
ORIGINAL RESEARCH**ANALYSIS OF SERVICE QUALITY AND APPLICATION QUALITY ON PATIENT LOYALTY IN THE DIGITAL ERA AT CICENDO EYE HOSPITAL, BANDUNG****Galih Indriana¹, Sri Suwarsi¹, Subhan Perkasa Sumadilaga¹***Faculty of Economics and Business, Universitas Islam Bandung, West Java, Indonesia*

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Abstract**Background:** *Digital-based service quality is an encouragement for consumers to establish strong bonds with the company in the long term. Challenges in hospital service quality and the effectiveness of healthcare applications must be addressed to improve patient loyalty and ensure hospital sustainability.***Objective:** *To determine the effect of service quality and application quality on patient loyalty at the Cicendo Eye Center Hospital, Bandung.***Methods:** *The research method used is descriptive verification. The sample of this study used the purposive sampling technique, where the number of samples was 159 people selected based on criteria. Primary data were collected through questionnaires. Data processing uses regression to test the hypothesis, F-test.***Results:** *The findings show that service quality is rated at a moderate level, application quality is rated at a low level, and patient loyalty at Cicendo Eye Center Hospital, Bandung is also rated at a moderate level.***Conclusion:** *Data gathered under joint testing reveal that measures of service quality and application quality demonstrate a statistically significant positive interaction; each remains influential in its own right. In light of that outcome, the two factors can be said to sway patient loyalty. Given these findings, hospital administrators are urged to reassess their information systems in order to bolster user perception and overall satisfaction.*

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1. Introduction

Digital transformation requires organization, including hospitals, to keep up with technology to stay ahead of the competition.(1) Digitalization improves performance efficiency, revenue, and organizational culture. In Indonesia, by December 2023, around 88.1% of internet users have utilized digital services, including registration for treatment in hospitals (2). Changes in the service application system are one of the important factors in supporting the success of digital transformation in hospitals.(1)

However, implementing digital applications in hospitals also presents challenges. The security of patients' personal data is a major concern as it can affect patient trust and loyalty. In addition, differences in patient preferences and needs based on age, culture and social background also affect loyalty. Therefore, healthcare facilities need to understand these changes and provide appropriate services in order to retain and attract different groups of patients (2).

Recent studies establish that the caliber of hospital services directly influences patient satisfaction and long-term loyalty. This concept of service quality extends beyond clinical accuracy; it enfold the tactile dimensions of comfort, the pace of care delivery, and the interpersonal exchanges between staff and patients. A decline in service quality, such as long waiting times and ineffective communication, can lead to dissatisfaction and decrease patient loyalty. Data at the Cicendo Eye Center Hospital in Bandung shows a decline in the service quality index and the number of patient visits over the past three years .(3,4)

Bandung Cicendo Eye Center Hospital has attempted to digitize patient flow by rolling out the SIGALIH platform for online registration and service integration. Despite the effort, only about 10 percent of visitors used the app in 2022; by the following year the figure nudged up to 20 percent, still far from robust. Interviews with front-line staff and casual users reveal two persistent obstacles: spotty network coverage across the city and software bugs that freeze or misroute requests. Hospital managers now recommend a fresh round of system upgrades paired with stronger in-house tech support if they hope to win back patients and make the services stick.

Sustaining a medical institution like Bandung Cicendo Eye Center hinges partly on patient fidelity. Loyalty shows up, for instance, when a visitor returns for care or, perhaps more telling, when they urge friends and family to choose the same facility. Suddenly eroding that allegiance can be alarmingly easy; persistently long queues, muddled information, and clunky mobile interfaces chip away at trust. Upgrading these systems and sharpening the quality of digital services offers a clear route toward boosting both satisfaction and loyalty in a market where competitors are only a quick tap away. (1,3)

The present inquiry sets out to evaluate both service provision and mobile-platform functionality at Bandung Cicendo Eye Center Hospital, studying how each dimension relates to the loyalty patients exhibit in a digital-dominated health landscape. It first gauges clinical, administrative, and technical interactions alongside parity of the hospitals digital interface, then registers the loyalty score that visitors ultimately report. A central question remains whether the two quality streams-combined service performance and application robustness-stack together to steer patient attachment in statistically meaningful ways.

