

THE INFLUENCE OF SERVICE QUALITY AND FACILITIES ON CUSTOMER SATISFACTION IN FORMING CUSTOMERS LOYALTY IN SBU FACTORY MAINTENANCE SERVICES (JPP) OF PT. PUPUK ISKANDAR MUDA

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ABSTRACT

This study examined and analyzed the effect of service quality and facilities on customer satisfaction in forming customer loyalty at SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda. This study used primary data obtained by distributing questionnaires to all customers, as many as 85 respondents, with 23 questions asked using five Likert scales (strongly agree-strongly disagree). The data analysis tool used was SmartPLS. The results showed that service quality significantly and positively affected customer satisfaction and customer loyalty, and facilities significantly and positively influenced customer satisfaction and customer loyalty. Meanwhile, customer satisfaction negatively but significantly affected customer loyalty. The results of hypothesis testing show that service quality and facilities directly affected customer loyalty. Meanwhile, the test results indirectly revealed that customer satisfaction partially mediated service quality on customer loyalty.

Keywords: Service Quality, Facilities, Customer Satisfaction, Customer Loyalty.

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INTRODUCTION

In developing its business every year, the company must be capable of surviving and carrying out various developments and innovations, especially in providing the best service to its customers. Companies must be able to make customers their top priority to achieve business success. PT Pupuk Iskandar Muda, a company that produces fertilizer products, has developed a business strategy in factory maintenance support services, namely SBU Factory Maintenance Services (JPP). The development of this service sector starts with assets and facilities that have the opportunity to infiltrate the sales of factory maintenance services that can assist companies in their efforts to increase concerning resources and conditions in the area around the company that support them. The supporting assets are workshop units that consist of factory equipment industrial workshops, machine and welding workshops, instrument and electrical workshops, civil workshops (carpentry and woodworking, insulation and refractory stone), Agricultural Machine Tools manufacturing workshops, heavy equipment, and auxiliary equipment workshops. Services provided are factory equipment industry services by leasing heavy tools, valve repair services, machine shop services, welding services, scaffolding services, electric motor repair services, instrumentation services, and laboratory services to external parties by empowering human resources employees and hiring expert workers.

In empowering assets and facilities of the SBU Factory Maintenance Service (JPP), PT PIM, as the management unit, cooperates with external parties under management procedures. By implementing Business to Business, the company will be very profitable in the long run. In addition, Business to Business (B2B) also has characteristics in which suppliers and customers have close relationships (Marjani & Sutisna, 2019). This condition requires more intensive interactions between suppliers and customers (Nyadzayo et al., 2020). Intense interaction involvement with customers when purchasing can serve as an evaluation material in the purchasing process. As a result, it becomes the key to increasing a sustainable competitive advantage for the company (Youssef et al., 2018). Currently, the company is still limiting the number of jobs from external parties due to the limited number of workers caused by the routine workload, so that in completing the work must be adjusted to the availability of time. This factor is also supported by the number of company partner data, which shows that the number of partners who cooperate each year is still inconsistent, where 90.42% or 85 customers have collaborated repeatedly, and 9.57% or 9 customers only have one-time purchasing.

In the industrial world, loyal customers are more likely to focus on long-term benefits and engage in cooperative actions that are profitable to each other in a relationship (Lam et al., 2004). And loyal customers are also not too concerned with the prices set by suppliers but prioritize the value of the benefits they receive (Andersson & Karlström, 2014; Gummesson, 2002). Customer loyalty is customer behavior towards company services (Andreassen & Lindestad, 1997). Loyal customers will return to collaborate repeatedly and recommend to their colleagues to use the company's services (Hennig-Thurau et al., 2004). Service quality positively and significantly affects consumer loyalty (Budinewita & Besra, 2020; Marjani & Sutisna, 2019). The implementation of service quality has a positive effect on customer loyalty, as evidenced by tangibility, reliability, assurance, responsiveness, and empathy having a significant and positive influence on the loyalty of the company's business partners (Ifediora et al., 2022). Companies need to increase their understanding of interacting relationships as Business to Business (B2B) companies and provide better service to retain their customers to remain loyal (Ali, 2020).

In the Business to Business (B2B) relationship, every quality of service provided must match and exceed the desired expectations so that customers are satisfied and loyal that service quality will have a positive and significant influence on customer loyalty (Nejad et al., 2014; Chenet et al., 2010; Bloemer & Kasper, 1995; Budianto, 2019). Good company service will increase customer satisfaction and consumer repurchase intentions (Nezami, Worm & Palmatier, 2018). With good service quality and maximum satisfaction, the company will be able to keep customers loyal and enable other consumers to work together to use the services provided by the company. Satisfaction is an assessment of the experience of interacting with service providers (Nejad et al., 2014). Satisfaction is based on a comparison between pre-purchase expectations and actual/post-purchase experience (Huang et al., 2019; Kotler, 2003). Service quality has a positive influence on customer satisfaction with a significant value. It means that the better the quality of service provided, the higher the customer's perceived satisfaction (Andreassen & Lindestad, 1998; Maulidiah et al., 2023; Nuvriasari, 2012; Huang et al., 2019; Parasuraman et al., 1994; Budinewita & Besra, 2020).

