



Proceeding – ICOBIS
INTERNATIONAL CONFERENCE ON GLOBAL INNOVATION AND TRENDS IN ECONOMICS
(ICOBIS)

Study Of Antecedents Of Digital Service Dissonance On Customer Switching With Moderation Of Propensity To Switch

1st Suwignyo Rahman

*Department of Management, Faculty of Social and Humaniora
Universitas Harkat Negeri
Tegal, Indonesia
suwignyo.rahman@harkatnegeri.ac.id*

2nd Vincent Didiek Wiet Aryanto

*Department of Management, Faculty of Economic and Business
Universitas Dian Nuswantoro
Semarang, Indonesia
vincentaryanto@dsn.dinus.ac.id*

3rd Piji Pakarti

*Department of Management, Faculty of Economic and Business
Universitas Dian Nuswantoro
Semarang, Indonesia
piji.pakarti@dsn.dinus.ac.id*

4th Lisa Mardiana

*Department of Communication, Faculty of Computer Science
Universitas Dian Nuswantoro
Semarang, Indonesia
lisa.mardiana@dsn.dinus.ac.id*

Abstract –

The purpose of this study is to examine the antecedents of service dissonance and customer switching, moderated by propensity to switch. The results are expected to provide various benefits for academics as well as for practitioners in terms of operational knowledge. Primary data collection was carried out from January 2, 2025 to February 28, 2025. The results indicate that of the three hypotheses tested, one is accepted and the other two are rejected. One accepted hypothesis is that Disquality Delivery of Service negatively influences Digital Service Dissonance. The two rejected hypotheses are that Digital Service Dissonance negatively influences Customer Switching, and Propensity to Switch negatively influences Digital Service Dissonance on Customer Switching. The rejected hypotheses have a significant effect because their T-statistics are greater than 1.96 and their P-values are less than 0.05. Services provided by the government or public sector, as well as clinical services, bind consumers, and are less likely to switch. Systematically, bound consumers must receive services at the primary health care service they registered for or attended. These findings indicate that although the relationship between the variables is significant, the direction of the relationship observed in the field does not align with initial theoretical predictions, thus rejecting the hypothesis. This suggests that specific characteristics of consumer behavior or the digital service context influence this relationship pattern.

Keywords – Disquality Delivery of Service , Digital Service Dissonance , Propensity to Switch, Customer Switching

I. INTRODUCTION

I.1. Background

Disquality service delivery in digital services perceived by customers/users is expressed in various ways and attitudes. Negative ways and attitudes toward what customers feel are expressed through public criticism, criticism, and even demands for our service products, which creates unnecessary dissonance. Research by Wang et al. (2020) shows that perceived corporate regret negatively influences the decision to blame and positively influences emotional empathy. Emotional empathy negatively influences coping behavior. According to this study, blaming how decisions are made and emotional empathy do not have a serial mediating effect on the relationship between perceived regret and coping behavior. Only emotional empathy mediates the effect of strong regret on coping behavior. Study 2 found that response time and apology mode jointly influence perceived regret. Digital service failures by companies remain frequent, as research by Rosenbaum et al. (2021) suggests three drivers explaining the frequent failures of commercial digital technologies. The first driver highlights misuse or criminal intent by individuals. The second involves organizations failing to prevent or address technological failures. The third relates to failures originating from government agencies. According to SuaraSurabaya.Net, the Indonesian Consumers Foundation (YLKI) assisted a national comedian who was sued by a developer in 2017. The comedian was reported for defamation after complaining via social media about inadequate facilities. Instead of providing positive feedback, the consumer was sued. Furthermore, in 2019-2020, YLKI also acted as an expert witness for a mother who sued a company over a product that made her child sick. Instead of receiving compensation for her losses as a consumer, the mother was sued criminally and civilly by the manufacturer.

These cases are some examples of service failures in service delivery. Service failures that are not managed well by service providers result in dissonance that actually harms the service provider's image. Instead of improving the company's image, it actually reaps criticism and scorn from social media users. The lack of awareness among service providers to admit mistakes for service failures and the absence of a service recovery approach results in a worsening of the service provider's image. Several studies have shown theoretical debates regarding the relationship between service failures in service delivery and the level of dissatisfaction indicated by service dissonance. This description shows that the relationship between service failures in service delivery and the level of dissatisfaction indicated by service dissonance is still a matter of debate among researchers. Therefore, this study seeks to clarify the relationship between service failures in service delivery and the level of dissatisfaction indicated by service dissonance, which can also result in customer switching.

The phenomenon discussed above represents a perspective where service failure influences satisfaction, dissatisfaction, or service dissonance. This is consistent with the finding that all dimensions of digital service failure, such as m-banking services (functional, system, information, and service), influence m-banking usage, which in turn influences user satisfaction with m-banking and customer engagement. Furthermore, this study found that user satisfaction with m-banking acts as a partial mediator between m-banking usage and customer engagement (Kamboj et al., 2022). Given the importance of understanding the negative

implications of customer behavior, empirical examination of negative customer engagement should be a top priority for marketing researchers. Testing frameworks, such as those proposed in this study, and developing scales and validating the negative customer engagement construct are crucial. The research results of Xuan Do et al (2020), examine the rapidly developing customer engagement, with a joint effort to conceptualize and empirically test the dimensions of customer engagement from both positive and negative perspectives.

This is consistent with the findings of Varela et al. (2010) who stated that recovery strategies offset the negative impact of negative emotions (dissonance) on customer satisfaction and that customer compensation strategies are more efficient if offered quickly. From the above debate, we can conclude that there are differences of opinion regarding the influence of customer satisfaction or dissatisfaction after a service failure.