2. Methods

The study adopted a quantitative framework grounded in descriptive-verified design, a strategy suited to cataloging observable fact and mapping the tangled connections among measured variables. Data flowed through the ordinary cycle of collection, processing, analysis, and interpretation, the familiar routine of statistical inquiry. Fieldwork took place at Bandung's Cicendo Eye Center during all twelve months of 2023, concentrating on the outpatient clinic. That service attracted 3,157 distinct patients over the

year, averaging roughly 263 visits monthly. The sample was drawn using a purposive sampling technique based on inclusion criteria such as complete medical records, good communication skills, and willingness to be a respondent, and exclusion criteria such as cognitive or psychological impairment and routine absence in the last three months. Data were collected through questionnaires distributed directly to respondents; the instruments were developed from theory and previous research, tested for validity with item-total correlation analysis and reliability using Cronbach's Alpha ($\alpha \geq 0.70$), and used a four-point Likert scale. If the instrument came from a foreign source, it was translated using the forward-backward translation method to maintain meaning. The analytical framework drew first on descriptive statistics to map basic respondent habits and preferences. This was followed by a verification stage in which multiple linear regression gauged how far service quality and application performance collectively drive patient loyalty. Classical assumption diagnostics-normality, multicollinearity, heteroscedasticity, and autocorrelation-also punctuated the exercise to ensure the regressions rested on stable ground. Ultimately, the overall bite of the independent predictors on the outcome was summarized by the familiar R-squared metric.

3. Results

Table 1 Recapitulation of Respondents' Responses Regarding the Variable Service Quality in the digital era

No.	STATEMENT		Alternative answer				Total N	Total score	Mean score	Remark
			SS 4	S 3	KS 2	TS 1	%			
1	Patient admission procedures are quick and precise.	n	5	30	45	79	159	359	3.0	Medium
		%	3	19	28	50	100			
2	Treatment checks are carried out directly by direct health workers (doctors and nurses)	n	7	18	65	69	159	371	2.7	Medium
		%	4	11	41	43	100			
3	If a patient has a problem, the health worker pays close attention.	n	15	26	39	79	159	375	2.7	Medium
		%	9	16	25	50	100			
4	If the health worker finds signs/symptoms in the patient, the health worker conducts a complete examination.	n	0	0	96	63	159	351	3.1	Medium
		%	0	0	60	40	100			
5	Health workers demonstrate care for the patient's needs.	n	15	0	78	66	159	375	2.5	Low
		%	9	0	49	42	100			
6	Health workers are kind to patients.	n	10	10	70	69	159	369	2.5	Low
		%	6	6	44	43	100			
7	Patients feel safe when examined by health workers	n	6	13	70	70	159	362	3.2	Medium
		%	4	8	44	44	100			
8	Information delivery procedures are easy to understand.	n	7	16	72	64	159	379	2.9	Medium
		%	4	10	45	40	100			
9	Health workers demonstrate care for the patient's needs.	n	10	30	119	0	159	527	2.9	Medium
		%	6	19	75	0	100			
10	Medical examination room that is clean	n	17	26	106	10	159	517	3.0	Medium
		%	11	16	67	6	100			
11	The arrangement of the waiting room looks neat and comfortable	n	6	19	109	25	159	458	2.7	Medium
		%	4	12	69	16	100			
12	The medical examination room is well-equipped	n	15	26	35	83	159	367	2.7	Medium
		%	9	16	22	52	100			
13	Health workers providing services are neatly	n	10	12	38	99	159	311	3.0	Medium

No.	STATEMENT		Alternative answer				Total	Total score	Mean score	Remark
			SS	S	KS	TS	N			
			4	3	2	1	%			
	dressed and polite		%	6	8	24	62	100		
14	In communicating with health workers use simple and easy-to-understand language.	n	17	26	47	69	159	399	2.7	Medium
		%	11	16	30	43	100			
15	Health workers pay special attention to each patient.	n	6	20	30	103	159	303	2.7	Medium
		%	4	13	19	65	100			
16	Health workers provide health services without regard to social status	n	15	26	48	70	159	393	3.1	Medium
		%	9	16	30	44	100			
17	Medical personnel and employees at the Hospital do not keep patients waiting too long.	n	9	16	30	103	159	303	2.5	Low
		%	6	10	19	65	100			
18	Health workers have knowledge of treatment screening.	n	6	10	19	124	159	251	3.0	Medium
		%	4	6	12	78	100			
Total								6770	2.81	

Source: Data processed 2024

Table 1 summarizes how study participants evaluated the Quality of Service at Bandung Cicendo Eye Center Hospital. Respondents assigned a mean score of 2.81; that figure is mapped onto the quality continuum below.