Currently, facilities have become a primary concern for consumers in increasing their satisfaction, such as feeling comfortable with the service. If the services meet the requirements, they will satisfy customers (Oetama & Sari, 2017). In general, the facilities provided by the company have several forms, types, and benefits. Facilities can be in the form of buildings/places, tidiness, cleanliness, supporting equipment, communication media, and decorations that can be functioned and used according to their needs. With the availability of various kinds of facilities at the company, customers can feel comfortable and exceed their expectations by creating satisfaction and establishing good relationships. Facilities have a significant effect on customer satisfaction, where the more facilities available in a company, the higher the value of customer satisfaction (William & Purba,

2020; Riseetyawan et al., 2022; Lepkova & Uselis, 2013; Pantilu et al., 2018; Adawia et al., 2020. On the other hand, facilities do not affect customer satisfaction (Pamungkas et al., 2021; Rahman et al., 2017; Fadillah & Haryanti, 2021). Facilities also measure customer loyalty to the facilities provided by the company and will minimize the possibility of customers switching to other companies and reduce commitment-based capitation to service (Setyawan et al., 2022). With more complete and adequate facilities, the higher the effect on high customer loyalty (Sianipar et al., 2022; Nurcahyo et al., 2017; Khadafi et al., 2022; Sofyan et al., 2013; Dora, 2017; Ozdemir & Culha, 2009).

Therefore, based on the reference results in the research above, it is deemed necessary to conduct a study on the effect of service quality and facilities on customer satisfaction in forming customer loyalty to retain regular customers so they do not switch to other competing companies, and will later affect the company revenues.

METHODS

Data and Sample

The location of this research was carried out in Section SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda. Domiciled in Krueng Geukueh, North Aceh, Indonesia. While the subject in this research is all partners or customers who have relationships in using the service SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda. This study uses Census sampling, which takes the entire population as the sample. This technique is used when the population is less than 100 respondents (Potale & Uhing, 2015). There are 85 respondents as the samples who are partners and use services.

Data Analysis Methods

The data analysis technique used is PLS (Partial Least Squares). According to Ringle et al. (2018), PLS is a data analysis technique with high collinearity through the dependent variable projection from an independent variable. Meanwhile, according to Henseler et al. (2009), PLS is used to avoid a problem with small sample size and can be applied to situations where other methods cannot. Thus, PLS (Partial Least Squares) is a statistical method based on variance, where matrix singularity will never occur. In addition, PLS can also be used on data with nominal, ordinal, interval, and ratio scales where the data does not have to be in large quantity. PLS also does not require data to be multinormal (Abdillah & Jogyanto, 2015).

Measurement Models (Outer Model and Inner Model)

a) Convergent validity

An indicator is categorized to meet Convergent validity if it has a loading value (λ) above 0.70 (Hair et al., 2014). If one of the variable indicators has a loading value of <0.70 , it must be dropped due to an indication of not being good enough to measure variables accurately.

b) Discriminant validity

Testing discriminant validity can be done by comparing the square root of the AVE so that each construct with a correlation value appears between the constructs in the model. Good discriminant validity appears in the AVE square root for each construct which is higher than the correlation between the constructs in the model (Fornell & Larcker, 1981). If the expected AVE value is > 0.5 , then this value has good discriminant validity.

c) Internal Consistency

In this study the value of composite reliability and Cronbach alpha is > 0.70 , as recommended by Hair et al. (2014). Based on the evaluation by testing the validity and reliability of the models mentioned above, the next step is compiling an equation path pattern that explains the relationship patterns between variables and each indicator (Ghozali & Latan, 2015).

The inner model analysis aims to ensure that the structural model built is robust and accurate that can be evaluated by looking at the R² value of the endogenous variables and the path coefficient parameter. According to Ghozali (2015), the Inner model is measured by looking at the percentage of variance that can be explained by looking at the R-square value (0.75/strong, 0.50/medium, and 0.25/weak) and R-square value 0, 67. 0.33 and 0.19 indicate that the models are strong, moderate, and weak. The inner model/structural model evaluation model appears in several test indicators below:

1. Coefficient of Determination (R²)

The structural model test using PLS can be started by looking at the R-square value for each endogenous variable, which becomes the predictive power of the structural model. Changes in R-square values can be used to explain whether the influence of certain exogenous latent variables on endogenous variables will have a substantive effect. The R-square values are 0.75, 0.50, and 0.25. It concludes that the models are strong, moderate, and weak. The results of the PLS R-square represent the amount of variance of the construct described by the model. The effect of f² can be calculated by the following formula:

$$f^2 = (R^2_{included} - R^2_{excluded}) / (1 - R^2_{included})$$

2. Predictive relevance (Q²)

Predictive relevance is to measure how well the observed values are generated from the model and the results on the parameter estimates. If the Q-Square value is higher than 0 (zero), it will show that the model has a predictive relevance value, and if the Q-square is less than 0, it will show that the model lacks predictive relevance.

Hypothesis Tests

Furthermore, Husein (2015) suggests that, in general, an explanatory research method is a method approach that uses Partial Least Squares (PLS) because there is hypothesis testing and to test hypotheses can be seen from the t-statistics and probability values. The hypothesis testing uses statistics with an alpha of 5%, and the t-statistic value is 1.96. So, the criteria for acceptance/rejection of the hypothesis are that H_a is accepted while H₀ is rejected (t-statistic is > 1.96). In the t-test, if t-count $>$ t-table at a specific significance level, this variable will have a significant effect). To reject/accept the hypothesis using probability, H_a is accepted when the value is < 0.50 . In other words, the P-Value variable is the same, or $< 5\%$ can be declared as a variable that has a significant effect (Ghozali, 2015).

