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The influence of the Service Quality dimension on Attitudinal Loyalty and Behavioral Loyalty moderated by the Level of Internet Usage and switching costsstudycase on *Indihome* in Indonesia

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ABSTRACT

The increase in Indihome subscribers increased but the Fixed Broadband Market Share for Indihome products decreased. It is suspected that there is a decrease in Indihome customer loyalty, supported by data on bad customer loyalty behavior and also the attitude of customer loyalty is not good. Investigation is necessary to find the causes of decreased loyalty, so this research uses the Service Quality internet service provider model for quantitative analysis involving independent variables namely Network Quality, Customer Service, Information Quality and Security, and the dependent variables namely Attitudinal Loyalty and Behavioral Loyalty, and moderator variables namely Internet Usage Lavel and Switching cost. The causal relationship between the eight variables forms a structural equation model (SEM). Data were obtained from 408 Indihome internet customers, and the data were analyzed using WarpPLS 8.0 software.

The results of this research indicate that the provider must pay attention to information to customers to continue to provide complete, up-to-date, useful and accurate information to make customers loyal. They also need to pay attention to the value of increasing customer loyalty, which in the future customers will continue to subscribe. And they need to improve Customer Service services for Internet users with high intensity. The provider need to increase Security which has a high level of Switching Cost because it can weaken Attitudinal loyalty.

Keywords: *Service Quality, Attitudinal Loyalty, Behavioral Loyalty, Internet Usage Lavel and Switching Cost*

1. Introduction

The increase in ISP subscribers in 2021 was 9.43%, but the Fixed Broadband Market Share for Indihome products fell -3.32% in 2021. From this it is suspected that there is a decrease in Indihome customer loyalty supported by data on customer loyalty behavior that is not good for Indihome products, the average churn value is still at 0.61% of the target of 0.3% of total customers in 2021 and 0.66% in 2020. This can show an attitude of customer loyalty that is not good for Indihome products, because the average NPS score is still at 7.36 out of a scale of 10 which is still below the target score of 8 in 2021. On the other hand, Indihome subscribers continued to increase, supported by data on the number of Indihome subscribers increasing by 6.81% in 2021 and 21% in 2020. The service provided by Indihome does not reflect a good value, which can be seen from the value of Indihome customer disruption, which is still at a high rate, exceeding the target, where the average Indihome customer interruption is still at 6.06% of the target of 3% in 2021 and 6.03%. in 2020. To maintain customer loyalty, it is necessary to have good service quality where according to research of Zeithaml et al. (1996) service quality affects customer loyalty.

The use of the service quality research model according to Quach et al. (2016) is closest to this research, because the object of this research is broadband internet. Added to the research limitations of Quach et al. (2016) where the object of previous research was that there were no competitors in the broadband internet business in Thailand, on the contrary, in this research object there were many competitors so it was necessary to consider switching costs as a moderator variable according to the research of Aydin et al. (2005)

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2. Literature Review and Hypothesis Development

2.1 Network Quality

The definition of Network Quality is a situation where customers can still use internet services without being limited by time, according to research from Cameron et al. (2007). Meanwhile Network Quality according to Li.X et al. (2011) internet speed has always been a major concern in the use of internet services and this is one of the most important performance indicators for all types of internet services. According to Okuthe et al. (2022) traffic flow classification is an important factor in Network Quality, capacity planning, identification of user needs and the possibility of tracking the growth of the user population based on network usage. According to Quach et al. (2016) Network Quality including connectivity quality, signal clarity, and internet speed are considered as fundamental quality characteristics in internet services that affect customer retention and also as one of the drivers of customer loyalty.

H1 : Network Quality has a positive and significant influence on Attitudinal Loyalty
H5 : Network Quality has a positive and significant influence on Behavioral Loyalty

2.2 Customer Service

Customer Service and customer support are important dimensions that explain e-banking service quality. Improving e-banking service quality will enable banks to retain loyal customers for e-banking services according to Demirci-Orel (2015).Customer service and technical support are parties that handle company operations and act as a liaison between the company and customers and handle customer needs and complaints. Companies that have good customer service and technical support will be able to provide good or positive perceptions to customers and be superior to these companies compared to other ISP provider companies.