This study will be conducted in a more comprehensive manner by elaborating the research problems proposed above, into several research questions proposed in empirical research, namely as follows: Is disquality delivery of service can influence digital service dissonance, What is it? digital service dissonance can influence customer switching? Is it Can propensity to switch moderate the influence of digital service dissonance on customer switching? Therefore, the research problem proposed in this study is: How can propensity to switch moderate the influence of digital service dissonance on customer switching?

The originality of this research includes the development of the concept of disquality delivery of service that can influence digital service dissonance towards customer switching. The originality of this research also includes the development of a model, namely the variable of disquality delivery of service that can influence digital service dissonance and the variable of propensity to switch that moderates the influence between digital service dissonance towards customer switching. The object of this research is the disquality delivery of digital service that occurs in several health centers and clinics in Semarang City.

The purpose of this study is to study the antecedents of service dissonance to customer switching, moderated by propensity to switch. The results are expected to provide various benefits for academics as a means of developing scientific knowledge, as well as operational benefits for practitioners. The specific benefits that can be realized in this study for academics as a means of developing scientific knowledge include: To synthesize and empirically test the disquality of service delivery in influencing Digital service dissonance. Providing analytical input on how digital service dissonance can influence consumer switching through propensity to switch.

While the benefits Specifically operationally for practitioners that can be realized in research is that it can provide contributions to service provider practitioners so that they can optimize their digital service features and complaint mechanisms in their digital services to prevent customer switching.

1.2. Theoretical Basis

1.2.1. Development of Propositions and Theoretical Models

This study builds a basic theoretical model developed on the basis of an intensive literature review. The theoretical model proposed in this study is presented in the following figure 1:

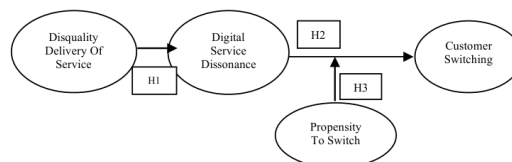


Figure 1. Proposed Theoretical Model

The figure shows a combination of concepts that explain the process of customer switching due to service dissonance experienced by consumers, moderated by the propensity to switch. The explanation of the development of the model shown in the figure is explained in the literature review.

1.2.2. Development Proposition Disquality Delivery of Service

Disquality delivery of service is one of the diseases that must be avoided in service quality. Isouard (2012) calls it Pathology service quality. Pathology service quality will have a significant impact on service delivery and patient care. Pathology service quality can also be affected by suboptimal workforce performance, inadequate examinations, outdated technology, and so on. negative image from health service sector so far. The results of research by Rahman & Widiyanto (2014) show that service failure has a positive effect on service dissonance, although not significantly. Service failure This occurs in several workflows that are not well-designed. Services provided by the public and private sectors have used monolithic workflow engines. To end the management of public services using monolithic workflow engines, a very practical mechanism is needed because service provider organizations usually use their own workflow tools.

Kumaran et al (2007) conducted a study aimed at introducing a new approach to automating complex workflows and variables, and this approach uses Information Technology management delivery service (MDS). This study concluded that the findings described in this study have made a number of significant contributions in advancing the state of the art in service delivery. The design and implementation of this new approach is to organize service request processing systems, consisting of operational model acceptance and business performance models based on domain knowledge. That is, a solution model developed based on domain knowledge, and a service delivery platform implemented to process service requests.

1.2.3. Digital Service Dissonance Development Proposition

The results of research by Rahman & Widiyanto (2014) show that service failure has a positive effect on service dissonance, although not significantly. However, service recovery has a positive impact on service dissonance. Dissonance arising from service failure becomes a problem if there are no service recovery efforts as described above. Understanding dissonance from service failure is very relevant in this study.

1.2.4. Proposition Development Propensity To Switch

The development of digital technology today makes it very easy for service users to express frustration over service dissonance. Service users who have digital media accounts can easily find references to search for better service. Research by Lopez et al. (2006) shows that the length, depth, and breadth of relationships help determine a customer's propensity to switch fixed line providers. Customers who maintain long-term relationships with a company (length), use more services (depth), and invest in complementary services (breadth) are less likely to switch. Malhotra & Kubowicz (2013) also stated that if customers perceive their provider to be innovative, they are less likely to switch to another provider; the perception of being innovative is as important as the perception of the quality of service delivered by the provider.

1.2.5. Customer Switching Development Proposition

The research results of Rahman & Widiyanto (2014) show that service dissonance also has a positive and significant effect on Customer switching. Customers' references to switching behavior also differ according to the reasons articulated for switching. When external switching is not an option, customers may react with behavioral changes that we label internal switching. Therefore, we argue that to understand customer behavior in relationships, we must not only consider the rates of switching, retention, and service usage (Bolton & Lemon, 1999; Roos, 2004 Ganesh et al., 2000;) but also focus on and explain the reasons behind internal switching.

Customers can switch completely or partially to another service provider, but in this article we also include the option of changing behavior internally, which we call internal switching. The results reflect the energy of the trigger. Intuitively, we suggest that triggers that lead to complete switching have more energy to cause behavioral change than triggers that lead to partial switching (Roos et al., 2004). Empirical studies were conducted in different industries, including retail, banking, insurance, telecommunications, and in the Swedish social insurance system (Edwardssoon & Roos, 2001).

Customers' own expressions of their reasons for switching are labeled switching determinants and are often combined with influential triggers. Reasons for switching may lie in the provider's poor knowledge of how changing customer situations affect their needs.