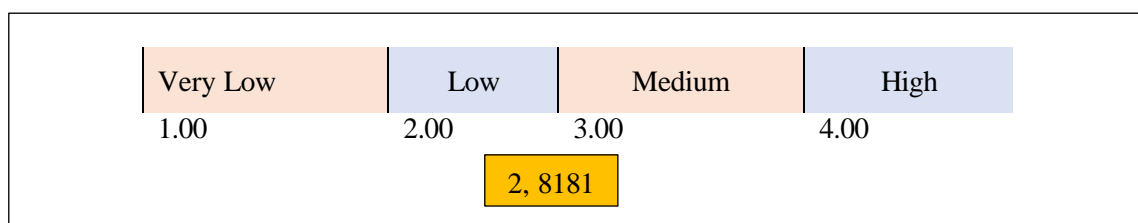


Figure 1 Maximum line of categorization of variables Service quality

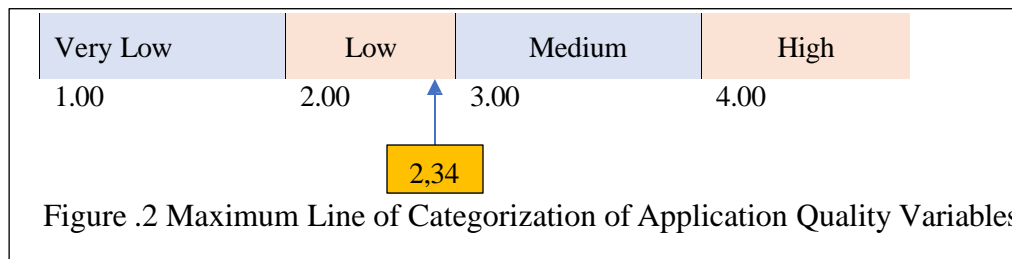
The average respondent response score of 2.81 indicates that the quality of service at Cicendo Eye Hospital Bandung is in the moderate category. Some aspects that still need to be improved are officer concern for patient needs, officer attitudes, and patient waiting times that are still too long.

**Table 2 Recapitulation of the Results of Respondents' Responses Regarding the Variable
Quality of the Application in the Digital Age**

No.	STATEMENT		Alternative answer				Total N	Total score	Mean score	Remark
			SS	S	KS	TS	%			
			4	3	2	1				
1	The sigalih app matches the products offered	n	5	30	40	84	159	349	2.0	Low
		%	3	19	25	53	100			
2	The sigalih application system can be used according to patient needs	n	0	18	65	76	159	343	1.9	Low
		%	0	11	41	48	100			
3	sigalih application can improve performance in hospitals	n	0	26	39	94	159	315	1.9	Low
		%	0	16	25	59	100			
4	The existence of active resources in the sigalih application system	n	0	0	65	94	159	289	3.3	Simply
		%	0	0	41	59	100			
5	The accuracy in the sigalih application system is quite accurate	n	0	0	78	81	159	315	3.3	Simply
		%	0	0	49	51	100			
6	The sigalih application can increase efficiency in user or patient time	n	0	10	70	79	159	329	2.4	Low
		%	0	6	44	50	100			
7	sigalih application can be used to achieve the goal	n	0	13	70	76	159	338	2.0	Low
		%	0	8	44	48	100			
8	The sigalih app can achieve satisfaction	n	0	16	72	71	159	351	1.9	Low
		%	0	10	45	45	100			
9	Information on the sigalih application is in accordance with the information received by the patient	n	0	30	60	69	159	369	2.0	Low
		%	0	19	38	43	100			
10	The sigalih application is part of the technology provided in the form of the internet or internet network	n	0	26	47	86	159	331	2.1	Low
		%	0	16	30	54	100			
11	The sigalih application has security features to improve the quality of the application	n	0	19	45	95	159	192	2.2	Low
		%	0	12	28	60	100			
12	The sigalih app can prevent security from alerts	n	0	26	35	98	159	307	2.0	Low
		%	0	16	22	62	100			
13	The sigalih application can be modified according to the times	n	0	12	38	109	159	271	1.9	Low
		%	0	8	24	69	100			
14	The sigalih application has maintenance on the application as an improvement in the quality of the application	n	0	26	47	86	159	331	3.4	High
		%	0	16	30	54	100			
15	The sigalih application can be used on computer systems	n	0	20	45	94	159	309	2.9	Simply
		%	0	13	28	59	100			
16	The sigalih application can be used via the internet network	n	0	26	48	85	159	333	2.4	Low
		%	0	16	30	53	100			
Total							5072	2.34	Low	

Source: Data processed 2024

Table 2 summarizes how visitors at the Bandung Cicendo Eye Center Hospital rated the overall quality of the applications they had used. The ratings clustered around a mean of 2.34, suggesting mild approval at best. The following continuum converts that average into qualitative terms, which helps frame the findings inside a familiar grading culture..



