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ABSTRACT

Bengkel Apeng Auto Service operates as a provider of motor vehicle service, encompassing not only repairs but also offering oil changes and car washing services. Situated at Jl. Imam Bonjol no.7, Geluran, Taman District, Sidoarjo Regency, this establishment is equipped to address various mechanical and body-related issues in automobiles. Furthermore, it provides both new and used spare parts. This study employs a customer-centric potential gain approach to pinpoint attributes contributing to decreased customer satisfaction. Additionally, there exists one attribute with the lowest PGCV index, indicating satisfaction aligns with customer expectations; however, this doesn't rule out the potential for improvement, as evidenced by a PGCV index value of less than 10.5. The first attribute, E2 - Mechanic's Attention to Customer Preferences, holds a PGCV index of 10.46, while the second attribute, RE3 - Information about Product Sales to Customers, has a PGCV index of 10.27. It is advisable for Bengkel Apeng Auto to periodically assess their service quality to identify potentially dissatisfactory aspects from customers' perspectives. This practice enables the implementation of corrective measures to enhance customer satisfaction levels.

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1. INTRODUCTION

In the era of globalization, businesses face significant impacts: markets expand, opportunities are widespread, yet competition is fierce and hard to predict. This drives companies to create competitive advantages through quality products/services and excellent services. Customer satisfaction analysis is important to enhance services and address complaints in order to achieve customer satisfaction. Apeng Auto Service Workshop is one of the providers of motor vehicle service services, not only for repairs but also offers oil changes and car washing. Apeng Auto Service and Car Wash are located at Jl. Imam Bonjol No.7, Geluran, Taman Sub-district, Sidoarjo Regency, where they can fix various engine and body damages of cars. Additionally, they also provide both new and used spare parts. The workshop's branch is located not far from Jl. Imam Bonjol No.7, Geluran, specifically in the Bringin Kulon area, Bringinbendo, Taman Sub-



district, Sidoarjo Regency. Customer satisfaction or dissatisfaction at Apeng Auto Service Workshop can occur anytime. This necessitates Apeng Auto Service Workshop to have ways to enhance the quality of their service, aiming to provide satisfaction to their customers as service users. First, a decrease in customer satisfaction due to prices not matching the quality of the service and car wash results, customers feel it's expensive and the car wash is not very clean. Second, a decrease in customer satisfaction due to unsatisfactory product quality, many issues arise after replacements. Third, a decrease in customer satisfaction due to inadequate public facilities, cramped and uncomfortable waiting area, customers criticize the insufficient waiting space. Given this, a research is needed using the Potential Gain in Customer Value (PGCV) method to identify the factors considered most influential in the of decrease customer satisfaction. By understanding these factors, the issues causing the decline in customer satisfaction can be determined. This will reveal the level of consumer satisfaction towards the service quality of Apeng Auto Service Workshop and which attributes are prioritized for improvement.

2. LITERATURE REVIEW

Service quality has an essential role in achieving customer satisfaction. According to Kotler (2005), service quality is part of efforts to appropriately fulfill customer needs and desires with a guarantee of meeting customer expectations and satisfaction. In the development of service quality, five factors determine service quality (Debora,2023) The main factor in developing a competitive advantage is service quality (Ali et al., 2012). Generally, service quality is determined by comparing customer expectations with how a service actually product or delivers (Ahmad,2022).Olsen and Wyckoff in the book Yamit (2010:22) state that service is a set of useful benefits, both explicitly and implicitly, for the ease of obtaining goods and services. Kotler and Keller (2009:1) elaborate on a series of essential characteristics that differentiate services from physical products. They explain that services possess unique attributes that influence how we interact with and experience them. First, intangibility describes how services

lack a physical form that can be sensed before purchase. Unlike physical products that can be seen, touched, or tested before deciding to buy, services require trust and confidence from consumers. Second, inseparability portrays the close connection between the production and consumption of services. Services are often produced and consumed simultaneously. This implies that the interaction between service providers and consumers plays a crucial role in the overall experience. Third, variability indicates that services tend to vary depending on factors such as who provides the service, when, and where it is delivered. This poses a challenge in maintaining consistent quality in an ever-changing environment. Fourth. perishability signifies that services cannot be stored or accumulated. They typically have a limited lifespan, and customer needs must be met when the service is provided. This emphasizes the urgency of delivering quality and effective services.