Mediation Effect Tests

Baron & Kenny (1986) first introduced the mediation model and then developed by Preacher et al. (2007), which explains the mediation effect test path, where the variable M has a mediating effect, X significantly affects Y, X significantly affects M. Thus, M significantly contributes to the variability in Y and X effect on Y decreases when M is entered simultaneously with X as a predictor of Y (Preacher & Hayes, 2008). According to Hayes and Preacher (2014), if (a) and (b) are significant while (c') is not significant,

customer satisfaction is declared as a full mediation variable. If (a) and (b) are significant and (c') is also significant while the coefficient (c') is lower (decreases) than (c), customer satisfaction is a partial mediation variable (partial mediation). If (a) and (b) are significant and (c') is also significant, the coefficient (c') is almost the same as (c), and customer satisfaction is not a mediating variable. If one (a) or (b) or both are not significant, then it is claimed not as a mediating variable.

RESULTS AND DISCUSSION

Descriptive Analysis for Respondents

Based on gender classification, all respondents are male (85 respondents, or 100%). Based on the type of work needed, 34 respondents (40%) used maintenance services, 19 respondents (22.4%) used heavy equipment & equipment rental services, 15 respondents (17.6%) used sales services, 9 respondents (10.6%) used fabrication services, 6 respondents (7.1%) used labor services, and 1 respondent (1.2%) used construction & civil services and inspection services. Based on their experience of using services, more respondents often use services (38 people or 44.7%). Only 26 people (30.6%) used services more than 2 times, and only 21 people (24.7%) used the service for the 2nd time.

Evaluating Measurement Model (Outer Model)

Model evaluation through Smart PLS examines the outer model and inner model (Henseler et al., 2009). The convergent validity is assessed from the loading factor > 0.70 and AVE and community > 0.50 . Outer model analysis can be performed to examine the validity and reliability of the model.

From the results of the analysis output in the figure 2 regarding loading factor constructs results with reflective indicators testing the outer model and the outer loading values of each indicator on its latent variables, all constructs with reflective indicators produce a loading factor value > 0.70 , which means all indicators of the construct are valid.

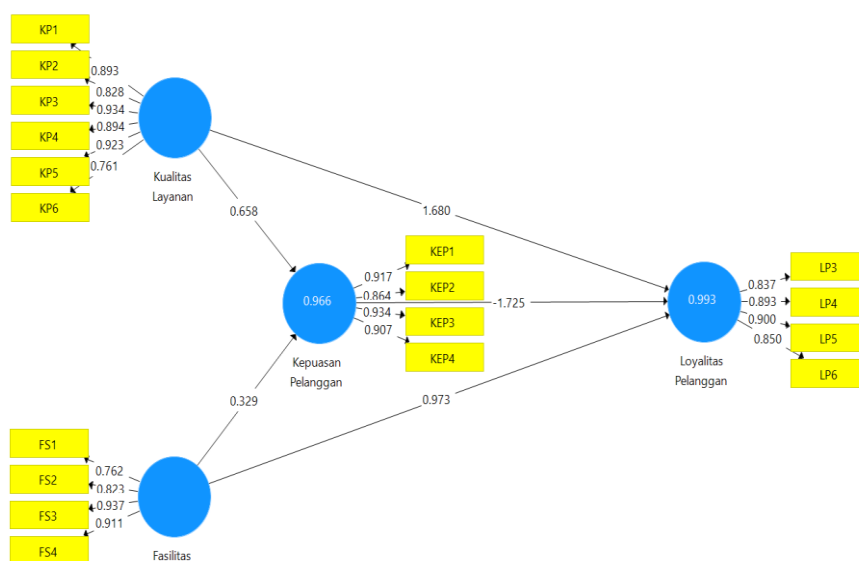


Figure 2. Construct Factor Loading Results with Reflective Indicators for Outer Model Testing

Table 2.
Average Variance Extracted (AVE) Values

Latent Variables Constructs	AVE Values	Evaluation
Service Quality (X1)	0,764	Good Enough
Facilities (X2)	0,742	Good Enough
Customer Satisfaction (Y1)	0,821	Good Enough
Customer Loyalty (Y2)	0,758	Good Enough

Source: Data from the analysis of the Smart PLS Program Version 3.2.9, 2023

Based on Table 2 above, the results of the Average Variance Extracted (AVE) values are good enough, or above 0.50 as recommended by Larcker (1981).

Table 3.
Results of Cronbach Alpha and Composite Reliability Values

Latent Variables Constructs	Cronbach Alpha Values	Composite Reliability
Service Quality (X1)	0,937	0,951
Facilities (X2)	0,881	0,919
Customer Satisfaction (Y1)	0,927	0,948
Customer Loyalty (Y2)	0,893	0,926

Source: Data from the analysis of the Smart PLS Program Version 3.2.9, 2023

Based on Table 3 above, the results of all latent variable constructs have a Composite Reliability value above 0.70. Therefore, there are no problems in the formed Reliability and unidimensional.

