

THE INFLUENCE OF SERVICE QUALITY, FACILITIES AND INFORMATION TECHNOLOGY ON CONSUMER SATISFACTION IN RADIOLOGY HAJI HOSPITAL SURABAYA

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Abstract

This study aims to analyze the effect of service quality, facilities, and information technology on consumer satisfaction at the Diagnostic and Interventional Radiology Installation of the Haji Regional General Hospital (RSUD) Surabaya, East Java. The method used in this study was non-probability sampling, involving 77 respondents who were consumers who had undergone examinations at the radiology installation. Data analysis was carried out using Smart PLS 4. The results of the study showed that partially, service quality (X1) had a significant effect on consumer satisfaction. Conversely, facilities (X2) and information technology (X3) did not show a significant effect on consumer satisfaction. However, simultaneously, the three variables—service quality, facilities, and information technology—had a significant effect on consumer satisfaction (Y). This finding emphasizes the importance of developing optimal facilities and implementing information technology to improve consumer satisfaction in radiology services.

Keywords: Service Quality, Facilities, Information Technology, Consumer Satisfaction, Radiology.

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh kualitas pelayanan, fasilitas, dan teknologi informasi terhadap kepuasan konsumen di Instalasi Radiologi Diagnostik dan Intervensi Rumah Sakit Umum Daerah (RSUD) Haji Surabaya, Jawa Timur. Metode yang digunakan dalam penelitian ini adalah non-probability sampling, dengan melibatkan 77 responden yang merupakan konsumen yang telah melakukan pemeriksaan di instalasi radiologi. Analisis data dilakukan menggunakan Smart PLS 4. Hasil penelitian menunjukkan bahwa secara parsial, kualitas pelayanan (X1) memiliki pengaruh signifikan terhadap kepuasan konsumen. Sebaliknya, fasilitas (X2) dan teknologi informasi (X3) tidak menunjukkan pengaruh signifikan terhadap kepuasan konsumen. Namun, secara simultan, ketiga variabel—kualitas pelayanan, fasilitas, dan teknologi informasi—berpengaruh signifikan terhadap kepuasan konsumen (Y). Temuan ini menekankan pentingnya pengembangan fasilitas dan penerapan teknologi informasi yang optimal untuk meningkatkan kepuasan konsumen di layanan radiologi.

Kata Kunci: Kualitas Pelayanan, Fasilitas, Teknologi Informasi, Kepuasan Konsumen, Radiologi.



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INTRODUCTION

Hospitals as health service providers have an important role in maintaining and improving the quality of life of the community. One of the crucial services provided by hospitals is radiology services, both for diagnostic purposes and medical intervention. Radiology installations have a central role in supporting the process of diagnosing and treating various diseases through advanced medical imaging technology, such as x-rays, ct-scans, mri. and medical interventions such as Angiography, ESWL.

The underlying phenomenon of this research is the many new hospitals that have sprung up around the Haji Hospital, which are the means of providing health services. This raises awareness of the importance of improving the quality of services and facilities that must be provided. In addition, the use of information technology quickly and measurably is a key factor in increasing the level of consumer satisfaction, so that it can contribute to increasing the number of visits to the Haji Hospital, especially in the field of diagnosis and intervention in the Radiology Installation. According to Philip, consumer satisfaction is a person's feeling of pleasure or disappointment that arises after comparing the performance (results) of a product they have in mind with the expected performance.¹

Customer satisfaction In the health service sector, including radiology, it is not only related to accurate diagnostic results, but also includes aspects of comfort, speed of service, skills of medical personnel, and ease of access to information. According to Pohan, the level of patient feelings that arise as a result of the performance of the health services they receive after the patient compares it with what they expected.²

The existence of a Research Gap can be seen from the quality of good service which will have an impact on consumer satisfaction and will create word of mouth. This description is supported by several researchers who relate service quality to consumer satisfaction and word of mouth to the influence of service quality on word of mouth.³ The results showed that service satisfaction was positively and significantly related to word of mouth, but this opinion was refuted by the Indriani Journal.⁴

Research Variables: X.1 Service Quality X.2: Technology Utilization Y: It is also produced that customer satisfaction has a positive and significant effect on customer loyalty. Furthermore, from the final research results, it can also be concluded that there is a significant influence on the

¹ K. Philip, *Marketing Management* (New Jersey: Pearson Education, 2009).