Service quality can be determined by comparing consumers' perceptions of the actual service they receive with the service they expect or desire regarding the service attributes of a company (Diza, 2016). Service quality, or customer service, can be categorized into two criteria: good service quality and poor service quality. This service quality is not a permanent or rigid concept but is flexible and can be changed. These changes are aimed at improving service quality to make it even better. In the process of changing service quality, several elements are required to support this process. For instance, surveys or observations of customers, which include feedback, opinions, and inputs about the service provided (Indrasari, 2019). Research by Tjiptono (2006), confirmed that service quality consist of: (1) Reliability. namely the ability to provide services according to promises in a timely and reliable manner, (2) Physical evidence (tangible) is evidence in realizing an actual appearance (facilities and infrastructure) as proof to customers, (3) Responsiveness is a willingness to help and provide fast and appropriate services to the community by conveying clear information, (4) Guarantee (assurance) is the employee's knowledge, courtesy, and ability to generate public trust and confidence in the institution, and (5) Empathy is giving sincere and

individual or personal attention to the community by understanding the community's wishes. The population is a generalization area consisting of objects or subjects with specific qualities and characteristics set by the researcher for the study and then conclude (Setyaningrum, 2020). Quality is considered good when a service provider delivers a level of service equivalent to what customers expect. Thus, achieving customer satisfaction requires a balance between needs, desires, and what is provided. It can be concluded that service quality essentially revolves around efforts to fulfill customer needs and desires, along with the accuracy of delivery to match customer expectations (Hakim, 2019). Service quality centers on the endeavor to meet customer needs and desires and the accuracy of its delivery, or in other words, it is a form of comparison between customers' expectations and the reality they experience.

Dimensions of service quality. There are five determinants of customer quality that can be outlined as follows: (i) reliability refers to the ability to provide services as promised accurately and reliably. This creates trust that what has been promised will be fulfilled. (ii) responsiveness involves the ability to assist customers promptly and provide effective responses to their requests or issues. It demonstrates responsiveness in meeting customer needs. (iii) confidence pertains to the knowledge, politeness, and staff's ability to instill trust or confidence in customers. This creates a safe and comfortable environment for customers. (iv) empathy involves the ability to care and provide personal attention to customers. It indicates the capacity to understand and empathize with customers' needs and feelings. (v) tangibility involves the appearance of physical facilities, equipment, personnel, and communication media. This provides a visual impression of the quality of the services provided. In order to create a positive and satisfying customer experience, all of these factors must be carefully considered and managed (Attamimi, 2019).

Kotler and Keller (2012:46) define customer satisfaction as an individual's level of contentment after comparing the performance or outcome experienced with their expectations. When performance exceeds expectations, they will feel satisfied, while if it falls short, disappointment may arise. Kotler (2000) explains customer satisfaction as the perceived result by a buyer who experiences a company's performance in line with their expectations. Satisfaction and dissatisfaction are important concepts to grasp as they can influence future consumer behavior. Customer satisfaction is a level where the needs, desires, and expectations of customers are fulfilled, leading to repeat purchases or ongoing loyalty (Band, 1991).

Potential Gain in Customer Value (PGCV) is a tool used to identify the priority scale of attributes that need to be considered and improved by a company (Muheir, 2015). According to Naufal Nusaputra (2014), the PGCV index can provide quantitative input for a wide range of strategic analyses. In PGCV analysis, it also involves the level of performance and importance, allowing the management to build a survey that can measure two crucial aspects: Consumer perception of the importance level of a service. And Consumer perception of the performance/satisfaction level of a service. The PGCV index is used to determine the priority order of service improvements that need to be carried out. However, the drawback of PGCV is its focus on all attributes in its index calculation, which is why it is recommended to use other methods first to streamline the index calculation for each attribute (Adinegoro, 2022).

3. RESEARCH METHOD

This research was conducted at Apeng Auto Service Workshop located at Jl. Imam Bonjol No. 7, Geluran, Taman Sub-district, Sidoarjo Regency. This study was aimed at the customers of Apeng Auto Service Workshop. The research commenced in March 2023 and continued until the required data was collected. The following are the steps in this research (Figure 1). To calculate the Potential Gain in Customer Value (PGCV) index, in order to identify which attributes have high scores. After that. an analysis and improvement recommendations will be provided for Apeng Auto Service Workshop.