1. Coefficient of determination (R^2)

Table 4.
Results of R-Square Value

Latent Variables Constructs	R Square	R Square Adjusted
Customer Satisfaction (Y1)	0,966	0,965
Customer Loyalty (Y2)	0,993	0,993

Source: Data from the analysis of the Smart PLS Program Version 3.2.9, 2023

Based on the results in Table 4 above, the latent R-square variable of Customer Satisfaction (Y1) is 0.966, or 96%, and the latent R-square variable of Customer Loyalty (Y2) is 0.993, or 99%. It indicates that the model is significant, with the R-square value of 96% and 99% of the variance of the Service Quality variable (X1) and Facilities variable (X2). Meanwhile, the rest of the 4% and 1% are explained by other variables outside this model.

2. Predictive relevance (Q^2)

The equation is as follows:

$$\begin{aligned}
 Q^2 &= 1 - (1 - R_1^2) (1 - R_2^2) \dots \\
 &= 1 - (1 - 0,966) (1 - 0,993) \\
 &= 0,999
 \end{aligned}$$

The results of the calculation of the test equation show that the Q-Square Predictive Relevance is 0.99 or 99%. It shows that the model has a very relevant predictive value because the Q-Square value is higher than 0 (zero) (Ghozali & Latan, 2015).

Hypothesis Test Results

The results of data processing using the Smart PLS program version 3.2.9 through the Calculation Bootstrapping process are in the following figure and table:

Table 5.
Path Analysis Results (Bootstrapping)

Latent Variables Constructs	Original Sample	T-Statistics	P-Values	Hypothesis Results
Service Quality (X1) -> Customer Satisfaction (Y1)	0,658	2,606	0,009	Accepted
Facilities (X2) -> Customer Satisfaction (Y1)	0,329	1,293	0,197	Rejected
Service Quality (X1) -> Customer Loyalty (Y2)	1,680	9,556	0,000	Accepted
Facilities (X2) -> Customer Loyalty (Y2)	0,973	7,310	0,000	Accepted
Customer Satisfaction (Y1) -> Customer Loyalty (Y2)	-1,725	7,246	0,000	Accepted

Source: Data from the analysis of the Smart PLS Program Version 3.2.9, 2023

The Effect of Service Quality on Customer Satisfaction

There is a path coefficient value of 0.658 and a t-count value of 2.606, and the t-count value with its influence is positive and significant (2.606; $p < 0.05$) or > 1.96 . In other words, service quality significantly and positively affects customer satisfaction. So, H1 is accepted. This is influenced by several factors at SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda so that the company is able and fulfills its responsibilities provide maximum services to internal and external parties for increase company profits by empowering existing resources. SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda has also been able to meet customer needs providing other supporting services and equipment. Besides, service quality (X1) significantly and positively affects customer satisfaction (Y1). It is relevant to studies conducted by Andreassen & Lindestad (1998), Nuvriasari (2012), Spreng et al. (2009), Jumhari et al. (2022), Zulu & Chileshe (2010), Nguyen & Nagase (2019), Maharsi et al., (2021), Maulidiah et al., (2023), Huang et al., (2019), Parasuraman et al., (1994), Budinewita & Besra (2020), Pamungkas et al., (2021) and Albari & Kartikasari (2019).

The Effect of Facilities on Customer Satisfaction

The analysis results reveal that the path coefficient value is 0.329, and the t-count value is 1.293. The t-count value with the effect is positive but insignificant (1.293; $p < 0.05$) or > 1.96 . In other words, facilities affect customer satisfaction. This is influenced by several factors in meeting needs customers who have the lowest value among other variables. This matter because SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda has not fully complied customer needs, both in terms of time and number of workers limited. So, that H2 is rejected. It is in line with research conducted by Srijani and Hidayat (2017), Wibisono & Achsa (2020), Riseetyawan et al. (2022), William & Purba (2020), Lepkova & Uselis (2013), Mulyasari et al., (2022), Pantilu et al., (2018), Sakti & Mahfudz (2018), Adawia et al., (2020), Harfika & Abdullah (2017), Ilyas & Mustafa (2022), and Zulpiani & Ridho (2016).

The Effect of Service Quality on Customer Satisfaction

Based on the analysis, the path coefficient value is 1,680, and the t-count value is 9,556, which reveals that the t-count value with its influence is positive and significant (9,556; $p < 0.05$) or > 1.96 . In other words, service quality significantly and positively affects customer loyalty. This is influenced by several factors that exist Commitment to provide the

right service on time, willingness providing information on when services will be provided, prioritizing customer convenience, availability of accurate work progress reports and maintain confidentiality in transactions and carrying out work in accordance with fair terms and conditions. So, H3 is accepted. It is in line with research conducted by Candi & Kahn (2016), Nejad et al. (2014), Budinewita & Besra (2020), Marjani & Sutisna (2019), Ifediora et al. (2022), Chenet et al., (2010), Bloemer & Kasper, (1995) and Budianto, (2019).

The Effect of Facilities on Customer Loyalty

Based on the analysis results, the path coefficient value is 0.973, and the t-count value is 7.310, which means that the t-count value with its influence is positive and significant (7.310; $p < 0.05$) or > 1.96 . In other words, facilities significantly and positively affect customer loyalty. This is influenced by several factors, namely the available facilities SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda workshop, availability of equipment with the right technology and provision of services provided both internally and externally the company and the conditions of the workshop are well organized and neat. So, H4 is accepted. Research by Sianipar et al. (2022), Khadafi et al. (2022), Sofyan et al. (2013), Setyawan et al. (2022), Nurcahyo et al. (2017), and Nobar & Rostamzadeh (2018) support the results of this study.