1.2.6. Contribution

The research concept of propensity to switch in digital service dissonance on the potential for customer switching will contribute to the novelty of the research topic because, as stated by Lopez et al. (2006), who suggested that many other factors intervene in customer switching decisions. The need to expand current research to consider longitudinal information on customer behavior can improve our understanding of the determinants of switching decisions and the differences between switchers and stayers. Another contribution in this novel model is the presence of the propensity to switch variable as a moderating variable rather than an intervening one. This model will certainly be interesting because it uses a different approach, that in the future, other research methods should be used to investigate specific aspects of service failure and recovery. Placing the propensity to switch variable as a moderating variable rather than an intervening one is an approach with a different research method than before.

1.2.7. Novelty of the research

This study proposes a novelty in moderating the tendency of customers to switch services due to digital service dissonance through the variable propensity to switch. The operational definition of propensity to switch is the tendency of customers to determine whether or not to switch services due to digital service dissonance. After experiencing disquality delivery of digital services, customers experiencing digital service dissonance will consider continuing the service or switching to services provided by other digital service providers. This research model emphasizes the management of digital service dissonance control over disquality delivery of digital services that can result in customer switching. The following is a conceptual mapping that forms the proposed novelty (Figure 2).

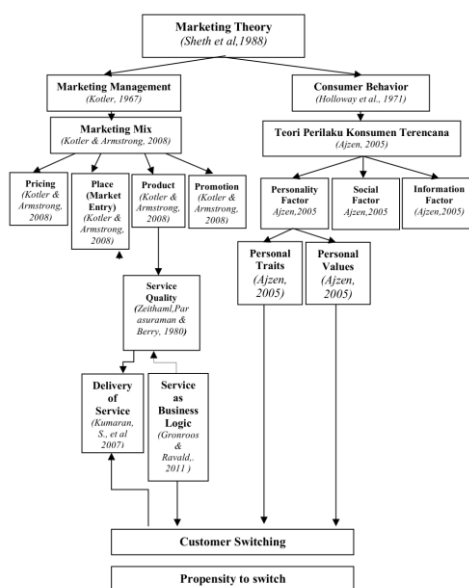


Figure 2. Conceptual mapping that forms the proposed novelty

This innovation adopts two of the three thoughts in Marketing Theory by Shets et al (1988), which states that there are three schools of thought related to novelty in research on marketing theory. The two are Marketing Management, pioneered by Kotler (1967), and Consumer Behavior, pioneered by Holloway et al. (1971). Marketing Theory nya Sheth (1988) Marketing Management is also defined by Kotler (2002). Kotler (2012) also formulated the Four P Components of the Marketing Mix. One component of the Marketing Mix is Product. This product consists of Product Variety, Quality, Design, Features, Brand Name, Packaging, Sizes, Services, Warranties, and Returns.

Regarding customer needs, Kotler (2002) also reminds us that a company can carefully define its target market but fail to properly understand customer needs. Clearly, understanding customer needs and desires is not always simple. Some customers have needs of which they are not fully aware, some cannot articulate those needs or use words that require some interpretation. We can distinguish between five types of needs: (1) stated needs, (2) real needs, (3) unstated needs, (4) pleasurable needs, and (5) secret needs. Responding only to other needs can underestimate customers.

A good product will be well received by consumers or customers if it is accompanied by good service. This service is a service industry where according to Kotler (2002) a service is any action or performance that one party can offer to another that is essentially tangible and does not result in any ownership, may or may not be associated with a physical product. On the other hand, service quality is evaluation consumer about superiority overall entity or superiority (Zeithaml, 1988).

Further exploratory research conducted by Parasuraman (1985) supports the idea that quality of service is overall evaluation similar to, but not the same as, attitude. Quality of service including the way in which This service was delivered by Gronroos (1982) such as the company's image profile, the relationship between sellers and consumers. Gronroos (2010) updated his thinking by analyzing the scope, content and nature, the creation of service value based on the view of the creation of value logic,

addressing the customer perspective in the relationship between service providers and customers known as the creation of customer value. The novelty of Pangkon Service Compromise is the process of creating customer value and analyzing opportunities to support value creation as well as implications for marketing through the approach of Javanese Pangkon cultural values.

Groenroos (2010) details five important things that must be considered in the process of creating customer value, namely: First, the goal of marketing is to support customers in the value creation process. Second, the basis of business is reciprocal value creation. Third, customers are value creators. Fourth, service providers are essentially facilitators of value creation, but during interactions with customers, service providers also have the task of creating value together with customers. Fifth, service providers are not only creators of value propositions, in addition to important interactions with customers, they also contribute to the fulfillment of their values.

The existence of poor service quality (disquality delivery of service) gives rise to efforts to restore the service received by customers. This has led to the emergence of the Service Recovery Theory (service atonement) conducted by Steyn (2011) and Service Delivery (service delivery) conducted by Kumaran (2007). Service in the new Pangkon Service Compromise refers to the theories above.

The idea of Marketing Theory, pioneered by Sheth (1988), also gave rise to Consumer Behavior (Holloway, 1971). From Consumer Behavior (Holloway, 1971), the Theory of Planned Consumer Behavior, proposed by Ajzen (2005), was derived. In this theory, there are three factors underlying the emergence of the theory of planned consumer behavior, namely:

1. Factors. These personal factors include attitudes, personality, values, and emotions.
2. Social factors. These include age and gender, race and ethnicity, education, income, and religion.
3. Information Factors. These factors include experience, knowledge, and media exposure. These personal factors reduce the attitudes of customers who experience digital service failure and service dissonance, which results in customers switching services to other service providers, preceded by a propensity to switch.

II. METHOD

This article proposes a conceptual model of the moderation of propensity to switch management on digital service dissonance and customer switching. Variables influencing digital service dissonance Dissonance is the disquality delivery of digital services. Digital service dissonance can lead to customer switching. The extent to which customers switch will be determined by efforts to moderate this propensity to switch. A literature review was conducted to develop a novel model for moderating the propensity to switch management in relation to digital service dissonance and customer switching.