In the data summarized in Figure 2, the overall mean rating registers at 2.34, comfortably within the low-performance band defined by a scale cutoff of 1.81 to 2.60. Such a score signals that the mobile Patient Application, as utilized at Bandung Cicendo Eye Center Hospital, falls short on several key dimensions-product fit to clinical workflow, intuitive navigation, rapid task completion, user-perceived safety, and its quickness to adapt to contemporary web standards and patient habits.

Table 3 Recapitulation of Respondents' Responses Regarding Patient Loyalty Variables in the Digital Age

No.	STATEMENT		Alternative answer				Total N %	Total score	Mean score	Remark
			SS	S	KS	TS				
			4	3	2	1				
			5	20	40	94	159			
1	Bandung Cicendo Eye Center Hospital is the first choice if patients need health services	n	3	13	25	59	100	319	2.5	Low
		%	0	12	67	80	159	329		
2	Patients are always loyal to subscribe at the Bandung Cicendo Eye Center Hospital	n	0	8	42	50	100		2.6	Low
		%	0	26	40	93	159	317		
3	Bandung Cicendo Eye Center Hospital complies with state-of-the-art eye care standards	n	0	16	25	58	100		3.0	Simply
		%	5	8	52	94	159	307		
4	Cicendo Eye Center Hospital Bandung provides excellent service products	n	3	5	33	59	100		2.8	Simply
		%	0	0	78	81	159	315		
5	Cicendo Eye Center Hospital Bandung provides affordable service fees	n	0	0	49	51	100		2.6	Simply
		%	0	10	70	79	159			
6	Bandung Cicendo Eye Center Hospital provides discounts on certain days such as the hospital's birthday.	n	0	6	44	50	100	329	2.9	Simply
		%	0	13	70	76	159			
7	Patients do not intend to transfer to another hospital	n	0	8	44	48	100	338	3.0	Simply
		%	0	16	72	71	159			
8	Patients are not affected by persuasion (application quality / advertising) carried out by other hospitals	n	0	10	45	45	100	351	2.8	Simply
		%	0	10	45	45	100			
Total								2605	2.77	Simply

Source: Data processed 2024

Table 7 summarizes the replies volunteered by patients of the Bandung Cicendo Eye Center Hospital concerning their sense of loyalty. The compiled data yield a mean value of 2.77 across all survey items. The subsequent discussion situates this average along the established interpretive continuum.

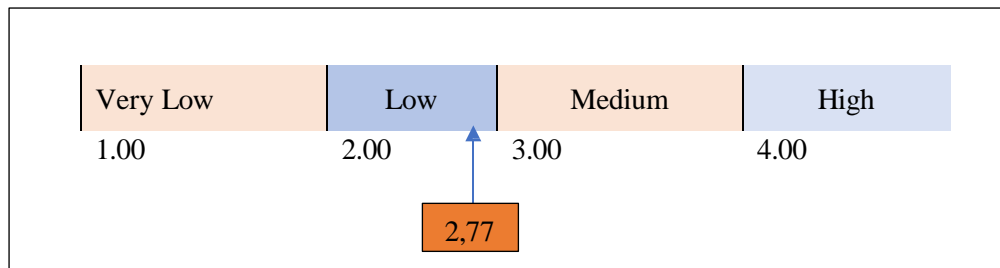


Figure 3 Maximum Line of Categorization of Patient Loyalty Variable

Table 4 Multiple Linear Regression Analysis Results

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.656	.948		4.911	.000
X1 (Service Quality)	.111	.064	.198	1.739	.000
X2 (Application Quality)	.352	.057	.708	6.226	.000

a. Dependent Variable: Y

Through the *unstandardized coefficients* (B) value contained in table 4, the following regression equation can be formed.

$$Y = 4.656 + 0.111 X_1 + 0.352 X_2 + \epsilon$$

Description:

Y = Patient Loyalty

ϵ = Constant

X1 = Service Quality

X2 = Application Quality

The coefficients returned by the multiple linear regression model suggest that, for this dataset, one-unit increases in independent predictors exert concrete and interpretable influences on the dependent outcome.

α = Constant = 4.656 which shows the amount of Patient Loyalty (Y) which is positively influenced by Service Quality (X_1), Application Quality (X_2). That is, if Service Quality (X_1) and Application Quality (X_2) = 0, then Patient Loyalty (Y) will be 4.656. This shows that there are other variables that can affect Patient Loyalty at the Bandung Cicendo Eye Center Hospital besides Service Quality and Patient Loyalty.

b_1 = The regression coefficient for X_1 = 0.111 which indicates the positive direction of the effect of Service Quality (X_1) on Patient Loyalty (Y) in Bandung Cicendo Eye Center Hospital Patients. This means that if the Quality of Service has a positive value, it will affect the Loyalty of Patients of the Bandung Cicendo Eye Center Hospital by 0.111.

b_2 = The regression coefficient for X_2 = 0.352 which indicates the direction of the influence of Application Quality (X_2) on Patient Loyalty (Y) in Bandung Cicendo Eye Center Hospital Patients. This means that if Application Quality increases while Patient Loyalty = 0 or constant (unchanged) then Patient Loyalty at the Bandung Cicendo Eye Center Hospital will increase by 0.352.