Figure 1. Research flow

4. RESULT AND DISCUSSION

4.1 Collection Data

Data collection for the questionnaire was obtained through distribution starting from March 2023 until the data requirements were fulfilled. The processed data consists of primary data obtained from questionnaire distribution. The following are the dimensions of service quality attributes at Apeng Auto Service Workshop that were used for the questionnaire data:

Table	1. Dimention of quality service				
Attribute	ute Description				
	Tangibles				
T1	Employees dressed neatly and courteously				
T2	Accessible workshop location				
Т3	Equipment completeness				
T4	Completeness of products sold				
T5	Comfortable and adequate waiting room facilities				
T6	Service area facilities for mechanics				
T7	Clean and adequate restroom facilities				
T8	Spacious parking area				
	Reliability				
Re1	Ease of repair cost payment				
	Accuracy of cashier's calculations for repair				
Re2	costs given accurately				
	Information on product sales from the				
Re3	workshop to consumers				
	Accurate provision of information related to				
Re4	repairs				
	Good service according to agreements				
Po5	providing evidence of work done as				
Rej	providing evidence of work done as				
	requested by the customer				
Rs1	Technicians who are adept at fulfilling repair				
	Events with with seven and out				
Rs2	Employees with quick response conduct				
	inspections before repairs				
\mathbf{D}_{a} ?	Clear delivery of sales and repair				
K85	understanding				
	Employees (Admin Cashier etc.) and				
5.4	mechanics with good communication to				
Rs4	avoid errors in the services provided to				
	customers.				
	Assurance				
A1	Satisfactory repair results				
A2	Guarantee of warranty for the performed				
	repairs				
A3	Quality assurance of products provided to				
<u> </u>	Responsibility for job completion delays				
	Handling of complaints after repairs from				
A5	customers is prioritized				
	Emphaty				
E1	Friendliness of employees and mechanics				
El	towards customers				
E2	Mechanic's attention to customer preferences				
E3	Service that confirms the resolution of				
	complaints by the workshop Priority on the security and comfort of				
E4	transactions				

4.2 Data Processing

1. Data Adequacy Test Based on the calculation, the minimum

sample size taken is 72.9904, which will be rounded to 73 respondents for this study. Therefore, the sample in this research consists of customers who have undergone motor servicing, oil change, and spare part services at Apeng Auto Service Workshop.

$$N = \frac{(Z\alpha/2)^2 pq}{e^2}$$

$$N = \frac{(1,96)^2 0,95(1-0,95)}{(0,05)^2}$$

$$N = \frac{3,8416.0,0475}{(0,0025)^2}$$

$$N = 72.9904 \approx 73 \text{ respondents}$$

N = The number of observations to be made

Z = Z (Normal Table) related to the level of precision

e = Percentage of margin of precision

2. Validity Test

The validity testing on all questionnaire results was conducted using SPSS version 20 software. The identity of the pilgrims was anonymized in accordance with the company's policy. Several attributes were considered invalid if the calculated r-value (r_{β}) was less than the critical value $(r_{t\gamma})$, and in such cases, the data was discarded, as observed in the following attributes

Attribute	R Calculated	R Table	Description
Satisfactory repair outcomes	0.185	0.2303.	Invalid
Quality assurance of products provided to customers	0.185	0.2303	Invalid
Handling of complaints after customer repairs is prioritized	0.190	0.2303	Invalid
Friendliness of employees and mechanics towards customers.	0.006	0.2303	Invalid