2.1. Research Sample

The population in this study includes all users of digital health services in Semarang City, Central Java Province, Indonesia, who provide first-level health services at Community Health Centers and First-Level Health Clinics.

2.2. Respondent Description

Field interviews were conducted, resulting in 371 data points that could be used in the analysis of this research. More details can be seen in the following table:

Table 2.2.1. Respondent Description

Information	Amount	Percentage (%)
Gender		
Man	141	38
Woman	230	62
Age (years)		
17 - < 25	61	16.44
25 - < 30	29	7.82
30 - < 35	32	8.63
35 - < 40	40	10.78
40 - < 45	36	9.7
45 - < 50	35	9.43
> 50	138	37.2
last education		
Elementary school and below	41	11.05
Junior High School	51	13.75
High School	189	50.94
Diploma	25	6.74
S-1	59	15.9
S-2 and above	6	1.62
Work		
Civil Servants/TNI/Polri	13	3.5
Private employees	80	21.56
Self-employed/Entrepreneur	36	9.71
Students	26	7.01
Other	216	58.22

Source: SmartPLS 4 (2026)

The research location was conducted at community health centers and clinics, the details can be seen in the following table:

Table 2.2.2. Research Location and Number of Respondent Samples

No.	Name of Health Center/Clinic	Number of respondent samples
1	Mangkang Community Health Center, Tugu District, Semarang City	5
2	Bulu Lor Community Health Center, North Semarang District, Semarang City	11
3	Tlogosari Wetan Community Health Center, Pedurungan District, Semarang City	10
4	Halmahera Community Health Center, East Semarang District, Semarang City	10
5	Poncol Community Health Center, Central Semarang District, Semarang City	12
6	Pandanaran Community Health Center, South Semarang District, Semarang City	117
7	Kedungmundu Community Health Center, Tembalang District, Semarang City	124
8	Gayamsari Community Health Center, Gayamsari District, Semarang City	1
9	Srondol Wetan Community Health Center, Banyumanik District, Semarang City	1
10	Ngesrep Community Health Center, Banyumanik District, Semarang City	1
11	Ngaliyan Community Health Center, Ngaliyan District, Semarang City	2
12	Candilama Community Health Center, Candisari District, Semarang City	5
13	Delima Sehat Clinic, Pedurungan District, Semarang City	14
14	Derla Primary Clinic Semarang, Tengah District, Semarang City	7
15	Clinic, Central Semarang District, Semarang City	4
16	Brimedika Clinic, Tembalang District, Semarang City	11
17	Pratama Medika Clinic, Tembalang District, Semarang City	22
18	Cita Sehat Clinic, South Semarang District, Semarang City	3
19	Ceria Life Partner Clinic, Pedurungan District, Semarang City	2

No.	Name of Health Center/Clinic	Number of respondent samples
20	Mardi Mulya IV Clinic, Candisari District, Semarang City	6
21	Rahmat Medika Clinic, Tembalang District, Semarang City	1
22	Kimia Farma Citarum Clinic, East Semarang District, Semarang City	1
23	Selaras Primary Clinic, South Semarang District, Semarang City	1
	Total number	371

Source: Processed data (2026)

2.3. Data Collection Procedures

2.3.1. Research Data

The research data consists of primary and secondary data. Primary data comes from questionnaires completed by respondents. The target population of this study was patients/companions at the at the Primary Health Clinic Services and Community Health Centers in Semarang City, Central Java Province, Indonesia. Secondary data consists of supporting data regarding phenomena related to team performance at the Primary Health Clinic Services and Community Health Centers in Semarang City, Central Java Province, Indonesia. Primary data collection was carried out from January 2, 2025 to February 28, 2025.

2.3.2. Data Collection

In this study, the researcher used data collection methods in the form of:

1. The questionnaire was completed using a closed-ended question method using a 1-5 Likert scale. Respondents were asked to rate various statements related to the research variables. The scale ranged from "1" indicating "Very Poor," describing a very unsatisfactory condition, to "5" indicating "Very Good," reflecting a very satisfactory condition.
2. Enumerators are tasked with interviewing respondents using a questionnaire that is read out to them to obtain their answers. The enumerators record their responses in a Google Form. Therefore, the enumerator must first obtain confirmation to meet with the respondents to obtain answers to the questions in the questionnaire.
3. Referring to the interview guidelines as revealed by Patton. According to Moleong (2002), the interviewer make framework And line big main points Which formulated even though it is not necessary asked in a sequentially. The interviewer also prepares the appropriate diction (word choice) and prepares it in a measured manner. Instructions The interview only contains basic guidelines about the process and the content of the interview to ensure that the planned points can be fully covered. The interview can develop in field according to the researcher's needs to dig up more information in. Interviews were conducted using purposive sampling with users service care road Primary Health Clinics and Community Health Centers in City Semarang as well as Which relevant with This study. Data for public opinion were collected through a questionnaire using a 1-5 Likert scale. This study draws on empirical studies showing that the statistical characteristics of questionnaire results with various scale options are significantly similar. With this approach, the data obtained can provide clearer and more measurable insights into public opinion on the various issues studied. The questionnaire was distributed to respondents through several channels, such as direct distribution in physical form, delivery via email, and the use of an online survey platform. This approach ensured wide reach and ease of access for respondents to provide responses. Each respondent was given a brief explanation of the study's purpose and the importance of their participation, so they could provide accurate and honest assessments. After completing the questionnaire, the collected data was analyzed to gain relevant insights into the variables studied.
4. Documentation. This is data obtained from actual documents related to the object of this research.