The Effect of Customer Satisfaction on Customer Loyalty

The analysis results show that the path coefficient value is -1,725 and the t-count value is 7,246, which indicates a negative and significant influence (7,246 ; $p < 0.05$) or > 1.96 . In other words, customer satisfaction negatively but significantly affects customer loyalty. This is influenced by several factors that SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda provide services and provide facilities according to demand and customer company needs. So, H5 is accepted. This is in line with research conducted by Hafidah (2022), Candi & Kahn (2016), Lee et al. (2018), Nejad et al. (2014), Rauyruen & Miller (2007), Budinewita & Besra (2020), Kim et al. (2018), Kasiri et al. (2017), and Dam & Cuong (2021).

Mediation Test Results

Mediation testing uses the bootstrapping method using Smart-PLS 3.2.9, and there is a mediating variable, namely customer satisfaction, with 2 mediation effect hypotheses (H6 and H7). The results of the mediation effect tests are in the following table:

Table 6.
Mediation Effect Test Results

Latent Variables Constructs	Original Sample	T Statistics	P Values	Mediation Effect Test Results
Service Quality (X1) -> Customer Satisfaction (Y1) -> Customer Loyalty (Y2)	-1,136	2,523	0,012	Significant
Facilities (X2) -> Customer Satisfaction (Y1) -> Customer Loyalty (Y2)	-0,568	1,277	0,202	Insignificant

Source: Data from the analysis of the Smart PLS Program Version 3.2.9, 2023

Customer Satisfaction Mediates Between Service Quality and Customer Loyalty

Based on the data analysis results, the direct effect test from bootstrapping show that the T value is (2.523), the P value is (0.012). The results show that the effect of service quality on customer loyalty through the mediation of customer satisfaction is (-1.136) and a significant p-value of $0.012 < 0.05$. Then H6 = Customer satisfaction plays a significant role as a variable that mediates the effect of service quality on customer loyalty. It is in line with research conducted by Caruana et al., 2000; Olorunniwo & Hsu, 2006; Dhandabani, 2010; Ilias & Panagiotis, 2010; and Izogo & Ogba, 2015).

The results of the mediation test obtain values (a) and (b), and (c) significant ($P < 0.05$). Thus, it shows that customer satisfaction can mediate the effect of service quality on customer loyalty, with the results of the mediation test of customer satisfaction said to be a partial mediation variable (partial mediation).

Customer Satisfaction Mediates Between Facilities and Customer Loyalty

Based on the data analysis results, the results of the direct effect test from bootstrapping show that the T value is (1.227), and the P value is (0.202). These results indicate that the effect of facilities on customer loyalty through the mediation of customer satisfaction is (-0.568) and has a significant p-value ($0.202 > 0.05$). Then H7 = Customer satisfaction is insignificant. So, it did not act as a variable that mediated the effect of facilities on customer loyalty. It is relevant to research by Akbar & Ariansyah (2021) that did not directly show a significant influence between facilities and infrastructure on consumer loyalty through customer satisfaction.

The results of the mediation test obtained values of (a) not significant because of the P value (> 0.05), (b) significant, and (c) significant ($P < 0.05$). It means that the value of customer satisfaction cannot mediate the effect of facilities on customer loyalty because one value, namely (a) is insignificant, whereas (b) and (c) are significant. Thus the mediation test of the influence of customer satisfaction mediates between facilities and customer loyalty is declared not as a mediating variable.

CONCLUSIONS

This study examined and analyzed the effect of service quality and facilities on customer satisfaction in forming customer loyalty at SBU Factory Maintenance Services (JPP) of PT Pupuk Iskandar Muda. We utilised SmartPLS for the purpose of confirmatory factor analysis to create, verify and confirm the effectiveness of our measurement models. We also used a structural equation model to examine whether the measurement model was fit for purpose. This study used primary data obtained by distributing questionnaires to all customers, as many as 85 respondents, with 23 questions asked using five Likert scales (strongly agree-strongly disagree). Our results reinforce our 7 hypotheses and they also suggest that our model is fit for purpose due to its correspondences.

Based on the results, it concludes that service quality significantly and positively affects customer satisfaction and customer loyalty. Furthermore, facilities positively but insignificantly affect customer satisfaction and significantly and positively affect customer loyalty. Meanwhile, customer satisfaction has a negative but significant effect on customer loyalty. The results of hypothesis testing show that the quality of services and facilities directly affects customer loyalty. Meanwhile, the test results indirectly show that partial mediation of customer satisfaction can mediate the quality of services and facilities on customer loyalty. However, customer satisfaction mediates between facilities and customer loyalty and does not significantly affect indirect

influence and is not said to be a mediating variable.