Table 3. Valid data				
Attribute	R Calculated	R Table	Description	
Employees dressed neatly and courteously	0.284	0.2303	Valid	
Easily accessible workshop location	0.487	0.2303	Valid	
Completeness of equipment	0.562	0.2303	Valid	
Completeness of products sold	0.465	0.2303	Valid	
Comfortable and adequate waiting room facilities	0.512	0.2303	Valid	
Service area facilities for mechanics	0.604	0.2303	Valid	
Clean and adequate restroom facilities	0.525	0.2303	Valid	
Spacious parking area	0.606	0.2303	Valid	
Ease of repair cost payment	0.269	0.2303	Valid	
Accuracy of cashier's calculations for repair costs, given accurately	0.533	0.2303	Valid	
Information on product sales from the workshop to consumers	0.545	0.2303	Valid	
Accurate provision of information related to repairs	0.467	0.2303	Valid	
Good service according to agreements, providing evidence of work done as requested by the customer	0.529	0.2303	Valid	
Technicians who are adept at fulfilling repair requests from customers	0.575	0.2303	Valid	
Employees with quick response conduct inspections before repairs	0.546	0.2303	Valid	
Clear delivery of sales and repair information to customers for easy understanding	0.621	0.2303	Valid	
Employees and mechanics with good communication to avoid errors in the services provided to customers	0.509	0.2303	Valid	
Guarantee of warranty for the performed repairs	0.517	0.2303	Valid	
Responsibility for job completion delays	0.517	0.2303	Valid	
Mechanic's attention to customer preferences	0.255	0.2303	Valid	
Service that confirms the resolution of complaints by the workshop.	0.262	0.2303	Valid	
Priority on the security and comfort of transactions	0.564	0.2303	Valid	

3. Reliability Test

The evaluation of reliability for all collected questionnaire data was carried out using SPSS 20 software. To align with company protocols, the personal information of the participants was anonymized. Reliability testing serves to gauge the precision of the questionnaire measurements, with the instrument being deemed reliable if the results obtained are accurate. The evaluation criteria for reliability are outlined as follows:

- a. If the Cronbach's alpha value is greater than or equal to the critical value (r table), it is deemed reliable.
- b. If the Cronbach's alpha value is less than the critical value (r table), it is considered unreliable.

Table 4. Reliability test of customer satisfaction and important	nce
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Attribute	R Calculated	R Table	Description
Customer satisfaction	0.726	0.2303.	Realiable
Customer importance	0.731	0.2303	Reliable

4. PGCV Processing

Through the implementation of this index computation, it will be applied to develop enhancement tactics, specifically addressing service quality at the Apeng Auto Service Workshop in Sidoarjo. The objective is to amplify customer satisfaction. The subsequent sections outline the procedural steps for identifying priority enhancements using the Potential Gain in Customer Value (PGCV) approach:

a. Achive Customer Value (ACV)

In the case of the Attain Customer Value (ACV) element, it is derived from the product of the observed variable ($\overline{X}t$) and the anticipated variable ($\overline{Y}t$). The calculated outcomes stem from the mean values of individual attributes as gathered from the analyzed questionnaire responses.

$$ACV = (\overline{X}t) \times (\overline{Y}t)$$

 $\bar{X}t$ = the mean score of observations (Perception Questionnaire)

 $\bar{Y}t$ = the mean score of expectations (Expectation Questionnaire)

Attribute	Perception	Expectation
T1	196	341
T2	184	321
Т3	194	330
T4	185	327
Т5	186	341
T6	190	328
Τ7	194	361

Attribute	Perception	Expectation
T8	192	341
Re1	194	339
Re2	189	340
Re3	193	318
Re4	186	330
Re5	188	321
Rs1	188	336
Rs2	194	337
Rs3	192	336
Rs4	185	328
A1	187	334
A2	186	337
A3	187	327
A4	186	332
A5	189	333
E1	193	350
E2	193	324
E3	191	327
E4	195	333

Following the computation of the cumulative evaluations for every attribute across 73 participants, the subsequent phase involves dividing each computed value by the overall count of respondents, which amounts to 73 individuals.

$$\overline{\mathbf{X}}t / \overline{\mathbf{Y}}\mathbf{t} = rac{Sum \, of \, each \, attribute}{Total \, Respondent}$$

Once the outcomes of anticipations and observations are ascertained, obtained through dividing the cumulative scores of each attribute by the total count of participants, which is 73 respondents, we can move forward to compute the Attain Customer Value (ACV) for each attribute.

$$ACV = \overline{X}t \times \overline{Y}t$$

Table 6. The results of ACV for each attribute.