Table 5 Anova Table for Simultaneous Testing

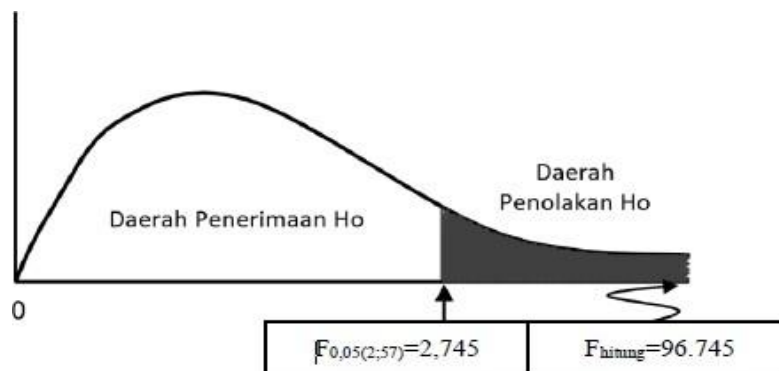
ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	555.582	2	277.791	96.745	.000 ^b
Residuals	163.668	57	2.871		
Total	719.250	59			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

In table 5, it can be seen that the value of F_{count} is 96.745 with a significance value close to zero. Then the value of F_{table} at a significance level of 5% ($\alpha = 0.05$) and free degrees 2 and 57 is 2.3445. Because $F_{(\text{count})}$ (96.745) is greater than $F_{(\text{table})}$ (2.3445), then at the 5% level of error it is decided to reject H_0 so that H_a is accepted. Service Quality and Application Quality interactively shape Patient Loyalty at the Bandung Cicendo Eye Center. Evidence of this joint effect appears in the rejection region for the null hypothesis, which is displayed in the accompanying graph.

Figure 4 Graph of Acceptance and Rejection Areas of H_0 on Simultaneous Tests

In the graph above, it can be seen that the value of f_{count} (96.745) is in the H_0 rejection area, so it is concluded that Service Quality and Application Quality simultaneously affect Patient Loyalty at the Bandung Cicendo Eye Center Hospital.

Table 6 Test Results of the Effect of Service Quality on Patient Loyalty

Standardized Coefficients	t_{count}	Sig.	$t_{(\text{table})}$ (df-57)	H_0	Ket
0,111	1,739	0,000	1,997	Rejected	Influential

In table 6, it can be seen that the $t_{\text{calculated}}$ value of the effect of service quality on patient loyalty is 1.739 with a significance value close to zero. because the $t_{\text{calculated}}$ value is greater than t_{table} and the significance value is less than 0.05, then at the 5% error level it is decided to reject H_0 so that H_a is accepted. Evidence from the Bandung Cicendo Eye Center Hospital strongly suggests that the standard of service directly influences the loyalty exhibited by patients. A graphic representation of the data delineates the statistical rejection and acceptance regions concerning the null hypothesis, illuminating the threshold at which service quality ceases to correlate with patient allegiance.

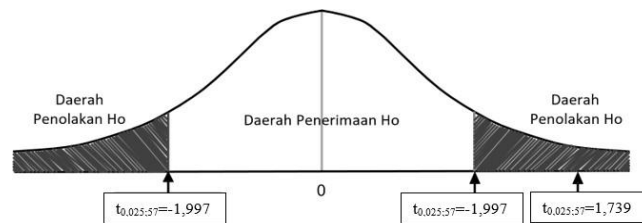


Figure 5 Regions of Acceptance and Rejection of Ho in the Test of the Effect of Service Quality on Patient Loyalty

In Figure 5 above, it can be seen that t_{count} of 1.739 is in the Ho rejection area, which shows that service quality affects patient loyalty at the Bandung Cicendo Eye Center Hospital. Data gathered during the fieldwork suggest a clear correlation between service quality and patient retention at the Bandung Cicendo Eye Center Hospital; those who rate care as superior are also the ones who report ongoing satisfaction.

Table 7 Multiple Correlation Coefficients

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879 ^a	.772	.764	1.695

a. Predictors: (Constant).