2.3.3 . Research Variable Measurement Scale

The measurement tool used in this study is interval data measurement. This scale produces measurements that allow for the calculation of averages, standard deviations, parameter statistics, correlations, and so on. Each indicator item is measured using a scale with five answer choices, where the lowest answer is given a score of 1 and the highest answer is given a score of 5. The score for each indicator is the average value of the indicator items.

Example :

Strongly disagree	Strongly agree
☐	☐
1	5

2.3.4. Research Methods

This research method was conducted through explanatory research because this study intends to explain the causal relationship between variables through hypothesis testing with quantitative research methods . The population of this study were patients/companions at Primary Health Clinics and Community Health Centers in Semarang City. The sampling method used a purposive sampling method. In this explanatory research, the variables were tested through quantitative research methods with Smart PLS SEM (Structural Equation Modeling) data processing. The determination of sample size used in SEM analysis is related to the number of parameters estimated in the model, the number of indicators, and the estimation technique used. The guideline for determining sample size is more than 30 and less than 500 is appropriate for most studies (Sekaran, 2011).

III. RESULTS AND DISCUSSION

3.1. DESCRIPTIVE ANALYSIS OF RESEARCH DATA

Descriptive data analysis is an important initial step in research, providing an overview of the characteristics of the data. This analysis involves the use of descriptive statistics to present, summarize, and organize data for easy understanding. Descriptive analysis, in this case, is used to describe respondents' responses to the research variables. The data is explained by assigning weights to each statement in the questionnaire. Respondent response criteria refer to the questionnaire response procedures below.

1. Strongly Agree, score 5
2. Agree, score 4
3. Neutral, value 3
4. Disagree, score 2
5. Strongly Disagree, score 1

In this study there are five answer choices, the value for each statement is calculated as follows: Maximum score = 5 Minimum score = 1 Range = 5 - 1 = 4

In this study there are five answer choices, the value for each statement is calculated as follows:
Maximum score = 5
Minimum score = 1
Range = 5 - 1 = 4
 $RK = \frac{5-1}{3} = \frac{4}{3} = 1,33$
 $RIK = 4/6 = 0.67$

The following is a data categorization to provide an overview of the variables studied:

- a. High Score = > 3.67
- b. Medium Value = 2.33 to 3.67
- c. Low Value = < 2.33

The results of the analysis of the average respondent's answers for each variable can be seen in Table 3.4. The frequency of respondent answers is attached.

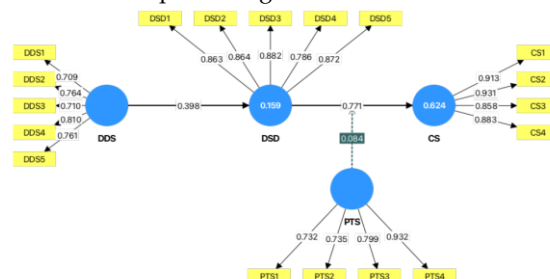
3.1.1. Evaluation of the Measurement Model (Outer Model)

In conducting PLS analysis, the measurement model (outer model) is evaluated, a fundamental evaluation aimed at determining the validity and reliability of the indicators measuring the latent variables. Validity criteria are measured using convergent and discriminant validity, while construct reliability criteria are measured using composite reliability, average variance extracted (AVE), and Cronbach's alpha.

Covergent Validity

Convergent validity testing on PLS can be seen through the magnitude of the outer loading of each indicator on its latent variable. Convergent validity on each indicator can be seen to analyze its reflective indicators. According to the opinion of Ghazali (2011), an outer loading value with a value above 0.70 is highly recommended.

Smart PLS 4 software tools. The results of the data processing are shown in the following image:



Source: SmartPLS 4 (2026)

Evaluation of the outer model or measurement model can be seen from the outer loading value of each variable indicator as shown in the attached table of outer loading calculation results.

Discriminant Validity

Discriminant validity is a measure that shows that a latent variable is not the same as a construct or other variables within a theory and is empirically proven through statistical testing. Discriminant validity is measured using cross-loading, the Fornell Lacker Criterion, and HTMT. The test results for each variable can be explained as follows:

a. Fornell Lacker Criterion Test Results

Validity testing using the Fornell-Lacker Criterion can be done by calculating the root value of the Average Variance Extraction (AVE) and comparing it with the correlation between constructs. This test is considered valid if the root of the AVE is greater than the correlation between variables.

Table 3.1.1.1. Discriminant Validity Test Values with the Fornell-Larcker Criterion

	CS	DDS	DSD	PTS
CS	0.897			
DDS	0.375	0.752		
DSD	0.783	0.398	0.854	
PTS	0.374	0.549	0.432	0.804

Source: SmartPLS 4 (2026)

The table shows that the root value of the AVE is greater than the correlation value between the other constructs. These results indicate that all constructs have good discriminant validity, thus the research instrument used to measure all constructs or latent variables in this study has met the criteria for discriminant validity.

b. Heterotrait-monotrait ratio (HTMT) test results

In the HTMT criteria test, the HTMT matrix is applied. A value of 0.9 is an acceptable HTMT criterion.