Attribute	Perception
T1	12.54
Т2	11.20
Т3	12.01
T4	11.35
Т5	11.90
Т6	11.69
Τ7	13.14
Т8	12.28
Re1	12.34
Re2	12.05
Re3	11.52
Re4	11.52
Re5	11.32
Rs1	11.85

Attribute	Perception
Rs2	12.26
Rs3	12.10
Rs4	11.38
A1	11.72
A2	11.76
A3	11.47
A4	11.58
A5	11.81
E1	12.67
E2	11.73
E3	11.72
E4	12.18

The product of combining customers' actual perceptions and their expectations leads to the Attain Customer Value (ACV), presented in Table 4.8 above. The attribute with the highest outcome is T7 (Clean and adequate restroom facilities), attaining a value of 13.14.

b. Ultimately Desire Customer Value (UDCV)

Regarding the Ultimately Desire Customer Value (UDCV) aspect, it signifies the ultimate value sought by customers. This value is determined through the multiplication of the mean expectations scores by the maximum performance score derived from the Likert scale employed in the disseminated questionnaire..

 $UDCV = \overline{Y}t \ge Pmax$

Explanation:

 $\bar{Y}t$ = the average score of expectations Pmax = the maximum performance score (5)

The computation of UDCV also encompasses the utilization of mean expectation scores. These scores are acquired by summing up attribute scores from 73 participants and subsequently dividing the sum by the total respondent count. After obtaining the mean expectation scores for each attribute, the UDCV calculation can then be proceeded with.

Table 7. The results of $\overline{Y}t$ (average score of expectations) and	
UDCV (Ultimately Desire Customer Value) for each attribute.	

UDCV (Ultimately Desire Customer Value) for each attribute.				
Attribute	Yt	UDCV		
T1	4.67			
T2	4.40	21.99		
Т3	4.52	22.60		
T4	4.48	22.40		
T5	4.67	23.36		
T6	4.49	22.47		
T7	4.95	24.73		
Т8	4.67	23.36		
Re1	4.64	23.22		
Re2	4.66	23.29		
Re3	4.36	21.78		
Re4	4.52	22.60		
Re5	4.40	21.99		
Rs1	4.60	23.01		
Rs2	4.62	23.08		
Rs3	4.60	23.01		
Rs4	4.49	22.88		
A1	4.58	23.08		
A2	4.62	22.40		
A3	4.48	22.74		
A4	4.55	22.81		
A5	4.56	23.97		
E1	4.79	22.19		
E2	4.44	22.40		
E3	4.48	22.81		
E4	4.56	22.88		

From the UDCV calculation on each attribute, the highest result is obtained for attribute E1 (Friendliness of employees and mechanics towards customers) with a value of 23.97, while the lowest result is recorded for attribute Re3 (Information about product sales from the workshop to consumers) with a value of 21.78.

c. Indeks Potential Gain In Customer Value (PGCV)

The Potential Gain In Customer Value (PGCV) index is generated by deducting ACV from UDCV. The attribute exhibiting the greatest quality value based on this index is given precedence in terms of enhancement, followed by the attribute with the second highest value, and subsequently in a sequential manner.

PGCV Index = UDCV - ACV Where: UDCV = the desired final value for the customer

ACV = the result of multiplying the reality variable with the expectation variable.

 Table 8. The results of UDCV (Ultimately Desire

 Customer Value) and PGCV (Potential Gain in

 Customer Value) for each attribute

Attribute	UDCV	ACV	PGCV
T1	23.36	12.54	10.82
Т2	21.99	11.2	10.79
Т3	22.60	12.01	10.59
T4	22.40	11.35	11.05
Т5	23.36	11.9	11.46
T6	22.47	11.69	10.78
T7	24.73	13.14	11.59
Т8	23.36	12.28	11.08
Re1	23.22	12.34	10.88
Re2	23.29	12.05	11.24
Re3	21.78	11.51	10.27
Re4	22.60	11.51	11.09
Re5	21.99	11.32	10.67
Rs1	23.01	11.85	11.16
Rs2	23.08	12.26	10.82
Rs3	23.01	12.1	10.91
Rs4	22.47	11.38	11.09
A1	22.88	11.72	11.16
A2	23.08	11.76	11.32
A3	22.40	11.47	10.93
A4	22.74	11.58	11.16
A5	22.81	11.81	11
E1	23.97	12.67	11.3
E2	22.19	11.73	10.46
E3	22.40	11.72	10.68
E4	22.81	12.18	10.63

Upon obtaining the PGCV index for each attribute, a prioritization process will ensue to illustrate the sequence of enhancements according to customer input. This ranking will reveal the attributes that demand prompt attention and enhancement in accordance with customer preferences..