Table 7 exhibits a multiple correlation coefficient value of .879, revealing a compact bond between service quality, application quality, and patient loyalty. Such a result categorically designates the collective influence as very strong, even verging on hyperbolic when the triad of variables is considered together.

Table 8 Test Results of the Effect of Application Quality on Patient Loyalty

Standardized Coefficients	t_{count}	Sig.	$t_{(table)} (df=57)$	Ho	Ket
0,352	6,226	0,000	1,997	Rejected	Influential

In table 8, it can be seen that the $t_{calculated}$ value of the effect of application quality on patient loyalty is 6.226 with a significance value close to zero. Because the $t_{calculated}$ value is greater than t_{table} and the significance value is smaller than 0.05, at the 5% error rate it is decided to reject Ho so that Ha is accepted. The inquiry points to a straightforward conclusion: the quality of digital applications has a measurable influence on patient loyalty at Bandung Cicendo Eye Center Hospital. Surgeons, support staff, and administrators who tinker with the code or troubleshoot user feedback can now cite these numbers. Higher application quality, it appears, maps almost linearly onto patient satisfaction. When the interface behaves as intended, the waiting room hears fewer complaints.

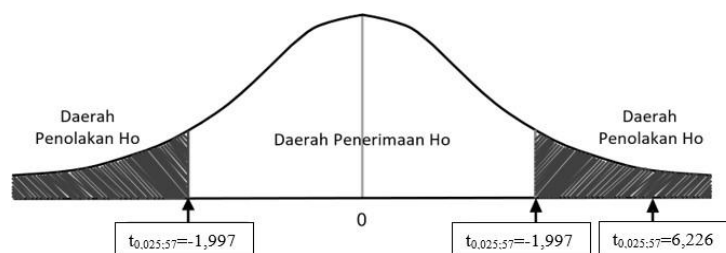


Figure 6 Regions of Acceptance and Rejection of Ho in the Test of the Effect of Application Quality on Patient Loyalty

In Figure 6 above, it can be seen that t_{count} of 6.226 is in the H_0 rejection area, which shows that application quality affects patient loyalty at the Bandung Cicendo Eye Center Hospital. Findings from the present inquiry substantiate the notion that greater patient satisfaction directly forges stronger loyalty bonds within the Bandung Cicendo Eye Center. The quantitative analyses show that even modest increases in reported contentment correlate with marked rises in the likelihood of return visits and referrals.

Table 9 Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879 ^a	.772	.764	1.695

a. Predictors: (Constant), X2, X1
Source: Data processed 2024

Table 9 presents an R-squared value of 0.772, a statistic often referred to in the literature as the coefficient of determination. By that measure, nearly three-quarters- precisely 77 percent-of the variations in patient loyalty at Bandung Cicendo Eye Center can be traced back to the combined effects of service quality and application performance. The leftover 23 percent, of course, is likely shaped by influences not captured in this particular model. To assess the weight each predictor exerts on loyalty, researchers typically apply a standard multiple-regression equation; that formula remains a staple in both introductory texts and more advanced analytical workshops.

Beta X Zero Order

Table 10 Partial Coefficient of Determination
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlation		
		B	Std. Error	Beta					
1	(Constant)	4.656	.948		4.911	.000	Zero-order	Partial	Partial
	X1 (Service Quality)	.111	.064	.198	1.739	.000	.514	.456	.300
	X2 (Application Quality)	.352	.057	.708	6.226	.000	.537	.544	.380

a. Dependent Variable: Y
Source: Data processed 2024

Table 10 displays the relevant summary statistics; the corresponding formula for the partial determination coefficient yields:

$$\text{Beta coefficient} \times \text{Zero Order} \times 100\%.$$

Table 11 Partial Determination Coefficient Calculation Results

Research Variables	Beta Coefficient x Zero Order	Results
Service Quality (X ₁)	0.198 X 0.514	0.101
Service Quality (X ₂)	0.708 X 0.537	0.380
Total		0,48

Source: Data processed 2024

Based on the calculation of table 4.22, it can be found in the calculation as follows:

- The magnitude of the effect of service quality (X₁) on Patient Loyalty (Y)
 $0.198 \times 0.514 = 0.10$ or 10%
- The magnitude of the effect of application quality (X₂) on Patient Loyalty (Y)
 $0.708 \times 0.537 = 0.38$ or 38%

It is concluded that the quality of service (X_1) has a smaller effect of 0.101 (10%), while the quality of the application (X_2) has an effect of 0.380 (38.0%) on patient loyalty (Y) in patients at the Cicendo Eye Center Hospital Bandung so that X_1 and X_2 are known by Zero Order of 77.2%.