Table 3.1.1.2. Discriminant Validity Test Values with Heterotrait-monotrait ratio (HTMT) criteria

	CS	DDS	DSD	PTS	PTS x DSD
CS					
DDS	0.415				
DSD	0.792	0.454			
PTS	0.401	0.679	0.484		
PTS x DSD	0.036	0.176	0.130	0.143	

Source: SmartPLS 4 (2026)

The table shows that the HTMT matrix values are below 0.9. This test indicates that the discriminant validity evaluation is acceptable. Based on these test results, it can be concluded that the HTMT test requirements have been met, so all data analysis results are acceptable.

c. Cross Loading

The results of the analysis of the indicators themselves with construct correlations and other indicators with construct correlations can be presented in the table below:

Table 3.1.1.3. Correlation Values of Constructs with Indicators (Cross Loading)

	CS	DDS	DSD	PTS	PTS x DSD
CS1	0.913	0.350	0.613	0.289	0.065
CS2	0.931	0.337	0.704	0.366	0.001
CS3	0.858	0.287	0.533	0.207	0.006
CS4	0.883	0.356	0.869	0.423	-0.051
DDS1	0.264	0.709	0.286	0.545	-0.131
DDS2	0.238	0.764	0.267	0.433	-0.134
DDS3	0.185	0.710	0.216	0.294	-0.157
DDS4	0.349	0.810	0.366	0.406	-0.072
DDS5	0.329	0.761	0.326	0.376	-0.104
DSD1	0.530	0.377	0.863	0.397	-0.099
DSD2	0.542	0.343	0.864	0.379	-0.109
DSD3	0.838	0.348	0.882	0.420	-0.040
DSD4	0.480	0.313	0.786	0.241	-0.204
DSD5	0.824	0.326	0.872	0.378	-0.079
PTS1	0.257	0.426	0.327	0.732	-0.150
PTS2	0.229	0.450	0.283	0.735	-0.073
PTS3	0.365	0.410	0.401	0.799	-0.081

	CS	DDS	DSD	PTS	PTS x DSD
PTS4	0.320	0.491	0.355	0.932	-0.112
PTS x DSD	-0.001	-0.151	-0.114	-0.127	1.000

Source: SmartPLS 4 (2026)

For discriminant validity testing in this way, it can be said to be valid if the correlation value of the construct with its own indicator has a greater value compared to other constructs and all correlation values of the construct with its own indicator and other constructs show positive values.

3.1.2. Reliability Test

In measuring reliability, it can be applied using 3 (three) methods, namely:

a. Composite Reliability

This method can show the degree that indicates common latent (unobserved), this can show the block indicators that measure the internal consistency of the indicators that form the construct, according to Ghazali & Latan (2015) the acceptable limit value for the Composite reliability level is 0.7.

b. Average Variance Extracted (AVE)

If the AVE value is greater than 0.5, the indicator can be used for research because the indicator used in the research is declared reliable.

c. Cronbach Alpha

If the Cronbach alpha value is greater than 0.7, it can be said that the construct has good reliability.

3.1.3. Evaluation of Model Suitability (Goodness of Fit)

According to Hair et al. (2019), several measures to indicate the acceptability of a proposed model include R-square. R-square indicates the extent to which the variation in endogenous variables can be explained by other exogenous or endogenous variables in the model. Chin (1998) interprets R- square as 0.19 (low influence), 0.33 (moderate influence), and 0.67 (high influence).

Table 3.1.1.4.. R-square value

	R-square	R-square adjusted
CS	0.624	0.621
SDS	0.159	0.156

Source: SmartPLS 4 (2026)

On the CS variable with a value of 0.624 meaning CS have influence and be able to explain CS of 62.4% and the remaining 37.6% is explained by other constructs. Furthermore, the R-square value for the SD variable with a value of 0.159, it means that SD has an influence and is able to explain SD amounting to 15.9% and the other 84.1% is explained through other constructs.

3.1.4. Structural Model Evaluation (Inner Model)

According to Ghazali (2011), structural model testing (inner model) involves examining the relationships between latent constructs by examining the estimated path parameter coefficients and their significance levels. More details can be found in the following table:

Table 4.8 . Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
DDS->DSD	-0.398	-0.404	0.043	9.156	0.000
DSD->CS	0.771	0.772	0.023	34.062	0.000
PTS x DSD->CS	0.084	0.085	0.029	2.909	0.004

Source: SmartPLS 4 (2026)

The results of this study show that all the hypotheses tested were proven, namely :

H1 = Disquality Delivery of Service (DDS) negatively influences Digital Service Dissonance (DSD) .

The results of the first hypothesis test state that DDS negatively affects DSD . The original sample estimate or path coefficient value of -0.398 indicates that DDS negatively affects DSD . The T-statistic value is 9.156 (more than t table 1.96) and the P-value is 0.000 (less than 0.05). These results indicate that DDS negatively affects DSD . Thus, the first hypothesis is accepted. H1 is accepted, meaning that empirical evidence shows that poor service delivery quality significantly increases digital service dissonance, so that improving service quality is an effective strategy to reduce customer dissatisfaction and perception disturbance.

H2 = Digital Service Dissonance (DSD) negatively influences Customer Switching (CS) .

The results of the second hypothesis test state that DSD negatively affects CS . The original sample estimate or path coefficient value of 0.771 indicates that DSD positively affects CS . The T-statistic value is 34.062 (more than t table 1.96) and the P-value is 0.000 (less than 0.05). These results indicate that DSD positively affects CS . Therefore, the second hypothesis is not accepted. H2 was rejected, but the results revealed that digital service dissonance is a strong driver of customer switching behavior. In other words, any increase in dissonance increases the likelihood of customers leaving the service.

H3 = Propensity to Switch (PTS) negatively affects Digital Service Dissonance (DSD) on Customer Switching (CS) .

The results of the fourth hypothesis test state that PTS negatively influences DSD towards CS . The original sample estimate or path coefficient value obtained is 0.084, indicating that PTS positively influences DSD towards CS . The T-statistic value is 2.909 (more than the t-table of 1.96) and the P-value is 0.004 (less than 0.05). These results indicate that PTS positively influences DSD towards CS. CS . So the fourth hypothesis is not accepted. H3 was rejected, but the findings showed that the propensity to switch actually magnifies the negative impact of digital service dissonance on customer switching. In other words, customers who are already prone to switching will be even more motivated to switch when experiencing service dissonance.