Table 9. Ranking order of PGCV index results

Rank	Attribute	PGCV	Gap
1	T7	11.59	-
2	T5	11.46	0.13
3	A2	11.32	0.14
4	E1	11.30	0.02
5	Re2	11.24	0.06
6	Rs1	11.16	0.09
7	A1	11.16	0
8	A4	11.16	0
9	Re4	11.09	0.07
10	Rs4	11.09	0

Rank	Attribute	PGCV	Gap
11	T8	11.08	0.01
12	T4	11.05	0.03
13	A5	11	0.05
14	A3	10.93	0.07
15	Rs3	10.91	0.02
16	Re1	10.88	0.02
17	T1	10.82	0.06
18	Rs2	10.82	0
19	T2	10.79	0.03
20	T6	10.78	0.01
21	E3	10.68	0.1
22	Re5	10.67	0.01
23	E4	10.63	0.04
24	T3	10.59	0.04
25	E2	10.46	0.13
26	Re3	10.27	0.19

Based on the above ranking results, the attributes that require improvement at Bengkel Apeng Auto Service have been identified. According to the table above, in the Gap column, the average gap for each attribute out of the 26 attributes is 0.04, where this value < 1, indicating a high likelihood that the results of perception and expectations are acceptable to customers. Attributes with higher values are those most frequently complained about by customers. Several attributes with index values > 11.5 include attribute T7, where the restroom facilities provided by the workshop are perceived as inadequately clean and poorly illuminated, resulting in discomfort for customers using the workshop's restroom facilities.

4.3. Suggestions for improvement

From the aforementioned attributes that have customer complaints, suggestions have been proposed for each attribute. For attribute T7, the restroom facilities provided by Bengkel Apeng Auto Service should be equipped with lighting and regularly cleaned to ensure customer comfort while using these facilities.

Based on the research background, it is explained that Bengkel Apeng Auto Service Sidoarjo is among the workshops with the highest customer demand for its repair services, even amid the pandemic conditions during the research period. The final result highlights that one attribute with the highest index, representing the most frequent customer complaint, is the cleanliness and lighting inadequacy of the facilities. Therefore, restroom this research can also be supported by examining the attribute with the smallest PGCV index value, which is attribute E2, reflecting the attention of Apeng Auto Service Sidoarjo's mechanics to customer preferences, deemed satisfactory bv customers. Additionally, attribute Re3, the provision of product sales information to customers, is also considered satisfying by customers of Apeng Auto Service. These attributes, with lower PGCV index values, serve as reasons for customers to continue choosing Apeng Auto Service for their repair services. However, if Apeng Auto Service fails to promptly address the attributes contributing to the decline in service quality, customers may opt for other workshops for their repair needs.

The results of this study compared to previous research show both differences and similarities. This study indicates that certain attributes of service quality at Bengkel Apeng Auto Service need improvement to enhance customer satisfaction, although there is variation in prioritization of improvements the compared to previous research. The earlier study may have identified other attributes deemed significant for enhancement, and these findings offer deeper insights into changing customer preferences and needs over time. Nevertheless, a more detailed analysis in comparison with the previous research is necessary to identify the differences and implications of these findings for service improvement policies. Bengkel Apeng Auto Service can improve its services using the PGCV method through steps such as identifying service quality attributes with the highest Potential Gain in Customer Value (PGCV) scores, conducting in-depth analysis of attributes

requiring improvement, formulating measurable improvement strategies. implementing changes according to the plan, monitoring and evaluating the impact of changes, making adjustments and developments as needed, involving employees, and communicating with customers about the implemented improvements. With this approach, Bengkel Apeng Auto Service can effectively enhance service quality and meet customer preferences.