² Pohan, *Jaminan Mutu Pelayanan Kesehatan* (Jakarta: Penerbit Buku Kedokteran EGC, 2015).

³ I. Fibriyady, "Pengaruh Kualitas Pelayanan Terhadap Word of Mouth," *Jurnal Riset Labora* 5, no. 1 (2016).

⁴ Anak Agung Sagung Istri Indriani dan I. Nyoman Nurcaya, "Pengaruh Kualitas Pelayanan terhadap Word of Mouth yang Dimediasi oleh Kepercayaan Pelanggan pada PT. Auto Bagus Rent a Car Denpasar," *E-Jurnal Manajemen* 4, no. 5 (12 Mei 2015).

causal relationship between service quality and the utilization of information technology on loyalty through customer satisfaction. The novelty in this study, in addition to service quality, also obtained a positive influence on the utilization of information technology on customer satisfaction and loyalty. The utilization of information technology in this study was refuted in Budiarno's research.⁵

The consumer satisfaction variable is used as a dependent variable, referring to previous research. The influence of service quality and facilities on patient satisfaction at the Southwest Aceh District General Hospital.⁶ The results of the study based on partial tests show that the variable of service quality has an effect on patient satisfaction at the Teuku Peukan General Hospital, Southwest Aceh Regency, and facilities have an effect on public satisfaction at the Teuku Peukan General Hospital, Southwest Aceh Regency.

Quality of service is a business that focuses on fulfilling needs, requirements, and timeliness to meet consumer expectations,⁷ or in other words, service quality is an action or deed of a person or organization aimed at providing satisfaction to consumers or employees. This satisfaction can certainly be created if customer expectations are met, after comparing the performance (results) of the product in mind to the expected performance. According to Keller, service quality is the completeness of the features of a product or service that has the ability to provide satisfaction to a need. According to Lewis & Booms, The facilities are physical resources that must be present before a service is offered to consumers.⁸ Facilities are an important element in service businesses, especially those that are closely related to what consumers feel directly.⁹ Health care facilities can be physical or non-physical objects. Physical facilities include advanced examination systems, such as Cathlab (Angiography machine, MRI 3 Tesla, CT Scan 128, and ESWL), panoramic examination, and mobile X-ray. In addition, there is the provision of a comfortable waiting room, equipped with air conditioning, television, and ergonomic seating for patient comfort. The use of information technology in health services continues to increase. This technology allows for more efficient storage and management of patient data, and facilitates faster communication between patients and medical personnel. In the context of radiology installations, the application of information technology not only helps manage medical imaging data, but also supports the registration process, retrieval of results, and communication between patients and health workers. Information technology includes systems and methods used in various stages, from collecting,

⁵ B.N. Budiarno, "Pengaruh Kualitas Layanan dan Kualitas Produk Terhadap Kepuasan Pelanggan dalam Membentuk Loyalitas Pelanggan (Studi Kasus pada Pelanggan Indomaret Point Colombo Yogyakarta)," *Equilibrium Jurnal Penelitian Pendidikan dan Ekonomi* 19, no. 2 (Juli 2022).

⁶ J. Harfika, "Pengaruh Kualitas Pelayanan dan Fasilitas Terhadap Kepuasan Pasien di RSUD Teuku Peukan Kabupaten Aceh Barat Daya," *Balance Economic, Business Management dan Accounting Journal* 14, no. 1 (2017).

⁷ Kasmir, *Customer Service Excellence: Teori dan Praktik* (Jakarta: Raja Grafindo Persada, 2017).

⁸ H. Tjiptono, *Pemasaran Jasa: Prinsip Penerapan Riset*, 4th ed. (Surabaya: Erlangga, 2020).

⁹ Tjiptono, *Pemasaran: Prinsip, Penerapan dan Riset*, 3rd ed. (Jakarta: Erlangga, 2014).

sending, processing, interpreting, storing, organizing, to using data meaningfully..¹⁰In the Radiology installation, the technologies used include:PACS (Picture Archiving And Communication System) A system for storing, sending images and digital reading reports, thus accelerating information to consumers and clinicians, speeding up registration via application, Mbois (Mobile Information System), WOW (Women's examination services by female officers).