IV. CONCLUSIONS

4.1. Discussion

Proper service quality management can directly reduce the digital inconsistency or discomfort experienced by customers. Improving service reliability, timeliness, and accuracy will reduce the potential for service dissonance. This finding supports the conceptual model that low service delivery quality is indeed a major trigger for digital service dissonance. Ignoring digital service dissonance is very risky because it directly encourages customer switching. High PTS will weaken (negative direction) the effect of DSD on CS, meaning that even if digital service dissonance exists, people with a high propensity to switch will not easily switch. Conversely, high PIS strengthens (positive direction) the effect of DSD on CS. This means that the higher the tendency of customers to switch brands/services, the greater the chance of them actually switching when they experience digital service dissonance.

The results of this study indicate that in government-provided or public-sector services, as well as clinical services, consumers are less likely to switch easily. This is because consumers are systematically bound to receive services at the primary health care provider they registered for or attended. However, management still needs to check services to prevent digital fraud. Service dissonance is a symptom of service dissonance in service delivery. Service dissonance can cause customers to discontinue service and tarnish the reputation of their primary healthcare provider if consumers choose to complain on digital media that is easily accessible to many people. Therefore, future research is expected to further explore the causes of service dissonance and reduce the

impact of customers discontinuing service. Therefore, a service recovery management model is needed to reduce digital service dissonance. Dissonance over Disquality Delivery of Service in service delivery which can result in the search for new marketing affiliates to customer switching.

4.2. Conclusion

The results of this study indicate that of the three hypotheses tested, one is accepted and the other two are not. One accepted hypothesis is that Disquality Delivery of Service negatively influences Digital Service Dissonance. The other two are not accepted: Digital Service Dissonance negatively influences Digital Service Dissonance. Service Dissonance negatively affects Customer Switching, and Propensity to Switch negatively affects Digital Service Dissonance on Customer Switching. These findings indicate that although the relationship between the variables is significant, the direction of the relationship observed in the field does not align with initial theoretical predictions, thus rejecting the hypothesis. This suggests that specific characteristics of consumer behavior or the digital service context influence this relationship pattern.

4.3. Research Limitations-

This research was conducted largely in the public sector, organized by the government, because the primary healthcare facilities used in this study were community health centers (Puskesmas) and primary health clinics, which are clinical services that bind consumers to prevent them from easily switching. Future research should be conducted in private healthcare locations, which allow consumers to easily switch because there is no obligation to receive healthcare services at that healthcare facility. The results of this study also provide valuable lessons for improving future research, starting from the limitations in this study, which occurred due to the lengthy licensing process and when sampling patients/companions at the Primary Health Clinic and Community Health Center in Semarang City was not willing to be interviewed. It would be better if in future research patients/companions were willing to openly take the time to be open and enthusiastic in being interviewed.

4.4. Managerial Implications -

The results of this study provide the following managerial implications:

1. Customers with a high propensity to switch are the group most vulnerable to churn if there are service issues. Special strategies are needed to retain this group, such as loyalty programs, long-term contracts, or personalized service.
2. This research needs to be further developed, including revising the model or framework for future research. The relationship between DSD and CS was found to be positive, so the initial (negative) assumption does not align with respondents' actual behavior.
3. The management of Primary Health Clinics and Community Health Centers in Semarang City should check their services to prevent digital service dissonance due to disquality service delivery.
4. The management of Primary Health Clinics and Community Health Centers in Semarang City needs to optimize adequate complaint mechanisms that can be accessed by consumers online, not through chat bots, or offline, in order to minimize the occurrence of digital service dissonance.

The management of Primary Health Clinics and Community Health Centers in Semarang City needs to optimize the digital features of their services to be friendly to all consumers, not only young but also elderly.