H2: Customer Service has a positive and significant influence on Attitudinal Loyalty
H6: Customer Service has a positive and significant influence on Behavioral Loyalty

2.3 Information Quality

According to Howard et al. (2011) Information quality is recognized as playing an important role in service quality. Information quality is said to consist of facts and data, which are organized for a specific purpose. Information quality is the main criterion for measuring the success of information systems, and decision quality is a function of information quality. Service quality is the level of satisfaction felt by users regarding the technical and functional performance of Information Quality according to Kim et al (2012). Customers must rely on the description of information provided by the seller to understand the product, and customers will place more emphasis on information systems such as completeness of information, convenience, accuracy of information, and accuracy of information according to Dickinger et al (2013).

H3: Information Quality has a positive and significant influence on Attitudinal Loyalty
H7: Information Quality has a positive and significant influence on Behavioral Loyalty

2.4 Security

According to Kelly et al. (2002) customer security in internet services includes customer data security, access to information held about customers and knowing that it is accurate and safe, sending and receiving email messages or other data that will not be intercepted or read by anyone other than the intended recipient. Security is defined as the seller's ability to protect customer personal information from any suspicious use in internet transactions according to Dovalieno et al (2007) and Guo et al (2012). Having a trusted website with high security helps customers to have more trust for transactions and ultimately feel satisfied. Security is divided into two parts, the first part is related to data and transaction security, the second part is about user authentication according to Gay et al (2007).

H4: Security has a positive and significant influence on Attitudinal Loyalty
H8: Security has a positive and significant influence on Behavioral Loyalty

2.5 Attitudinal Loyalty and Behavioral Loyalty

Attitude loyalty includes positive word of mouth intentions, willingness to recommend to others and encourage others to use the company's products and services, Zeithaml et al. (1996). Attitudinal loyalty describes consumers' identification with certain service providers and preferences for products or services over

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alternatives, Jones et al (2007). Attitudinal Loyalty as an attitude and focuses on consumer psychological commitment according, Odin et al. (2001). The concept of attitudinal loyalty refers to consumer agreement with intensive problem-solving behavior that includes brand and feature comparisons and leads to strong brand preferences according to Bennett et al. (2002). The attitudinal loyalty measure uses attitudinal data indicating affective and psychological factors in the loyalty structure and it is claimed that this measure is related to commitment and feelings of loyalty, Bowen et al (2001). According to Choi et al (2017), there are three indicators for forming attitudinal loyalty, namely: Recommending products; Protect the brand or product; Trust the product.Behavioral Loyalty is defined as loyalty that is fully focused on the behavioral dimension. Specifically, loyalty is defined as a form of consumer behavior (such as repurchasing) directly towards a certain brand over a certain period of time, Geçti et al. (2013) supported by Zeithaml et al. (1996) in Quach et al (2016). Tjiptono (2018:394) based on the perspective of Behavioral Loyalty is defined as a consistent repurchase of a brand by customers. Every time customers buys the same product again, they are said to be loyal customers to that brand. Chauduri et al (2001) stated that behavioral loyalty is repeated purchases of certain brands. Choi et al (2017), stated that there are three indicators that can affect Behavioral Loyalty, namely: Repurchasing products; Keep using the product as the main choice; Encouraging even more use of the product

H9: Attitudinal Loyalty has a positive and significant influence on Behavioral Loyalty
H10: Attitudinal Loyalty mediates the influence of Network Quality on Behavioral Loyalty
H11: Attitudinal Loyalty mediates the influence of Customer Service on Behavioral Loyalty
H12: Attitudinal Loyalty mediates the influence of Information Quality on Behavioral Loyalty
H13: Attitudinal Loyalty mediates the influence of Security on Behavioral Loyalty