LITERATURE REVIEW

Previous research that will be used as a reference here is research that has been conducted by several previous researchers that are relevant and have been published in national journals as a basis for research with a discussion of the problem of the relationship between service quality, facilities and information technology to consumer satisfaction. There are twelve previous research journals that are used as references for the research:

1. The Influence of Product Quality and Service Quality on Customer Satisfaction.¹¹
2. The Influence of Product Quality and Service Quality on Consumer Satisfaction of PT. Radekatama Piranti Nusa.¹²
3. The Influence of Service Quality on Consumer Satisfaction.¹³
4. The Influence of Product Quality, Service Quality, and Location on Consumer Satisfaction.¹⁴
5. The Influence of Service Quality, Information Technology Infrastructure, and Availability of Medical Personnel on Patient Satisfaction in Private Hospitals.¹⁵
6. The Influence of Service Quality and Utilization of Information Technology on Consumer Satisfaction at Bintang Mulia Hotel Jember.¹⁶
7. The Influence of Service Quality, Utilization of Information Technology and Customer Value on Customer Satisfaction and Loyalty of Online Transportation Services.¹⁷

¹⁰ W. Bambang, *Pengantar Teknologi Informasi* (Yogyakarta: Andy Yogyakarta, 2008).

¹¹ M. Ibrahim dan S. M. Thawil, "Pengaruh Kualitas Produk dan Kualitas Pelayanan terhadap Kepuasan Pelanggan," *Jurnal Riset Manajemen dan Bisnis (JRMB)* 4, no. 1 (2019).

¹² Rosa Lesmana, "Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Kepuasan Konsumen PT. Radekatama Piranti Nusa," *Jurnal Pemasaran Kompetitif* 2, no. 2 (23 Maret 2019).

¹³ A.A. Zain, "Pengaruh Kualitas Pelayanan Terhadap Kepuasan Konsumen," *Al-Maqashid: Journal of Economics and Islamic Business* 2, no. 2 (2022).

¹⁴ A. Izzuddin dan M. Muhsin, "Pengaruh Kualitas Produk, Kualitas Layanan, dan Lokasi Terhadap Kepuasan Konsumen," *Jurnal Manajemen dan Bisnis Indonesia* 6, no. 1 (2020).

¹⁵ Tania Salendra dkk., "Pengaruh Kualitas Pelayanan, Infrastruktur Teknologi Informasi, Dan Ketersediaan Tenaga Medis Terhadap Kepuasan Pasien Di Rumah Sakit Swasta," *Jurnal Sehat Indonesia (JUSINDO)* 6, no. 02 (6 Agustus 2024).

¹⁶ Helena, "Pengaruh Kualitas Pelayanan dan Pemanfaatan Teknologi Informasi terhadap Kepuasan Konsumen pada Hotel Bintang Mulia Jember" (Thesis, Universitas Jember, 2020).

¹⁷ Santo Igno Gelu, John EHJ FoEh, dan Simon Sia Niha, "Pengaruh Kualitas Layanan, Pemanfaatan Teknologi Informasi Dan Customer Value Terhadap Kepuasan Dan Loyalitas Pelanggan Jasa Transportasi

8. The Influence of Service Quality and Facilities on Customer Satisfaction at Travellers Hotel Jakarta.¹⁸
9. The Influence of Service Quality and Facilities on Customer Satisfaction at Bank Syariah Indonesia Sudirman 2 Ngawi Branch Office.¹⁹
10. The Influence of Service Quality and Facilities on Patient Satisfaction at the Southwest Aceh District Hospital.
11. The influence of product quality, service quality and trust on customer loyalty through satisfaction as an intervening variable.²⁰
12. The Influence of Location, Promotion, and Facilities on Consumer Satisfaction (Study on Visitors to the Tangkahan Ecotourism Area, Langkat Regency).²¹