4. Discussion

The data reveal an R-square of 0.772, a statistic commonly referred to as the coefficient of determination. This figure suggests that, taken together, Service Quality and Application Quality account for 87.9 percent of the variation in Patient Loyalty at Bandung Cicendo Eye Center. The residual 12.1 percent reflects influences yet unmeasured or unexplored beyond those two domains.

The results of this study are supported by the research of Fida et al. (2020), Octarinie (2018), Bramantyo et al. (2022) Michelle & Siagian (2019), and Rahayu & Wati (2018) who found that when the quality provided by a company is good, indicated by the number of good responses from customers to the conditions of each service quality indicator, it will encourage the creation of customer loyalty .(5–9)

Findings from the present inquiry echo earlier reports by Fida et al. (2020), by Michelle and Siagian (2019), and by Panday and Nursal (2021), each of which verified that improvements in Customer Application Quality correlate strongly with enduring customer allegiance. When clients encounter a well-functioning interface, their loyalty deepens and, quite naturally, they begin volunteering recommendations to friends and colleagues.(5,8,10) Society 5.0 envisions a future in which every strand of technology-internet of things, artificial intelligence, even simple mobile networks-fuses into the daily rhythms of the human body and spirit. The Web ceases to be merely a conduit for status updates; it becomes a living environment where e-commerce, social bonding, and personal reflection coexist. Central to this vision is the human user, not a passive consumer, but an active architect who translates algorithms into fresh social value and narrows income, health, and knowledge divides. The promise, however, rests on a shared literacy that spans generational, cultural, and geographic boundaries, because a breakthrough gadget is useless if no one can interpret its signal (11) . These developments require all generations including the younger generation in Indonesia to adapt. Currently, the younger generation in Indonesia is getting used to the many new things and innovations that appear in their lives that can provide loyalty to patients .(6)

According to Tjiptono (2020), consumer loyalty is the consistent repurchase of a brand by consumers(12). The word loyalty has trailed alongside commerce for centuries, popping up in studies of parishioners and cult followings as easily as in surveys about brand sugar. When a patient decides to book the same X-ray suite for their next scan, they usually mention the radiological team to colleagues at the water cooler, so goodwill migrates. In that sense, loyalty blossoms as a kind of continuing devotion to the clinical product-think of it as Application Quality writ small, repeated for every shoulder MRI the hospital buys. A visible bond like that signals the health provider has earned not just business, but a subscriber willing to cheer from the stands. (13)

Recent work identifies the signature traits of loyalty as a persistent emotional bond patients form with their hospital and the repeated visits-or purchases-that follow. The two behaviors can be analyzed side by side, tapping demographic or clinical categories for deeper insight(14). Customer loyalty describes more than a simple habit of repeat buying; it signals an active readiness to pass along a brand name at the kitchen table or the office break room. A dependable patron does not just return for another purchase, they volunteer a referral(15)

Tampering with trust subtly undermines company value, while durable loyalty-matured beneath repeated interaction-yields profits that compound rather than evaporate. Customer satisfaction softens churn and nerves staff; together they stitch a firmer fiscal foundation (16) Programs that reward customer fidelity frequently shrink the tabs firms run for marketing, cut the clock-and-cash drain involved in completing each sale, curb the expense of losing and replacing staff, and trigger the kind of word-of-mouth chatter money can never buy.(17)

The recent findings align neatly with the earlier work by Rahmah et al. (2021) and Surahman et al. (2020). Both studies demonstrated that high service quality fosters customer loyalty, with the quality of the customer-facing application acting as a mediating factor (18,19) . Application quality routinely emerges as a central determinant of corporate success; its absence almost always signals trouble. One plausible remedy lies in tailoring the software to customer expectations, thereby cultivating immediate satisfaction. When users feel heard, their allegiance to the product deepens, and the odds of repeat purchases climb(10)

Patient loyalty is a patient attitude that describes a loyalty to services to utilize services(4) Quality of service remains a pressing concern, yet the current framework often falls short of fully meeting patients expectations and expressed needs. As a consequence, a noticeable subset of the patient population reports feelings of dissatisfaction (13) . Users often air their grievances on multiple platforms; Google Reviews, in particular, has become a favored outlet for short, pointed testimony.(20)

The development of the eye health care industry today continues to experience rapid development, and one of them is the accommodation of health services in hospitals both private and government(21). Many hospitals across Indonesia now find themselves under pressure to rebuild the trust of ordinary citizens. Quality clinical care, while essential, rarely suffices on its own; observers repeatedly point out that robust infrastructure and a patient-centered attitude are equally indispensable (22). Nineteenth-century physicians hung a shingle and promised that anyone inside the walls would leave healthier than when they arrived. The compact between the modern hospital and its surrounding community rests on roughly that same ideal. Building policies often frame that promise in terms of the best possible services, measurable performance improvements, and attention to local hopes and demands.(23)