2.6 Internet Usage Lavel

According to Almarabeh et al (2016) Internet usage is the amount of information transferred through your internet connection (i.e. browsing the web, checking email, downloading and uploading files, streaming audio and video, etc.). According to Teo et al (1999) Internet users are categorized with very low intensity (less than one hour per day), low intensity (1-2 hours per day), moderate intensity (2-3 hours per day), high intensity (3-4 hours per day), and high intensity (more than 4 hours per day) and supported by research of Quach et al (2016). Internet use can positively moderate the relationship between intentions and Green Consumption behavior and internet use can positively moderate the relationship between Perceived Behavioral Control and Green Consumption behavior according to Wang et al (2022)

H14: The influence of Network Quality on Attitudinal Loyalty is moderated by Internet Usage Lavel
H15: The influence of Customer Service on Attitudinal Loyalty is moderated by Internet Usage Lavel
H16: The influence of Information Quality on Attitudinal Loyalty is moderated Internet Usage Lavel
H17: The influence of Security on Attitudinal Loyalty is moderated by Internet Usage Lavel
H18: The influence of Network Quality on Behavioral Loyalty is moderated by Internet Usage Lavel
H19: The influence of Customer Service on Behavioral Loyalty is moderated by Internet Usage Lavel
H20: The influence of Information Quality on Behavioral Loyalty is moderated by Internet Usage Lavel
H21: The influence of Security on Behavioral Loyalty is moderated by Internet Usage Lavel

2.7 Switching Cost

Aydin et al. (2005) stated that switching costs become a kind of extra strategy in a competitive environment. These costs can delay or cancel a consumer's desire to switch. In Research from He et al. (2009) when the Switching Cost is very large, dissatisfied customers tend to maintain business relationships with existing providers and customer groups who maintain their loyalty because high Switching Costs is possible in the business world or can be called false loyalty. In a research by Edward et al. (2010) satisfying service quality performance better than other service providers can lead to increased customer loyalty whereas low service quality performance but high switching cost levels can keep customers using the service. In a research by Ruyter et al. (1997) found that Switching Cost is a quasi moderator for the relationship between perceived service quality and loyalty. Switching Cost shows a significant positive influence on loyalty. In a research by Widodo et al (2020) The results of the study that were carried out were obtained Switching Cost can significantly affect the loyalty variable. Success in Increasing Switching Costs has strong and direct impacts on Customer Loyalty. In a research by Chou et al (2009) found that with increasing switching costs, the relationship between service quality and customer loyalty also increases and with increasing service quality, the influence of switching costs on customer loyalty also increases. In the research of Lee et al. (2001) switching costs are customer perceptions

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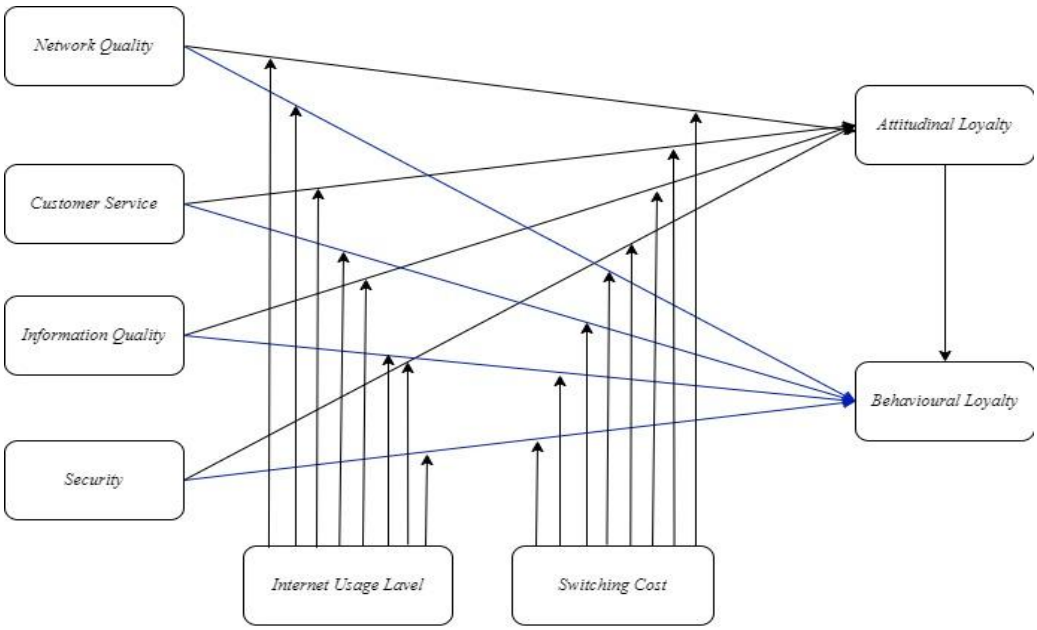
of the time, money and effort associated with changing service providers. Consumer direct costs are also associated as a transition process from one service provider to another.