Gap Research from this study, it can be seen that good service quality will have an impact on consumer satisfaction and will realize word of mouth. This description is supported by several researchers who relate service quality to consumer satisfaction and word of mouth to the influence of service quality on word of mouth.²² The results showed that service satisfaction was positively and significantly related to word of mouth, but this opinion was refuted by the Indriani Journal.²³

Quality of Service

It is a business that focuses on fulfilling the requirements and timeliness to meet consumer expectations according to Kasmir.²⁴ Service quality is the actions or deeds of a person or organization aimed at providing satisfaction to consumers or customers, namely:

1. Tangibility: Physical appearance, equipment, personnel, and communication materials.
2. Reliability: The ability to provide promised services accurately, on time and in a reliable manner.
3. Responsiveness: Willingness to help customers by providing good and fast service.

Online (Literature Review Manajemen Sumber Daya Manusia),” *Jurnal Ilmu Manajemen Terapan* 4, no. 1 (22 September 2022).

¹⁸ Mutiara Nur dan Dadan Ahmad Fadili, “Pengaruh Kualitas Pelayanan Dan Fasilitas Terhadap Kepuasan Pelanggan Travellers Hotel Jakarta,” *Jurnal Pemasaran Kompetitif* 5, no. 1 (1 Oktober 2021).

¹⁹ A.M. Sholikhah, “Pengaruh Kualitas Pelayanan dan Fasilitas Terhadap Kepuasan Konsumen di Bank Syariah Cabang Sudirman 2 Ngawi” (E-Thesis, IAIN Ponorogo, 2021).

²⁰ A. A. “Pengaruh Kualitas Produk Astuti, “Kualitas Pelayanan dan Kepercayaan Terhadap Loyalitas Nasabah Melalui Kepuasan sebagai Variabel Intervening,” *Jurnal Manajemen dan Bisnis* 7, no. 1 (2020).

²¹ Nurafrina Siregar, Mifta Elfikri, dan Rizka Paramitha Daulay, “Pengaruh Lokasi, Promosi, Dan Fasilitas Terhadap Kepuasan Konsumen (Studi Pada Pengunjung Kawasan Ekowisata Tangkahan, Kabupaten Langkat),” *SOSEK : Jurnal Sosial Dan Ekonomi* 3, no. 1 (2 Juni 2022).

²² Fibriyady, “Pengaruh Kualitas Pelayanan Terhadap Word of Mouth.”

²³ Indriani dan Nurcaya, “Pengaruh Kualitas Pelayanan terhadap Word of Mouth yang Dimediasi oleh Kepercayaan Pelanggan pada PT. Auto Bagus Rent a Car Denpasar.”

²⁴ Kasmir, *Customer Service Excellence: Teori dan Praktik*.

4. Empathy: Trying to know and understand consumer needs individually.
5. Assurance: Knowledge and friendliness of personnel and the ability of personnel to be trusted and believed.

Facility

According to Kotler, facilities are anything that is physical equipment and provided by the service provider to support consumer comfort.²⁵

Information Technology

According to Loudon, a combination of computer technology consisting of hardware and software to process and store communication technology, information to carry out information distribution.²⁶

Customer Satisfaction

According to Kotler, consumer satisfaction is a person's feelings of pleasure and disappointment that arise after comparing their perception or impression of the performance (results) of a product and their expectations.²⁷ Therefore, consumer satisfaction is a high benchmark in various marketing needs and company goals in general. Sugiyono defines a framework of thought as a conceptual model of how theory relates to various factors that have been defined as important problems.²⁸ Meanwhile, according to McGaghie in Rina, thinking is the process of making arrangements in presenting questions in research and encouraging investigations into problems that present problems and contexts.²⁹ . The conceptual framework of research is the relationship between one concept and another concept of the problem to be studied. The conceptual framework is used as a guideline for researchers in compiling systematic research and systematically explaining the theories used in the research. Hypothesis According to Sugiyono is a temporary response to the formulation of research problems and is based on empirical facts obtained through data collection.³⁰

²⁵ P. Kotler, *Marketing Management*, 12th ed. (Upper Saddle River, NJ: Prentice Hall, 2005).

²⁶ KC Loudon, *Management Information Systems: Managing the Digital Firm*, 7th ed. (New Jersey: Pearson Education, 2004).