5. CONCLUSION

Based on the research findings regarding the analysis of service quality and customer satisfaction at Bengkel Apeng Auto Service, it can be concluded that the calculation results using the Potential Gain in Customer Value (PGCV) method have identified attributes prioritized for improvement in order to enhance the service quality of Bengkel Apeng Auto Service. There are attributes that yield the highest PGCV index values, indicating areas where customers find less satisfaction. These attributes are therefore prioritized for improvement to enhance the service quality of Bengkel Apeng Auto Service in the future, ultimately leading to increased customer satisfaction. One of the attributes with the highest PGCV index is related to the cleanliness and adequacy of the restroom facilities provided by Bengkel Apeng Auto Service, with a PGCV index value of 11.59. If Bengkel Apeng Auto Service does not promptly address the attributes causing a decline in service quality, it may lead customers to choose other workshops for their motor repair needs. The next recommendations for research on Bengkel Apeng Auto Service include conducting a more in-depth study on priority attributes that need improvement, analyzing competition comparisons, developing employee training programs, implementing and technology management systems, conducting regular customer satisfaction surveys, diversifying services and offerings, utilizing social media and promotions, collaborating with suppliers and distributors, and maintaining ongoing performance measurement. By following these steps, the workshop can continually enhance its service quality and better meet customer expectations.

REFERENCES

Ahmad, T. L., Wardani, S. A. (2022). Analysis of Service Quality Measurement at Vocational Higher Education with the Higher Education Performance Method (HEdPERF) and Importance Performance Analysis (IPA). Journal IJIEM (Indonesian Journal of Industrial Engineering & Management), 4(2), 184-197.

http://dx.doi.org/10.22441/ijiem.v4i2.2 0202

- Attamimi, Z., Maryani A. (2019). Customer Satisfaction Measurement Through Service Quality of PT. BNI Syariah Kc. Ciputat using Importance Performance Analysis (IPA) Method & Customer Satisfaction Index (CSI) Method. [Tugas Akhir] UIN Syarif Hidayatullah, Jakarta.
- Darmawan, A., Mulyadi, N., K., B. (2014). Analisis Kepuasan Pelanggan Terhadap Layanan Purna Jual Avanza Dengan Metode SERVQUAL dan PGCV (Studi Kasus BPPT Hadji Kalla Cabang Urip Makassar). *JEMIS*, 2(2), 12-19. https://doi.org/10.21776/ub.jemis.2014. 002.02.3
- Debora, F., Fasa, N., Sudrajat, H. A., Apriliani, A. (2023). Analysis of Service Quality on Lestari Seserahan SME Customer Satisfaction with the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) Methods. Journal IJIEM (Indonesian Journal of Industrial Engineering & Management), 4 (1),78-86. https://doi.org/10.22441/ijiem.v4i1.191 98
- Dewi, S., K., Analisa, I., Amardan, W. (2019). Determining Priority Improvements in Service Quality Using Customer Satisfaction Index (CSI), Importance Performance Analysis (IPA), and Potential Gain in Customer Value

(PGCV) Index. Jurnal SENTRA. Muhammadiyah University.

- Diza Farah, Sileyljeova Moniharapon, Imelda W.J Ogi. (2016). Pengaruh Kualitas Pelayanan, Kualitas Produk dan Kepercayaan terhadap Kepuasan Konsumen (Studi pada PT. Fifgroup Cabang Manado). *EMBA Journal*, 4(1), 109-119.
- Garaika, and Darmanah. (2019). Research Methodology. Lampung: Hira Tech.
- Hakim, Nur et al. (2019). Determining Priority for Quality Improvement using Importance Performance Analysis (IPA) and Potential Gain in Customer Value (PGCV) Method. Volume 23, Number 2. Faculty of Social and Political Sciences, Department of Business Administration. Universitas Pembangunan Nasional "Veteran".
- Indrajaya, D. (2018). Analisis Kualitas Pelayanan Terhadap Tingkat Kepuasan Konsumen Menggunakan Metode Importance Performance Analysis Dan Customer Satisfaction Index pada UKM Gallery. Jurnal IKRA-ITH Teknologi, 2(3), 1-6.
- Indrasari Meithiana, 2019. Marketing and Customer Satisfaction. Surabaya: Unitomo Press.
- Kotler, P., & Keller, K. L. (2016). Marketing Management, 15th Edition. New Jersey: Pearson Pretice Hall, Inc.
- Setyaningrum, F. E. (2020). Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) Methods of Exclusive Matte Lip Cream. Journal IJIEM (Indonesian Journal of Industrial Engineering & Management), 1(2), 116-126.

http://dx.doi.org/10.22441/ijiem.v1i2.1 0220

Tjiptono, F. (2006). Manajemen Jasa. Yogyakarta: Andi Offset.