REFERENCES

- Abdillah, W., Jogiyanto, HM. (2015). *Partial Least Square (PLS) Alternatif Struktural equation Modeling (SEM) dalam Penelitian Bisnis*. Andi, Yogyakarta.
- Andreassen, Wallin & Lindestad. (1997). The Impact of Corporate Image on Quality, Customer Satisfaction, and Loyalty for Customer with Varying Degrees of Service Expertise. *The International Journal of Service Industry Management*, 8(4),: 14-15.
- Andersson, P., & Karlström, K. (2014). Factors influencing a customer's loyalty in B2B relationships: A qualitative study of relationship marketing. <https://www.semanticscholar.org/paper/Factors-influencing-acustomer>
- Bloemer, J. and Kasper, H. (1995), "The complex relationship between consumer satisfaction and brand loyalty", *Journal of Economic Psychology*, Vol. 16 No. 2, pp. 311-29.
- Budianto, A. (2019). Customer Loyalty: Quality of Service. *Journal of managementReview*. Volume 3 Number 1 Page (299-305). Doi: <http://dx.doi.org/10.25157/jmr.v3i1.1808>
- Candi, M., & Kahn, K. B. (2016). Functional, emotional, and social benefits of new B2B services. *Industrial Marketing Management*, 57, 177–184. <https://doi.org/10.1016/j.indmarman.2016.02.002>
- Caruana, A., Money, A. H., & Berthon, P. R. (2000). Service quality and satisfaction the marketing role of value. *European Journal of Marketing*, 34(11–12), 1338–1352.
- Dam, S.M., and Cuong D, T. (2021). Relationships between Service Quality, Brand Image, Customer Satisfaction, and Customer Loyalty. *Journal of Asian Finance, Economics and Business*. 8(3), 585-593.
- Dhandabani, S. (2010). Linkage between service quality and customers loyalty in commercial banks. *International Journal of Management and Strategy*, 1(1), 1 –22.
- Dora, M. Y. (2017). Analysis Effect of Service Quality, Educational Facilities, and Method of Learning, Student Satisfaction and Loyalty to Students - Studies in the University of Widyatama Bandung. *European Journal of Social Sciences Education and Research*, May-August 2017 Volume 4, Issue 3. pp. 16-27.
- Ghozali, I. (2015). *Aplikasi Analisis Multivariate dengan Program SPSS*. Badan Penerbit Universitas Diponegoro, Semarang.
- Ghozali, I, & Latan, H. (2015). *Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 Untuk Penelitian Empiris*. BP Undip, Semarang.
- Gummesson, E. (2002). *Total Relationship Marketing (2nd edition)*. Oxford: Butterford-Heinemann.
- Hafidah, S. (2022). Analisis Kepuasan, Loyalitas Dan Penjualan Pada Perusahaan Yang Melayani Transaksi Business To Business. *Jurnal Indonesia Sosial Teknologi*. Vol. 3, No. 6 Juni 2022. Hal. 724-740. Doi: 10.36418/jist.v3i6.432
- Harfika, J., & Abdullah, N. (2017). Pengaruh Kualitas Pelayanan dan Fasilitas Terhadap Kepuasan Pasien pada Rumah Sakit Umum Kabupaten Aceh Barat Daya. *Balance*, 14 (1), 44–56.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67(3), 451-470.
- Hair, J. F. J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). In *SAGE* (Vol. 46, Issues 1–2).



- SAGE Publications, Inc. <https://doi.org/10.1016/j.lrp.2013.01.002>
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word of mouth via consumer opinion platforms: What motivates consumers to articulate themselves on the internet?. *Journal of Interactive Marketing*, 18(1), 38-52.
- Henseler, J., Ringle, C.M., and Sinkovics, R.R. (2009). The Use Of Partial Least Squares Path Modeling In International Marketing. *Advances in International Marketing*, Volume 20, 277–319.
- Huang, Ping-Lung., Lee, B. C.Y & Chen, Ching-C. (2019). The influence of service quality on customer satisfaction and loyalty in B2B technology service industry, *Total Quality Management & Business Excellence*, 30:13-14, 1449-1465, DOI: 10.1080/14783363.2017.1372184.
- Husein. (2015). *Penelitian Bisnis dan Manajemen Menggunakan Partial Last Squares (PLS) dengan smart PLS 3.0*. Modul Ajar Jurusan Manajemen Fak. Ekonomi Dan Bisnis Universitas Brawijaya.
- Ifediora, C. U., Moguluwa, S.C., Christian, I. C., Iloka, C. B., & Isitor, C. N. (2022). To What Extent Does Service Quality Influence Loyalty of Business Partners in the Nigerian Telecommunication Sector?. *Journal of Positive School Psychology* 2022, Vol. 6, No. 5, 4429-4451.
- Ilias, S., & Panagiotis, T. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*, 22(3), 330– 343.
- Ilyas, G.B., & Mustafa. H. (2022). Price, Promotion, and Supporting Facilities on Customer Satisfaction. *Golden Ratio of Marketing and Applied Psychology of Business*, Vol.2, Issue. 1 (2022) <https://doi.org/10.52970/grmapb.v2i1.65>
- Izogo, E. E., & Ogba, I-E. (2015). Service quality, customer satisfaction and loyalty in automobile repair services sector. *International Journal of Quality & Reliability Management*, 32(3), 250 –269.
- Jumhari, M., Sulaeman, E., & Kusnanto, D. (2022). Pengaruh Harga Dan Kualitas Pelayanan Terhadap Kepuasan Konsumen Dimasa Pandemi Covid-19 Pada Bengkel Honda NSS Ahass 1838 Karawang. *Jurnal Ekonomi dan Bisnis*. 9(1), 321-328.
- Kasiri, L. A., Cheng, K. T. G., Sambasivan, M., & Sidin, S. Md. (2017). Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services* 35 (2017) 91–97
- Khadafi, M., Hanny., Anugrah, V. (2022). Analysis of the influence facilities, Quality of Service and Trust on loyalti customer in Star Hotel in Batam City. *Jurnal Ekonomi LLDikti Wilayah 1 (JUKET)*. Vol. 2 Issue 1, 2022 DOI : 12.45677/juket.v2i1.216
- Kim, J., Schmocker, Jan-Dirk., Yu, J.W and Choi, J.Y. (2018). Service quality evaluation for urban rail transfer facilities with Rasch analysis. *Travel Behaviour and Society*. 13, 26-35.
- Kotler, P. (2003). *Marketing Management*. Englewood Cliffs, NJ: Prentice Hall.
- Lam, S.Y., Shankar, V., Erramilli, K.M. and Murthy, B. (2004), “Customer value, satisfaction, loyalty and switching costs: an illustration from a business-to-business service context”, *The Journal of Academy of Marketing Science*, Vol. 32 No. 3, pp. 293-311.
- Lee, M., Kang, M., & Kang, J. (2018). Cultural influences on B2B service quality-satisfaction-loyalty, *The Service Industries Journal*, DOI: 10.1080/02642069.2018.1495710.
- Lepkova, N., & Uselis, R. (2013). Development of a quality criteria system for facilities