²⁷ Philip Kotler, *Marketing Management*, 14th ed. (New Jersey: Pearson Education, 2013).

²⁸ Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Bandung: Alfabeta, 2017).

²⁹ H. Rina, *Pengertian Kerangka Berfikir Menurut Para Ahli* (penelitianilmiah.com (Kampus Ceria), 2020).

³⁰ Sugiyono, *Metode penelitian kuantitatif, kualitatif dan R&D*, 2nd ed. (Bandung: Alfabeta, 2019).

RESEARCH METHODS

The quantitative approach, according to Sugiyono, is defined as a research approach used to study a particular population or sample as a research object. In this approach, data is collected using research instruments, then analyzed quantitatively to test previously established hypotheses.³¹ According to Sugiyono, a sample is part of the number and characteristics possessed by a population.³² If the sampling is truly representative of the population, then the conclusions from the sample can be applied to the entire population. In this study, the sampling method was used.

RESULTS AND DISCUSSION

Data Analysis Based on Respondent Characteristics Based on Gender

Most of the respondents were female, which was 48 people (62.34%). This was due to the need for specific health checks for women, such as mammography, gynecological ultrasound, hysterosalpingography (HSG), and examinations related to conditions that are more often experienced by women, such as endometriosis and osteoporosis. Meanwhile, there were 29 male respondents (37.66%).

Respondent Characteristics Based on Age

Most respondents were aged 21-30 years, a total of 27 people (35.06%), at that age the transition from adolescence to adulthood where hormonal factors, especially those related to fertility and reproductive problems, are of particular concern for women, for men especially musculoskeletal problems due to high activity in the world of work, is also carried out for early disease screening.

Respondent Characteristics Based on Education

It is known that the majority of respondents have a diploma education, amounting to 33 people (43.59%), the location of the hospital is in an educational environment where there is a PENT (integrated economic and financial development), polytechnic of health, and offices such as the information service, Telkom, KONI, and Depag, which influences respondents from the level of education.

Respondents' Answer Description

The results showed that 88.3% of respondents strongly agreed or agreed, indicating that the strategies implemented have succeeded in meeting consumer expectations, especially in terms of

³¹ Sugiyono.

³² Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Bandung: Alfabeta, 2015).

service quality, facilities, and technology. This success needs to be maintained with continuous innovation. As many as 7.12% of respondents gave neutral answers, possibly due to a lack of information or understanding of the statements in the questionnaire, so that effective communication improvements are needed to encourage positive perceptions. Respondents who disagreed were very low, only 0.44%, but this still indicates that there are specific areas that need improvement. Overall, positive perceptions dominate, but improvement efforts are still needed to address the neutral and disagree groups, in order to reduce dissatisfaction, even in small numbers.

1. Validity Test

The questionnaire used to obtain quality data was tested for validity. A question can be said to be valid if it has met the convergent validity criteria with a cross loading value greater than 0.7. But according to Chin³³ Stating that cross loading of 0.5 and 0.6 can still be maintained.

Convergent Validity Table (AVE)

	Average Variance Extracted (AVE)	Information
Customer satisfaction	0.7	Valid
Quality of service	0.6	Valid
facility	0.67	Valid
Information Technology	0.7	Valid

Administered on November 27, 2024

From the table above, it shows that the AVE value of each variable is stated as valid because each variable has a value above the predetermined criteria, namely > 0.5 . These results illustrate that all variables with the question items that have been presented are stated as valid in their entirety when viewed from the convergent validity value based on the AVE value.

2. Reliability Test

In the reliability test, it can be seen from the Cronbach Alpha and composite reliability. The construct criteria are stated as reliable according to Hair's opinion, if the Cronbach alpha and composite reliability values are >0.6 , the following table shows the results of the reliability test.³⁴

³³ Chin, Loading and Cross-Loading Value of the Final Research Model (Mahwah: Lawrence Erlbaum Associates, 1998).

³⁴ JF Hair et al., Multivariate Data Analysis, 6th ed. (Upper Saddle River, NJ: Pearson Prentice Hall, 2006).

