shown in the literature, Potluri and Hawariat (2010), Goffin (1999), and Mustofa (2011) have identified after sales services in different sector. In this Study, researcher has tried to identify following after sales services that could be applied in automobile sector based on the finding of above researchers and by EFA. All these after sales services have been used in Kano classification/evaluation;

1. Maintenance and Repair Service

2. Spare Parts Service
3. Warranty Claim Service
4. Inspection Service
5. Car Washing Service
6. Denting and Painting Service
7. Road Assistance and Towing Service
8. Insurance Claim Service
9. Pick and Drop Service

5. Data Analysis and Discussions

This section explores the utilization of the Kano Model in assessing customer expectations and requirements for after-sales services, examining its influence on customer satisfaction within the automobile industry. According to the Kano Model, Customer satisfaction coefficient is used to know the satisfaction or dissatisfaction value of customers with their given requirements. The frequency analysis has been calculated to analyses in which requirements group of the after sales service customer's requirements take place. The results is discussed with the help of frequency analysis of customer's requirements towards the after sales services.

Table 2: Customer Expectations/Requirements towards After Sales Services of Maruti Suzuki Ltd. Using Kano Model

After Sales Services	Customers Expectation/Requirement and frequency						Total	Category
	M	O	A	I	R	Q		
1 Maintenance and Repair Service	50	20	37	3	0	0	110	M
2 Spare Parts Service	56	25	19	10	0	0	110	M
3 Warranty Claim Service	23	53	21	13	0	0	110	O
4 Inspection Service	31	40	30	9	0	0	110	O
5 Car Washing Service	41	37	26	6	0	0	110	M
6 Denting and Painting Service	30	43	23	14	0	0	110	O
7 Road Assistance and Towing Service	28	23	46	12	0	0	110	A
8 Insurance Claim Service	33	50	12	10	0	5	110	O
9 Pick and Drop Service	25	20	45	16	0	4	110	A

Source: Authors' Computation

Table 2 indicated findings of the customer expectations/requirements examination based on the most commonly expressed responses of the customers towards after sales services of Maruti Suzuki Ltd. According to the results, maintenance & repair service, spare parts service and car washing with

the highest frequency of 50, 56 and 41 respectively are found under the category of “must be” requirement, while warranty claim service, inspection service, denting & painting service and insurance service with the highest frequency of 53, 40, 43 and 50 respectively are under “one-dimensional” requirement. In addition, road assistance & towing service and pick & drop service with the highest frequency of 46 and 45 respectively are of “attractive” requirement for maruti and Suzuki customers. The result stressed that Maruti and Suzuki Ltd should give all the necessary attention to the services as per the customer’s requirement to satisfy and make them loyal. The services that come under the “must be” requirement implies that if this requirement is not fulfilled the customers will be extremely dissatisfied but their fulfillment will not increase the customer satisfaction as customers take this requirement for granted. In addition, the services that come under “one-dimensional” requirement implies that customer satisfaction increases with the presence of these services but lead to dissatisfaction if these are not present as customers take this requirement as important. Moreover, the services that come under “Attractive” requirement implies that more satisfaction to the customers if these are present but in the absence, there is no dissatisfaction.

Table 3: Customer Requirements and Customer Satisfaction towards After Sales Services of Maruti Suzuki Ltd

After Sales Services	Frequency	Satisfaction Dimension	Dissatisfaction Dimension	Total Customer Satisfaction
Maintenance and Repair Service	M(50)	0.51	-0.63	-0.12
Spare Parts Service	M(56)	0.40	-0.73	-0.33
Warranty Claim Service	O(53)	0.67	-0.69	-0.02
Inspection Service	O(40)	0.63	-0.64	-0.01
Car Washing Service	M(41)	0.57	-0.70	-0.13
Denting and Painting Service	O(43)	0.60	-0.66	-0.06
Road Assistance and Towing Service	A(46)	0.62	-0.46	0.16
Insurance Claim Service	O(50)	0.59	-0.75	-0.16
Pick and Drop Service	A(45)	0.61	-0.40	0.21

Source: Authors’ Computation

Table 3 showed that the satisfaction dimension column has recorded warranty claim service, inspection service and road assistance & towing service as the top three services of satisfaction with 0.67, 0.63 and 0.62 coefficients respectively while the dissatisfaction column has recorded insurance claim service, spare parts and car washing service as the top three services of dissatisfaction by customers with the corresponding coefficient of -0.75, -0.73 and -0.70 respectively. “Overall total customer satisfaction” coefficient is found positive only in the case of road assistance & towing service and pick & drop service whereas negative total customer satisfaction coefficient is found in all other services. This results suggest that Maruti Suzuki Ltd must should channel its efforts towards improving services with lower or negative total customer satisfaction coefficients and try to better those services which are founded as per their requirement in table 2.