- management services in Lithuania. *Procedia Engineering*, 57, 697–706. <https://doi.org/10.1016/j.proeng.2013.04.088>
- Maharsi, A.R., Njotoprajitno, R.S., Hadianto, B., & Wiraatmaja, J. (2021). The Effect of Service Quality and Customer Satisfaction on Purchasing Intention: A Case Study in Indonesia. *Journal of Asian Finance, Economics and Business*. 8(4), 475-482.
- Marjani, L., & Sutisna, M. (2019). Loyalitas Pelanggan Pada Business-To-Business: Pengaruh Kualitas Pelayanan. *Jurnal Riset Bisnis dan Investasi* Vol. 5, No. 1, April 2019. Pp.10-20.
- Maulidiah, E. P., Survival & Budiantono, B. (2023). Pengaruh Fasilitas Terhadap Kualitas Pelayanan Serta Implikasinya Pada Kepuasan Pelanggan. *Jurnal Economina*. Vol. 2, No. 3. Hal. 728-737.
- Mulyasari, L.F., Widodo, H.P., & Wasesa, T. (2022). Pengaruh Fasilitas Dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan (Studi Kasus Pada Salon Anne Beauty House Citraland, Kec. Benowo, Surabaya). *Jurnal Mahasiswa Manajemen dan Akuntansi (JUMMA)*. 1(1), 75-81.
- Nejad, L. R., Firoozbakht, Z., Taghipoor, A. (2014). Service Quality, Relationship Quality and Customer Loyalty (Case Study: Banking Industry in Iran). *Open Journal of Social Sciences*, 2, 262-268. <http://dx.doi.org/10.4236/jss.2014.24028>
- Nezami, M., Worm, S., & Palmatier, R. W. (2018). Disentangling the effect of services on B2B firm value: Trade-offs of sales, profits, and earnings volatility. *In International Journal of Research in Marketing* (Vol. 35, Issue 2, pp. 205–223). <https://doi.org/10.1016/j.ijresmar.2017.12.002>
- Nguyen, T.L.H., & Nagase, K. (2019). The Influence Of Total Quality Management On Customer Satisfaction. *International Journal Of Healthcare Management*. 12(4), 277-285.
- Nobar, H. B. K. and Rostamzadeh, R. (2018) ‘The Impact of Customer Satisfaction, Customer Experience and Customer Loyalty on Brand Power : Empirical Evidence From Hotel Industry’, *Journal of Economics and Management*, 19(2), p. 14.
- Nurchahyo, R., Fitriyani, A., & Hudda, I. N. (2017). The Influence of Facility and Service Quality towards Customer Satisfaction and Its Impact on Customer Loyalty in Borobudur Hotel in Jakarta. *Binus Business Review*, 8(1), 23-29. <http://dx.doi.org/10.21512/bbr.v8i1.1790>
- Nuvriasari, A. (2012). Mengelola Hubungan Dengan Pelanggan Pada Praktik Pemasaran Business To Business (B2B) Dengan Orientasi Penciptaan Loyalitas. *SINERGI* Vol. 13 No. 1, Juni 2012: 15 – 28.
- Nyadzayo, M. W., Casidy, R., & Thaichon, P. (2020). B2B purchase engagement: Examining the key drivers and outcomes in professional services. *Industrial Marketing Management*, 85 (October), 197–208. <https://doi.org/10.1016/j.indmarman.2019.11.007>
- Oetama, S., & Sari, D.H. 2017. Pengaruh Fasilitas Dan Kualitas Pelayanan Terhadap Kepuasan Nasabah Pada PT. Bank Mandiri (Persero) Tbk Di Sampit. (2001), 59–65.
- Olorunniwo, F., & Hsu, M. K. (2006). A typology analysis of service quality, customer satisfaction and behavioral intentions in mass services. *Managing Service Quality*, 16(2), 106 –123.
- Ozdemir, G., & Culha, O. (2009). Satisfaction and Loyalty of Festival Visitors. *Anatolia: An International Journal of Tourism and Hospitality Research* Volume 20, Number 2, pp. 359-373
- Pantilu, D., Koleangan, R. A. M., & Roring, F. (2018). Pengaruh Kualitas Pelayanan, Harga