Instrument reliability test table

Variables	Cronch's Alpha	Computer reliability (ro a)	Composite reliability (rho-c)	Average Variance in Extraction (AVE)
X1	0.778	0.796	0.855	0.997
X2	0.748	0.757	0.857	0.667
X3	0.838	0.845	0.892	0.674
Y	0.895	0.907	0.923	0.709

Based on the reliability test in the table above, it shows that all constructs are stated to be reliable because they have a Cronbach alpha value and composite reliability above 0.6, with the criteria that have been set. If the value is less than 0.6 then it is considered weak, if the value is in the range of 0.7 it can be accepted and if the value is above 0.80 then it can be said to be good and the Cronbach alpha value is expected to be >0 .

3. Hypothesis Test Results

R square (R^2) test

According to Ghozali, R^2 is a measure that shows the proportion of the diversity of the dependent variable that can be explained by the independent variable. The R^2 value ranges from 0 to 1. The closer to 1, the better the model is in explaining the dependent variable. In addition, R^2 can also describe simultaneous relationships because it calculates the relationship of the independent variable to the dependent variable.³⁵

In other words, the R^2 result shows how much the X (independent) variable can explain the variation in the Y (dependent) variable.

R SQUARE OVERVIEW		
Variables	R Square	R.Square Adjusted
Y	0.656	0.642

The value of $R^2 = 0.656$ and R^2 adjusted = 0.642 were obtained. R^2 shows where 65.6% of the variation in the dependent variable (consumer satisfaction) can be explained by the independent variables (service quality, facilities, and information technology), the remaining 34.4% is influenced by other factors not included in the regression. While R^2 adjusted = 0.642 means that 64.2% of the variation in the variable is explained by the

³⁵ Ghozali, *Aplikasi Analisis Multivariat dengan Program IBM SPSS 23* (Semarang: Badan Penerbit Universitas Diponegoro, 2016).

independent variable and R^2 with a result of 0.642 shows that 64.2% of the dependent variable is explained by the independent variable simultaneously.

F Square Test

F square test According to Hair et al., the F square test helps determine whether a particular independent variable has a significant effect on the dependent variable.³⁶

F square test table

	Quality of service	Facility	Information Technology	Customer satisfaction
Quality of service				0.058
Facility				0.131
Information Technology				0.132
Customer satisfaction				

Multiple linear regression test

The purpose of multiple linear regression testing is to analyze independent variables simultaneously on the influence of dependent variables. This analysis is needed to determine the extent of the influence of independent variables on dependent variables.³⁷

Multiple linear regression data table

SUMMARY OUTPUT					
<i>Regression Statistics</i>					
Multiple R	0.326382				
R Square	0.106525				
Adjusted R Square	0.069807				
Standard Error	19.23747				
Observations	77				
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	3220,992	1073,664	2,901165	0.040603
Residual	73	27015.86	370,0803		

³⁶ JF Hair, A Primer on Least Squares Structural Equation Modeling (PLS-SEM) (Thousand Oaks: Sage Publications, 2017).

³⁷ Ghozali, *Aplikasi Analisis Multivariat dengan Program IBM SPSS 23*.

Total		30236.8						
	76	6						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	48.73098	30.27535	1.609593	0.111803	-11,6077	109,0697	-11,6077	109,0697
X1	0.214735	0.083473	2,572506	0.012129	0.048373	0.381096	0.048373	0.381096
X2	-1.96373	2,148701	-0.91391	0.363771	-6,24608	2.318628	-6,24608	2.318628
X3	-0.93292	1,745915	-0.53435	0.594725	-4.41253	2.546679	-4.41253	2.546679