H22: The influence of Network Quality on Attitudinal Loyalty is moderated by switching costs
H23: The influence of customer service on attitudinal loyalty is moderated by switching costs
H24: The influence of Information Quality on Attitudinal Loyalty is moderated by switching costs
H25: The influence of Security on Attitudinal Loyalty is moderated by switching costs
H26: The influence of Network Quality on Behavioral Loyalty is moderated by switching costs
H27: The influence of customer service on behavioral loyalty is moderated by switching costs
H28: The influence of Information Quality on Behavioral Loyalty is moderated by switching costs
H29: The influence of Security on Behavioral Loyalty is moderated by switching costs

Figure 1. Research Model



3. Methodology

This research is causality research. According to Ferdinand (2014: 7) causality research aims to find the cause-effect of several variables developed in management science. Based on the research method, this research has a quantitative method (hyphothesis testing research). In Ferdinand's book (2014: 9) quantitative research is to find new concepts or thesis. There are 2 dependent variables in the ISP Service Quality analysis model used by researchers, namely Attitudinal loyalty (AL) and Behavioral loyalty (BL) and four independent variables, namely Network Quality (NQ), Customer Service (CS), Information Quality (IQ) and Security (SC), then there are two moderator variables, namely internet usage lavel (IUL) and switching cost (SC). Ordinal scale and the Likert scale technique are used in this research. The research model uses structural equation modeling (SEM) analysis. According to Kock et al. (2016) the sample used in the PLS-SEM research used the inverse square root method, resulting in a minimum required sample size of 160 and based on the exponential gamma method, a minimum sample of 146. For this research, a sample of 408 was used from a total population of 7,270,551. Furthermore, the sampling technique was carried out by non-probability sampling method. According to Ferdinand (2014: 176) non-probability sampling was chosen on the basis of its availability or because of the consideration of the researcher that they could represent the population. The type of nonprobability sampling used in this research is purposive sampling with the following criteria: Indihome customers; Aged between 17 years to 60 years; Customers who have subscribed to Indihome services for more than 60 days.

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4. Result and Discussion

4.1 Characteristics of Respondents

Through distributing this questionnaire, researchers obtained 515 respondent data. The results obtained were 415 respondents who used Indihome services or 81% of the total respondents. The remaining 100 respondents or 19% did not use Indihome services. Then a Screening Question was carried out for Indihome users, it was found that 408 respondents or 98.31% of the total Indihome users in this research respondents had used Indihome services for more than 60 days. The remaining 7 respondents or 1.7% are less than 60 days. Then a second Screening Question was carried out, namely customers aged 16 to 60 years, 408 respondents or 100% were obtained, which means that all respondents were in the age range of 16 to 60 years. The samples in this research were dominated by male, namely 271 respondents or 66.4% of the total sample. The remaining 137 or 33.6% are female. Then the samples in this research were dominated by respondents who live in region 6 or in the island of Kalimantan and its surroundings by 87 respondents or 21% of the total respondents. Then successively region 5 East Java, Bali and Nusa Tenggara with 75 respondents or 18%, region 3 West Java with 69 respondents or 17%, region 2 Jabodetabek and Banten with 64 respondents or 16%, region 4 Central Java and the Special Region of Yogyakarta with 39 respondents or 10%, region 7 Sulawesi, Maluku Islands and Papua with 38 respondents or 9% and region 1 Sumatra Island with 38 respondents or 9%. The samples in this research mostly worked as private employees with 173 respondents or 42% of the total respondents, followed by BUMN employees with 109 respondents or 27%, students with 44 respondents or 11%, civil servants with 32 respondents or 8%, Entrepreneurs as many as 31 respondents or 8%, and Other Workers as many as 19 respondents or 5%. The samples in this research were dominated by respondents with incomes above 10 million per month as many as 135 respondents or 33% of the total, followed by respondents with incomes of 4 to 6 million per month as many as 125 or 31%, then respondents with incomes of 7 to 9 million Monthly as much as 76 or 19% and finally respondents with an income of 1 to 3 million per month are 72 or 18%.