- Dan Fasilitas Terhadap Kepuasan Pelanggan Pada Warunk Bendito Kawasan Megamas Manado. *Jurnal EMBA*, 6(4), 3723–3732. <https://doi.org/10.35794/emba.v6i4.21898>
- Pamungkas, B.A., Pawenang, S., Damayanti.,R. (2021). Kualitas Pelayanan, Harga, Dan Fasilitas Terhadap Kepuasan Pelanggan (Studi Kasus : Ahas Nusantara Sakti Nguter). *Edunomika*. 5(2), 1003-1011.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70(3), 201 –230.
- Potale, R., & Uhing, Y. (2015). Pengaruh Kompensasi Dan Stres Kerja Terhadap Kepuasan Kerja Karyawan Pada PT. Bank Sulut Cabang Utama Manado. *Jurnal EMBA* Vol.3 No.1, 2015, Hal.63-73.
- Preacher, K.J., Rucker D.D., Hayes A.F. 2007. Addressing Moderated mediation Hypotheses: Theory, Methods, & Prescription. *Multivariate Behavioral Research*, 42 (1), 185 - 227.
- Rahman, F., Chowdhury, T.D., Haque, T., Rahman, R. and Islam, A. (2017) Identifying Existing Bus Service Condition and Analyzing Customer Satisfaction of Bus Service in Dhaka City. *Journal of Transportation Technologies*, 7, 107-122. <https://doi.org/10.4236/jtts.2017.72008>
- Rauyruen, P., & Miller, K.E. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research* 60 (2007) 21–31. doi:10.1016/j.jbusres.2005.11.006
- Ringle, C.M., Sarstedt, M., Mitchell, R and Gudergan, S.P. 2018. Partial least squares structural equation modeling in HRM research. *The International Journal Of Human Resource Management*. 2018. pp: 1-27. <https://doi.org/10.1080/09585192.2017.1416655>.
- Riseetyawan, A., Sularto., Sari, A. E., & Badrunsyah. (2022). The Effect Of Facilities And Service Quality On Customer Satisfaction Of Gas Station In Setu Bekasi, West Java. *Journal Of Management, Accounting, General Finance And International Economic Issues (Marginal)*, 1(2), pp. 27-36.
- Sakti, B. J., & Mahfudz. (2018). Analisis Pengaruh Kualitas Layana, Ketepatan Waktu Pengiriman dan Fasilitas terhadap Kepuasan Pelanggan (Studi pada J & T Express Kota Semarang). *Diponegoro Journal of Management*, 7(4), 1-8.
- Setyawan, F.E.B., Supriyanto, S., Ernawaty, E., and Lestari, R. (2022) Organizational commitment, patient satisfaction and loyalty in the first-level health facilities. *International Journal of Public Health Science (IJPHS)*. 11(3), 1046-1057.
- Sianipar, M.R., Pakpahan, E., and Manalu, P. (2022). The Role of Quality of Academic Information Systems and Facilities on Student Loyalty. *Jurnal Manajemen Bisnis*. 13(2), 185-199.
- Sofyan, I. L., Pradhanawati, A., & Nugraha, H. S. (2013). Pengaruh Fasilitas dan Kualitas Pelayanan Terhadap Loyalitas, Melalui Kepuasan Konsumen Sebagai Variabel Intervening pada Star Clean Car Wash Semarang. *Jurnal Ilmu Administrasi Bisnis*, 2(2). Retrieved from <https://ejournal3.undip.ac.id/index.php/jiab/article/view/2505>
- Spreng, R. A., Shi, L. H., & Page, T. F. (2009). Service quality and satisfaction in business-to-business services. *Journal of Business & Industrial Marketing* 24/8 (2009) 537–548.
- Srijani, N., & Hidayat, A. S. (2017). Pengaruh fasilitas terhadap kepuasan pelanggan di aston madiun hotel & conference center. Wiga: *Jurnal Penelitian Ilmu Ekonomi*, 7(1), 31–38.

- Wibisono, H.B., & Achsa, A. (2020). Analisis Pengaruh Kualitas Pelayanan Dan Fasilitas Terhadap Kepuasan Konsumen Dalam Melakukan Servis Kendaraan. *Journal IMAGE*. 9(2), 92-100.
- William., & Purba, T. (2020). Kualitas Pelayanan Dan Fasilitas Terhadap Kepuasan Pelanggan Pada Bengkel Mazda Di Kota Batam. *Jurnal EMBA*. 8(1), 1987-1996.
- Youssef, Y. M. A., Johnston, W. J., AbdelHamid, T. A., Dakrory, M. I., & Seddick, M. G. S. (2018). A customer engagement framework for a B2B context. *Journal of Business and Industrial Marketing*, 33(1), 145–152. <https://doi.org/10.1108/JBIM-11-20>.
- Zulpiani, A., & Ridho, Syarifur. (2016). Pengaruh Kebijakan Harga, Pelayanan Dan Fasilitas Pendukung Terhadap Kepuasan Pelanggan Pada PT. Sumatera Berlian Motor. *Jurnal ECOBISMA*. 3(2), 10-19.
- Zulu, S., & Chileshe, N. (2010) Service Quality of Building Maintenance Contractors in Zambia: A Pilot Study, *International Journal of Construction Management*, 10:3, 63-81, DOI: 10.1080/15623599.2010.10773150