Inside the clinical environment, citizens routinely voice a shared grievance: an apparent lapse in professionalism among certain staff members. A survey of letters to the press mirrors this unease and echoes the content of formal hospital petitions. In almost every case the writer singles out interpersonal demeanor as the point of contention(24) . Indonesias health landscape today finds itself in a pronounced transition. State-run facilities once oriented solely toward public welfare are gradually adopting market-driven practices. Locally the hospitals now circulate the term socio-economic institution to capture this dual character(24). A pivotal factor warranting enhancement is service quality; research consistently demonstrates that patients overall experience hinges on how effectively care is delivered. (22)

Quality provides special encouragement for patients to establish long-term mutually beneficial relationships with hospitals. If the Company is able to create Quality Application patients, it will create loyalty(25). The quality of health services in Indonesia is still not inaccordance with the expectations of the community, although Indonesia provides health insurance for people who are less able or people who cannot afford it are still lacking in quality. This is because the budget for health in Indonesia is still low in bangdingkan other countries that can be said to be poor countries as well .(26)

Research consistently highlights a correlation between patient allegiance and the financial well-being of healthcare practices. When satisfied individuals share favorable reviews, those endorsements further amplify institutional loyalty. Sustaining such allegiance is not merely advantageous for providers; it can also translate into measurable gains in patient health. Active engagement from patients, in turn, serves as a critical moderator of clinical results, shaping trajectories of recovery and well-being.(27)

According to Jonathan (2022), Loyalty is defined as a consumer attitude that is favorable to the seller, which results in repeat purchases(28) . Loyalty is the impact of Application Quality consumers on service quality(29) . Having loyal customers is very beneficial for the company, given the high competition in the hospital industry, loyal consumers will recommend to their friends and family to make purchases .(30)

There are still many patients who take the queue number on the same day as their visit

schedule and there are still patients who are not in accordance with the predetermined hours, causing the queue to accumulate. This can be overcome in the SIGALIH program which makes it easier for users to make better use of time without having to wait long, because in the SIGALIH Application System itself if users who have registered themselves will certainly get a queue number, so that users can estimate their arrival. SIGALIH represents a recent digital innovation designed to smooth urgent bottlenecks in outpatient and emergency admissions. The platform enables both first-time visitors and returning clients to pre-register from a smartphone, thereby neutralizing the once-familiar crush of morning queues at reception desks. When patients log on, they can estimate the earliest time slot in which they are likely to be seen, a insight that shifts the experience from guesswork to planning. Built around contemporary information and communication technology, the SIGALIH framework promises to reshape the underlying architecture of Indonesian health portals while trimming operating costs and, ideally, lifting the overall caliber of patient care (Wicramasinghe and Goldbreg, 2023).

In 2020 the World Health Organization described the SIGALIH Application as a concrete instance of applying information and communication technologies to the health sector. The Organization further urged member states to draft sustained strategic road maps that would embed the platform in domains such as health management, legal oversight, and the construction of robust public-private partnerships. Such forward planning is intended to ensure the service matures beyond pilot phases and meaningfully strengthens national health systems.

Jusuf Saleh Bazed and M. Jamaluddin Ahmad mentioned that there are at least 4 main characteristics in Islamic services, namely rabbaniyah, akhlaqiyah, waqi'iyah and insaniyah(31) . So that the difference between Islamic health services and non-Islamic health services lies in the characteristics of rabaniyah, namely the belief and submission of everything because of the will of Allah Swt., while the other characteristics are characteristics in general contained in services in hospitals. However, the way of application and development is different from Islamic health services based on sharia principles.

5. Conclusion

Service quality at the Bandung Cicendo Eye Center Hospital is in the sufficient category, while application quality is still low, and patient loyalty is also classified as moderate. Recent research has documented a robust, positive relationship between the quality of administrative service and the technical performance of patient-facing applications, on loyalty outcomes both in isolated tests and in combined models. The finding underscores that routine upgrades to in-person care and persistent refinements to digital platforms jointly reinforce a patients inclination to return. From a traditional theory perspective, the results enrich ongoing discourse in e-health by linking user satisfaction directly to managerial practice rather than to abstract system features. Hospital leaders are, therefore, urged to benchmark clinical encounters quarterly, streamline interface navigation, and craft retention campaigns that spotlight personal connection as the ultimate driver of trustworthy care.

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