Table 1 Sample Characteristics

Demographic Profile	Number of Respondents	Percentage
Are you an Indihome customer		
Yes	415	80.58%
No	100	19.42%
How long have you been using Indihome		
More than 60 days	408	98.31%
Less than 60 days	7	1.69%
Current age		
16-60 Years	415	100.00%
Less than 16 or more than 60 years	0	0.00%
Sex		
Male	271	66.4%
Female	137	33.6%
Area of Residence		
Region 1 (Sumatra Island and Surrounding Areas)	36	9%
Region 2 (Jabodetabek & Banten)	64	16%
Region 3 (West Java)	69	17%
Region 4 (Central Java & Yogyakarta Special Region)	39	10%
Region 5 (East Java, Bali and Nusa Tenggara)	75	18%
Region 6 (Kalimantan and Surrounding Areas)	87	21%
Region 7 (Sulawesi, Maluku Islands & Papua)	38	9%
Occupation		
Student	44	11%
Entrepreneur	31	8%
Government employee	32	8%
BUMN employee	109	27%
Private employee	173	42%
Other Worker	19	5%
Income		
1-3 Million Per Month	72	18%

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4-6 Million Per Month	125	31%
7-9 Million Per Month	76	19%
Above 10 Million Per Month	135	33%

Results of Validity and Reliability

The results of this research were processed using PLS-SEM measurements with the WarpPLS 8.0 application. The validity and reliability tests on PLS-SEM according to Hair et al (2022) can be carried out by evaluating the Outer Measurement Model. To test the validity in this research, theory of confirmatory composite analysis or CCA (Confirmatory Factor Analysis) was used where for the first stage CCA on the reflective variable performs the calculation of the loading factor on each indicator to determine the value of validity. An indicator is declared valid if it has a loading factor value that is greater than 0.5 and is more ideal if the loading factor value is above 0.7 according to Hair et al (2020). Convergent Validity is measured by finding the AVE value for each variable where each variable has an AVE value above 0.5 so that each indicator can be said to be unified and can represent this variable according to Hair et al (2010) and test Internal Consistency Reliability where these variables can be used or are reliable for research by looking for reliability values using Composite reliability and Cronbach's alpha, the Composite reliability value is above 0.7 and the Cronbach Alpha value is above 0.6.

Table 2 Variables, Indicators, Factor loading and AVE

Variables	INDICAOTR	Loading Factor	AVE
(NQ)	I get good service when using indihome and didn't experience any service disconnection for a long time when using Internet	0.748	0.605
	I feel that internet download and upload speed matches the package I bought	0.835	
	I feel that internet speed remains smooth regardless of peak or non-peak hours	0.747	
(CS)	I feel the customer service personnel are knowledgeable	0.665	0.664
	I feel the customer service staff is willing to respond to my questions	0.857	
	I feel that my technical problem was resolved immediately by the Indihome service staff	0.902	
IQ)	I feel that products provide quite complete information	0.828	0.643
	I feel that products provide up-to-date information	0.731	
	I feel that products provide useful and accurate information for customers	0.842	
SR)	I feel that my personal data information is protected by provider	0.815	0.633
	I feel that my financial transaction data information is protected by provider	0.818	
	I feel safe when using internet services	0.753	
(SC)	I feel that moving to another ISP will waste material and non-material	0.905	0.791
	I found it expensive to switch to a new ISP	0.878	
	I find it generally inconvenient to switch to a new ISP	0.884	
(AL)	I feel myself as a loyal defenders customer	0.761	0.623
	I will share positive things about this is provider with others	0.853	
	I will recommend this is provider to others	0.748	
(BL)	I will choose this provider as my first choice	0.838	0.607
	I will be doing more business with this provider in the next few years	0.771	
	I will be a regular customer of this provider	0.724	