Table 4: Customer Expectations/Requirements towards After Sales Services of Hyundai Motor. Using Kano Model

After Sales Services	Customers Expectation/Requirement and frequency						Total	Category
	M	O	A	I	R	Q		
1 Maintenance and Repair Service	53	34	17	6	0	0	110	M
2 Spare Parts Service	66	20	15	9	0	0	110	M
3 Warranty Claim Service	57	24	20	9	0	0	110	M
4 Inspection Service	31	54	17	8	0	0	110	O
5 Car Washing Service	42	36	25	7	0	0	110	M
6 Denting and Painting Service	49	33	20	8	0	0	110	M
7 Road Assistance and Towing Service	30	40	23	17	0	0	110	O
8 Insurance Claim Service	40	55	11	4	0	0	110	O
9 Pick and Drop Service	23	25	30	27	0	5	110	A

Source: Authors’ Computation

Table 4 indicated findings of the customer expectations/requirements examination based on the most commonly expressed responses of the customers towards after sales services of Hyundai Motors. According to the results, maintenance & repair service, spare parts service, warranty claim, car washing and denting painting with the highest frequency of 53, 66, 57, 42 and 49 respectively are found under the category of “must be” requirement, while inspection service, road assistance & towing service and insurance service with the highest frequency of 54, 40 and 55 respectively are under “one-dimensional” requirement. In addition, pick & drop service with the highest frequency of 30 comes under “attractive” requirement for Hyundai motors customers. The result stressed that Hyundai motors should give all the necessary attention to the services as per the customer’s requirement to satisfy and make them loyal. The services categorized as “must be” requirements indicate that failing to meet these criteria would result in significant customer dissatisfaction. However, meeting these requirements alone doesn’t contribute to increased customer satisfaction, as customers already expect them to be fulfilled. In

addition, the services that come under “one-dimensional” requirement implies that customer satisfaction increases with the presence of these services but lead to dissatisfaction if these are not present as customers take this requirement as important. Moreover, the services that come under “attractive” requirement implies that more satisfaction to the customers if these are present but in the absence, there is no dissatisfaction.

Table 5: Customer Requirements and Customer Satisfaction towards After Sales Services of Hyundai Motor

After Sales Services	Frequency	Satisfaction Dimension	Dissatisfaction Dimension	Total Customer Satisfaction
Maintenance and Repair Service	M(53)	0.46	-0.79	-0.33
Spare Parts Service	M(66)	0.31	-0.78	-0.47
Warranty Claim Service	M(57)	0.40	-0.73	-0.33
Inspection Service	O(54)	0.64	-0.77	-0.13
Car Washing Service	M(42)	0.55	-0.70	-0.15
Denting and Painting Service	M(49)	0.48	-0.74	-0.26
Road Assistance and Towing Service	O(40)	0.63	-0.63	0
Insurance Claim Service	O(55)	0.60	-0.86	-0.26
Pick and Drop Service	A(30)	0.49	-0.45	0.04

Source: Authors' Computation

Table 5 showed that the satisfaction dimension column has recorded inspection service, road assistance & towing service and insurance claim service as the top three services of satisfaction by the customers with 0.64, 0.63 and 0.60 coefficients respectively while the dissatisfaction dimension column has recorded insurance claim service, Maintenance & Repair Service and spare parts service as the top three services of dissatisfaction by customers with -0.86, -0.79 and -0.78 coefficients respectively. Overall total customer satisfaction coefficient is found positive only in the case of road assistance & towing service and pick & drop service whereas negative total customer satisfaction coefficient is found in all other services. These findings indicate that Hyundai Motors should direct its efforts towards improving services that have the lowest or negative total customer satisfaction coefficient and try to better those services which are founded as per their requirement in table 4.