Source processed on November 28, 2024

From the results above, using analysis with Excel, the analysis was obtained

1. X.1: t count: 2.572 and t table 1.993 and P value 0.012 then: if t count 2572 and t table = 1993 means the results are significant so that the null hypothesis (Ho) is rejected and P value $0.012 < Cx 0.05$ this also supports that the results of Ho are rejected. The conclusion is that variable X1 has a significant positive effect on variable Y.
 2. X.2 : t count : 0.9139 and t table : 1993 and P value 0.363, the conclusion is, Variable
 3. does not have a significant influence on the dependent variable Y,
 4. X.3: t count 0.5343 and table: 1993 and P value 0.594 because t count is smaller
 5. From the t table and P value greater than <0.05 , X23 has no effect.
significant on the dependent variable Y
- X1: P value: 0.0121 ($P < 0.05$) Variable X1 has a statistically significant influence on the dependent variable (Y), meaning that X1 is relevant and statistically influences Y.
 - X2: P-Value = 0.3637 ($P > 0.5$) Variable X2 is not significant on the dependent variable (Y), meaning that X2 does not have a strong enough influence to explain Y.
 - X3: P value = 0.5947 ($P > 0.05$) Variable X3 is also not statistically significant to the dependent variable (Y), meaning that statistically X3 does not contribute to influencing Y.
 - Interpretation of Simultaneous Relationships Based on R Square and F test

R square ($R^2 = 0.106525$) R^2 shows that 10.65% of the variability of the dependent variable (Y) can be explained by three independent variables (X1,X2,X3) simultaneously.

A low R^2 value indicates that this model is not very good at explaining both the independent and dependent variables.

Adjusted R square ($R^{2adj} = 0.069807$) R^{2adj} is a version of R^2 that has been adjusted for the number of variables, a lower value (6.98) indicates that the addition of variables X2 and X3 to the model does not actually make a significant contribution to explaining the variability of Y.

F-Test and Simultaneous Significance obtained an F-test value of 2.9011 with a P-Value of 0.040603 ($P < 0.05$). Because $P < 0.05$, it can be concluded that the three independent variables simultaneously have a significant influence on variable Y. Although variables X2 and X3 are not significant individually, in simultaneous analysis, both still provide a collective contribution in explaining variable Y.

Based on the analysis of individual relationships, only variable X1 is statistically significant to variable Y, while variables X2 and X3 do not have a significant effect individually. However, in a simultaneous relationship, independent variables X1, X2, and X3 together have a significant effect on variable Y, as shown by the F-test results. However, the R^2 value indicates that the model is less able to explain the variation in variable Y as a whole.

Discussion

Service quality has a positive effect on customer satisfaction, but this is different from the results of research conducted by Ibrahim entitled "The Effect of Product Quality and Service Quality on Customer Satisfaction" where the results of service quality have not been able to prove a relationship with customer satisfaction.³⁸ After conducting the determinant coefficient test, a P-Value of 0.015 (< 0.05) was found from variable X1 (service quality) to Y (customer satisfaction), so that it has a significant relationship and from the multiple linear regression test using excel analysis, a P-value of 0.0121 was also found below the standard P-Value figure and from X.1: t count: 2,572 and t table 1,993 and P value 0.012 then: if t count = 2572 and t table = 1993 means the results are significant so that the null hypothesis (H_0) is rejected and the P value of 0.012 $< Cx$ 0.05 also supports that the results of H_0 are rejected. The conclusion is that variable X1 has a significant positive effect on variable Y.

³⁸ Ibrahim dan Thawil, "Pengaruh Kualitas Produk dan Kualitas Pelayanan terhadap Kepuasan Pelanggan."

These results are the same as previous research by Zain.³⁹ with the title "The Influence of Service Quality on Consumer Satisfaction." In the determination coefficient test, a P-Value of 0.004 was obtained, so the relationship between facilities and consumer satisfaction is very significant. where the facility variable (X2) greatly influences the consumer satisfaction variable (Y) but seen from the calculated t: 0.9139 and t table: 1993 and P value 0.363, the conclusion is that the X2 variable does not have a significant influence on the dependent variable Y. According to the researcher, there are similarities in the results of previous studies by Nufrina Siregar et al.,⁴⁰ in his research "The Influence of Location, Promotion, and Facilities on Consumer Satisfaction (Study on Visitors to the Tangkahan Ecotourism Area, Langkat Regency," the results of the study showed that location did not have a positive and significant influence on consumer satisfaction. Promotion had a negative but significant influence on consumer satisfaction, while facilities did not show a positive or significant influence on consumer satisfaction. Information technology, based on the determination coefficient test with a P-Value of 0.009 ($P < 0.005$), had a significant relationship with the Y variable, indicating that information technology contributed to consumer satisfaction. However, the results of the t-test showed a calculated t value of 0.5343, smaller than the t table (1.993), and a P-Value of 0.594, which was greater than 0.05. This indicates that the information technology variable (X3) does not have a significant influence on the dependent variable (Y). In conclusion, information technology has a less significant influence on consumer satisfaction.