REFERENCES

- Ajzen, I., Fishbein, M. (2005). Attitudes, personality, and behavior (2nd. Edition).
- Anderson, Erin & Weitz, Barton A. (1989). Determinants of continuity in conventional industrial channel dyads. *Marketing Science*, 8 (Fall), 310 – 232.
- Arikunto, Suharsimi, (2002). *Research Procedures, A Practical Approach*. Jakarta: PT. Rineka Cipta
- Bolton, R. N., & Lemon, K. N. (1999). A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction. *Journal of Marketing Research*, 36(2), 171-186
- Chaipat Lawsirirat. (2007). *Creating Optimal Service Delivery Strategy Of Long-Term Service Agreements From Risk Management Perspective*. New York : Rensselaer Polytechnic Institute Troy.
- de Matos et al (2009). Consumer reaction to service failure and recovery: the moderating role of attitude toward complaining. *Brazilian Journal of Services Marketing* 7/23 462–475.
- Edvardsson, B., & Roos, I. (2001). Critical incident techniques: Towards a framework for analysing the criticality of critical incidents. *International Journal of Service Industry Management*, 12(3), 251-268
- Fournier, Susan & David Glen Mick (1999). "Rediscovering Satisfaction." *Journal of Marketing*. 63. 5 – 23.
- Ganesh, J., Arnold, M. J., & Reynolds, K. E. (2000). Understanding the customer base of service providers: An examination of the differences between switchers and stayers. *Journal of Marketing*, 64(3), 65-87
- Ghozali, Imam (2011). "Application of Multivariate Analysis with SPSS Program". Diponegoro University Publishing Agency, Semarang.
- Ghozali, Imam, Hengky Latan. (2015). *Concepts, Techniques, Applications Using Smart PLS 3.0 for Empirical Research*. BP Undip. Semarang
- Grönroos, C. (1982). "An Applied Service Marketing Theory". *European Journal of Marketing*, Vol. 16 No. 7, hlm. 30-41
- Gro'nroos, C. a. R., A. (2010). Service as business logic implications for value creation and marketing. *Journal of Service Management*, Vol. 22 No. 1, 5-22. doi: 10.1108/09564231111106893
- Harnanto. (2017). *Cost Accounting: Historical Cost System*. Yogyakarta: BPFE.
- Hair, J.F. et al (1998). *Multivariate Data Analysis*. N.J. Prentice-Hall.
- Hair JR., Joseph F., et al., (2010) *Multivariate Data Analysis*. Seventh Edition. By Pearson Prentice Hall. All Rights Reserved.
- Harmon-Jones, Eddie. (2000) Cognitive Dissonance and Experienced Negative Affect: Evidence That Dissonance Increases Experienced Negative Affect Event in the Absence of Aversive Consequences. *University of Wisconsin-Madison. PSPB*, Vol. 26 No. 12, 1490-1501
- Holloway. (1971). *Consumer Research : Contemporary Research in Action*
- Istijanto, (2006), *Human Resources Research*. Jakarta: PT. Gramedia Pustaka Utama.
- Isoard, Godfrey. (2012). *An Urgent Need for Investment in Health Management Education*. School of Health, University of New England, Australia.
- Kotler, P. (2002). *Marketing Management Millenium Edition*. 10 (Custom Edition for University of Phoenix).
- Kotler, P. K., K. L. (2012). *Marketing Management*. 14.
- Kumaran, S; Bishop, et al. (2007) Using a Transformational and Service-Oriented Model-Driven Architecture Approach for Service Delivery Management pg. 513
- Liu, Annie H. (2006) Customer Value and Switching Costs in Business Services: Developing Exit Barriers Through Strategic Value Management. *The Journal of Business & Industrial Marketing* 21, 1,; ABI/INFORM Complete pg. 30
- Lopez, A. D., Mathers, C. D., Ezzati, M., Jamison, D. T., & Murray, C. J. L. (Eds.). (2006). *Global Burden of Disease and Risk Factors*. Oxford University Press.
- Mazurek., Gerzgorz & Kucia., Michal. (2011). Potential of Affiliate Marketing. *The 7th International Conference Management of Technological Changes - MTC 2011*. P 1-5.
- Malhotra, A., Kubowicz Malhotra, C., & See, A. (2013). How to create brand engagement on Facebook. *MIT Sloan Management Review*, 54(2), 18–20
- Metin., Irem & Camgoz, Selin Metin (2011). The Advances in the History of Cognitive Dissonance Theory. *International Journal of Humanities and Social Science* Vol. 1 No. 6
- Nur Indrianto & Bambang Supomo, (1999), *Research Methodology for Accounting and Management*, BPFE. UGM, Yogyakarta.
- O'Neil, Martin & Palmer, Adrian. (2004). Cognitive dissonance and the stability of service quality perceptions. *The Journal of Services Marketing*; 2004; 18, 6/7; ABI/INFORM Complete. pg. 433
- Parasuraman A, LL. Berry and Zethaml, AV, (1985), A Conceptual Model of Service Quality and Its Service Quality and Its Implications for Future Research, In BM Enis, KK Cox, and MP Moscow (Eds), *Marketing Classics: A Selections of Influential Articles*, 8th Ed., Engewood, Cliffs, NJ : Prentice Hall International, Inc.
- Patrick., Zurina & Hee., Ong Choon. (2021). Affiliate Marketing in SMEs: The Moderating Effect of Developmental Culture. *Pertanika J. Soc. Sci. & Hum.* 29 (2): 1249 – 1271
- Rahman, S., and Widiyanto, I. (2014). Service Atonement Toward The Service Dissonance and Customer Switching. *Proceeding 4th International Conference on Economics, Trade and Development- ICETD 2014*, Penang, Malaysia.
- Rosenbaum, M.S., Kim, K., Ramirez, G.C., Orejuela, A.R. and Park, J.(2021), "Improving well-being via adaptive reuse: transformative repurposed service organizations", *The Service Industries Journal*, Vol. 41 Nos 3-4, pp. 223-247, doi: <https://doi.org/10.1080/02642069.2019.1615897>.
- Roos, Inger., et al (2004) Customer Switching Patterns in Competitive and Noncompetitive Service Industries. *Journal of Service Research* 6, 3 pg. 256
- Sheth, e. a. (1988). *Marketing Theory : Evolution and Evaluation*.
- Smith, AK, et al (1999), "A model of customer satisfaction with service encounters involving failure and recovery", *Journal of Marketing Research*, Vol. 36 No. 3, pp. 356-72.

- Steyn., TFJ et al (2011) . The Effect of Service Failure and Recovery on Airline Passengers Relationships : A Comparison Between South African and United States Airline Passengers . *Journal of Management Policy and Practice* vol. 12(5)
- Uma Sekaran & Roger Bougie (2010). *Research Methods For Business : A Skill Building Approach* (Coursesmart) Publisher: Wiley Pages: 488
- Varela-Neira , Concepción et al (2010). The effects of customer age and recovery strategies in a service failure setting . Macmillan Publishers Ltd. 1363-0539. *Journal of Financial Services Marketing* Vol. 15, 1, 32-48.
- Wang., C.-y. a. M., Anna S. (2011). A cross-cultural comparison of perceived informational fairness with service failure explanations. *Journal of Services Marketing*, 429-439.
- Zeithaml, V. A. (1988). Consumer Perception of Price, Quality and Value : A Means -End Model and Synthesis of Evidence. *Journal of Marketing*, 52, 3., 2 - 22.