6. Limitations and Future Scope

Following limitations may limit the generalization of the findings of the research. Firstly, our study is limited to only state of Punjab in India which can further be applied to other states or countries also.

Secondly, the results of the study are applicable only to the automobile industry which can diversify to other sectors as well. Third, the study has focused on passenger cars segments and the results may not be valid for other segments in the automobile industry. Fourth, the study has been carried out by taking only two companies of passenger car vehicles which can further be applied to other companies of passenger car vehicles. Fifth, the expectations and preferences of customers may change from time to time. So, the results may need updation in the future. So, the study opens new avenues for future research.

7. Implication

The present study uncovers the requirement of customers towards after sale services in automobile industry using Kano model in an emerging economy. The Kano model serves as a tool for examining customer desires and formulating product requirements, aiming to ascertain what consumers expect from a product. It assists in foreseeing the future needs of customers by determining what should be offered and what should be avoided to ensure their satisfaction (Maattanen *et al.*, 2014). At present the need and expectations of customers towards after sales services in automobile sector changing day by day. So, the findings from the study can be valuable for service providers to understand the need and expectations of customers towards after sales services in this changing business environment. It can help them to anticipating the future requirement of customers towards after sales services on the basis of current expectations. Understanding the requirement of customers towards after sales services is very crucial for the companies to meet expectations of customers as it leads to customer satisfaction as well as customer loyalty which can be profitable to them (Singh, 2006; Rahim *et al.*, 2012; Saleem & Raa, 2014) Moreover, it can be helpful to gain competitive advantages also. Based on the findings of this research, companies can make informed decisions about what to offer and what to refrain from in order to meet the preferences of their customers.

8. Conclusion

The current research is an attempt to know the customer's expectation towards after sales services and its impact on customer satisfaction in automobile sector using Kano model. Customer expectation/requirements towards after sales services is studied due to the developing significance of after sales services which exceptionally influence the satisfaction level of the customers. From the outcomes of the Kano analysis based on the most frequent responses of customers towards after sale services of both companies namely Maruti Suzuki and Hyundai Motors, it is likely to conclude that maintenance & repair service, spare parts service and car washing service are found common under "must be" requirement while inspection service and insurance claim service are found common under "one-dimensional" requirement in the automobile industry. In addition, Pick & drop service is found common under "attractive" necessity in this sector. While there is found different expectations/requirements of customers towards other after sales services in the two companies. It can be concluded that both companies should give all the necessary attention to the services that are common and these services are highly expected by the customers in this competitive business environment, so every company should focus on services as per their customer requirements/expectations.