Based on the results of the R Square and F Square tests supported by analysis using Excel, the R^2 value was obtained at 0.656 and the Adjusted R was 0.642. This shows that 65.6% of the variation in the dependent variable (consumer satisfaction) can be explained by the independent variable, while 64.2% of the variation is explained simultaneously by the independent variable. These results are in line with previous research conducted by Salendra in a study entitled "The Effect of Service Quality, Information Technology Infrastructure, and Availability of Medical Personnel on Patient Satisfaction in Private Hospitals".⁴¹ The study shows that service quality and technological infrastructure have a positive influence on customer satisfaction.

³⁹ Zain, "Pengaruh Kualitas Pelayanan Terhadap Kepuasan Konsumen."

⁴⁰ Siregar, Elfikri, dan Daulay, "Pengaruh Lokasi, Promosi, Dan Fasilitas Terhadap Kepuasan Konsumen (Studi Pada Pengunjung Kawasan Ekowisata Tangkahan, Kabupaten Langkat)."

⁴¹ Salendra dkk., "Pengaruh Kualitas Pelayanan, Infrastruktur Teknologi Informasi, Dan Ketersediaan Tenaga Medis Terhadap Kepuasan Pasien Di Rumah Sakit Swasta."

CONCLUSION

Based on the explanation above, supported by the results of the questionnaire answers, it can be concluded that service quality has a significant influence on consumer satisfaction. Meanwhile, facilities and technology do not show a significant influence individually on consumer satisfaction. However, simultaneously, the three variables can have a significant influence on consumer satisfaction. This may occur because consumers tend to value aspects of service received directly, such as friendliness, speed in responding to complaints, ability to provide solutions, and professional attitudes from employees. These factors play a major role in creating a sense of consumer satisfaction with the service. Conversely, facilities and technology seem to have less influence individually on consumer satisfaction, which is likely caused by other factors that need to be studied further.

1. Excessively high expectations from consumers where facilities and information technology are standards that must exist, if in this case the service provider can meet and exceed existing standards, it is possible that it can change the consumer image to increase their satisfaction with the facilities and information technology factors.
2. Utilization Utilization of facilities and information technology is still not optimal. In this case, there is a lack of utilization of innovative facilities in radiology installations, which is caused by minimal information or lack of socialization from service providers. Information technology such as digital system applications for online registration, queue checking, and consultation of results with clinicians have not been utilized optimally. All of this occurs due to a lack of information and socialization to consumers. Meanwhile, information technology that is applied internally, such as PACS (Picture Archiving and Communication System), has not been fully understood by consumers. The effects of PACS are more felt by clinicians, while consumers only feel benefits such as speed in obtaining results and sending data and images without understanding that it is the result of information technology innovation. In addition, consumers feel that the existing facilities are still inadequate compared to their expectations. Information technology is also considered complicated by some consumers because it requires the use of data packages, internet, and stable networks, which are inhibiting factors. Although large investments have been made in the facilities and technology sector, without socialization to consumers, the image of the satisfaction value felt by consumers will not change.

SUGGESTIONS AND RECOMMENDATIONS

1. For Management

Based on the discussion above, it is necessary to recommend to the management of the radiology installation to focus more on improving the quality of service by providing training to all staff, improving the approach of personnel to customers to obtain input for improving services, especially in the field of facilities and information technology that can be applied in the radiology installation, optimizing the use of facilities and information technology. By conducting further socialization to consumers, simplifying the information system so that it can be easily understood by consumers, taking a holistic approach by synergizing the three variables harmoniously, for example the integration between existing facilities and information technology is not only a complement and requirement for innovation, but can really support the improvement of the quality of existing services.

2. For Further Researchers

- a. Sharpen your literacy and increase your literature before conducting research.
- b. Add variables that can provide more significant results than previous research.
- c. Make sufficient observations as provisions in collection of supporting data in research.
- d. Expanding the research sample.
- e. Helps provide detailed explanations about the direction of Questions and statements. which is used in the questionnaire to respondents.

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