References

- Adusei, C., & Tweneboah-Koduah, I. (2019). After-Sales Service and Customer Satisfaction in the Automobile Industry in an Emerging Economy. *Open Access Library Journal*, 6(1), 1-21.
- Agrawal, G., Sodhi, S., Mohapatra, A. K., & Bhandari, K. R. (2023). Can Consumer Citizenship Behavior be Created Using Service Robots in Luxury Hospitality Services?. *Indian Journal of Marketing*, 53(4), 8-29.
- Balinado, J. R., Prasetyo, Y. T., Young, M. N., Persada, S. F., Miraja, B. A., & Perwira Redi, A. A. N. (2021). The Effect of Service Quality on Customer Satisfaction in an Automotive After-Sales Service. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 116.
- Berger, C. (1993). Kano's methods for understanding customer-defined quality. *Center for quality management journal*, 2(4), 3-36.
- Bilgili, B., Erci, A., & Ünal, S. (2011). Kano model application in new product development and customer satisfaction (adaptation of traditional art of tile making to jewelleryes). *Procedia-Social and Behavioral Sciences*, 24, 829-846.
- Bilgili, B., & Ünal, S. (2008). Kano model application for classifying the requirements of university students. In MIBES Conference (Vol. 31, p. 46).
- Chawla, B.K., & Singh, B. (2022). Impact of Supportive After-Sales Services on Customer Satisfaction in Automobile Industry. *Orissa Journal of Commerce*. 43(4), 59-72.
- Gaiardelli, P., Saccani, N., & Songini, L. (2007). Performance measurement systems in after-sales service: an integrated framework. *International Journal of Business Performance Management*, 9(2), 145-171.
- Gencer, Y. G., & Akkucuk, U. (2017). Measuring quality in automobile aftersales: AutoSERVQUAL Scale. *Amfiteatru Economic*, 19(44), 110.
- Goffin, K. (1999). Customer support: A cross industry study of distribution channels and strategies. *International Journal of Physical Distribution & Logistics Management*.
- Golrizgashti, S., Hejaz, A. R., & Farshianabbasi, K. (2020). Assessing after-sales services quality: integrated SERVQUAL and fuzzy Kano's model. *International Journal of Services, Economics and Management*, 11(2), 137-166.
- Hsieh, P. L., Yeh, T. M., & Chen, J. E. (2015). Integrating fuzzy SERVQUAL into refined Kano model to determine the critical service quality attributes of chain restaurants. *Review of Integrative Business and Economics Research*, 4(4), 142-157.
- Jain, N. K., Singh, A. K., & Kaushik, K. (2019). Evaluating service quality in automobile maintenance and repair industry. *Asia Pacific Journal of Marketing and Logistics*, 32(1), 117-134.
- Jap, S. D. (2001). The strategic role of the salesforce in developing customer satisfaction across the relationship lifecycle. *Journal of Personal Selling & Sales Management*, 21(2), 95-108
- Kesh, R. (2017). A Study on After Sales Service Quality and its Influence on Customer Satisfaction in selected Automobile Companies. *South-Asian Journal of Multidisciplinary Studies*, 4(6), 196-210.
- Kurata, H., Nam, S., (2010). After-sales service competition in a supply chain: optimization of customer satisfaction level or profit or both? *Int. J. Prod. Econ.* 127 (1), 136–146.
- Määttänen, E., Jylhä, T., & Junnila, S. (2014). Applying the KANO model to analyse the value of green FM. *Property Management*, Vol. 32 No.4, and pp. 312-325.
- Mohanty, S.K. & Das, R.C. (2022). Service Experience and Customer Satisfaction in Offline and Online Services: A Study on Traditional Apparel Retail in Odisha. *Orissa Journal of Commerce*, 42(4), 74-91.

- Mustofa, K.E. (2011). Effect of After Sale Services on Customer Satisfaction and Loyalty in Automotive Industry of Ethiopia. A thesis submitted in Addis Ababa University.
- Potluri, R. M., & Hawariat, H. W. (2010). Assessment of after sales service behaviours of Ethiopia Telecom customers. *African Journal of Economic and Management Studies*.
- Rahim, A. G., Ignatius, I. U., & Adeoti, O. E. (2012). Is customer satisfaction an indicator of customer loyalty?
- Rigopoulou, I., Chaniotakis, I., Lymperopoulos, C., Siomkos, G., 2008. After-sales service quality as an antecedent of customer satisfaction. *Managing Service Quality: International Journal*, 18 (5), 512–527.
- Rotar, L. J., & Kozar, M. (2017). The use of the Kano model to enhance customer satisfaction. *Organizacija*, 50(4), 339-351.
- Saleem, H., & Raja, N. S. (2014). The impact of service quality on customer satisfaction, customer loyalty and brand image: Evidence from hotel industry of Pakistan. *Middle-East Journal of Scientific Research*, 19(5), 706-711.
- Sauerwein, E., Bailom, F., Matzler, K., & Hinterhuber, H. H. (1996). The Kano model: How to delight your customers. In International working seminar on production economics (Vol. 1, No. 4, pp. 313-327).
- Sheth, J., Jain, V., & Ambika, A. (2020). Repositioning the customer support services: the next frontier of competitive advantage. *European Journal of Marketing*.
- Sheriff, N. M., Roslan, N. I., & Yusuf, Y. (2020). Determinants of satisfaction for automotive after sales service quality: a preliminary application of AUTOSERVPERF model. *Journal Intelek*, 15(2), 197-208.
- Shokouhyar, S., Shokoohyar, S., & Safari, S. (2020). Research on the influence of after-sales service quality factors on customer satisfaction. *Journal of Retailing and Consumer Services*, 56, 102139.
- Singh, H. (2006). The importance of customer satisfaction in relation to customer loyalty and retention. *Academy of Marketing Science*, 60(193-225), 46.