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Table 3 Composite Reliability and Cronbach Alpha

Variables	Cronbach Alfa	Composite Reliability	Annotation
(NQ)	0.672	0.821	Reliabel
(CS)	0.739	0.854	Reliabel
(IQ)	0.721	0.844	Reliabel
SR)	0.71	0.838	Reliabel
(SC)	0.868	0.919	Reliabel
(AL)	0.695	0.831	Reliabel
(BL)	0.674	0.822	Reliabel

Table 2 and Table 3 shows that each indicator has a loading factor value above 0.7 which indicates that the data is ideally valid and one CS1 indicator above 0.5 is still in the valid category range so that each indicator can measure its respective variable. Then the validity of the variables arranged in each indicator were tested by looking at the AVE value, the results obtained for each variable are above 0.5 which can be interpreted as Valid which means that each indicator can be combined to represent the variable. Then the reliability value of each variable were tested by looking at the value of Composite reliability and Cronbach's alpha. Composite reliability for each variable is above 0.7 and Cronbach's alpha was above 0.6 so that each variable is reliable so that all indicators can be used for this research.

4.2 Inner model test results

The Model Fit Test was used to evaluate the measurement model and structural model and provides a simple measure of the overall model prediction used to validate the model, according to Kock et al 2019 in Perju-Mitran et al. (2020).

Table 3 Inner Model Test Results

No	Parameters	Criteria	Result	Quality
1	Average path coefficient (APC)=0.099	significant if p≤0,05	p<0,001	significant
2	Average R-squared (ARS)=0.622	significant if p≤0,05	p=0,001	significant
3	Average adjusted R-squared (AARS)=0.610	significant if p≤0,05	p=0,004	significant
4	Average block VIF (AVIF)	ideal if AVIF ≤3,3	2,153	ideal
		accepted if AVIF ≤5		
5	Average full collinearity VIF (AFVIF)	ideal if AFVIF≤3,3	2,324	ideal
		accepted if AFVIF ≤5		
6	Tenenhaus GoF (GoF)	Large if GoF≥ 0,36	0,638	large
		Medium if GoF≥ 0,25		
		Small if GoF≥ 0,1		
7	Sympson's paradox ratio (SPR)	ideal if SPR=1		
		accepted if SPR≥0,7	0,880	accepted
8	R-squared contribution ratio (RSCR)	ideal if RSCR=1		
		accepted if RSCR≥0,9	0,970	accepted
9	Statistical suppression ratio (SSR)	accepted if SSR≥0,7	0,960	accepted
10	Nonlinear bivariate causality direction ratio (NLBCDR)	accepted if NLBCDR≥0,7	0,760	accepted

The results obtained from table 3 are that all criteria of goodness of fit in the structural model of this research have a good value above the criteria that have been determined as a whole. On the results of the model fit test, the measurement index that a structural model can be said to be good of fit if it has at least 5 parameters in the model suitability measurement that reach predetermined criteria according to Hair et al (2010).

4.3 Hypothesis Testing Results

The hypothesis test in this research was determined by the significance and strength of the relationship between the variables according to the hypothesis that had been made.

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Table 4 Hypothesis Test Results

Hypothesis	Causal Relationship	Regression Coefficient	P-Value Significance	Conclusions
H1	NQ---> AL	0.143	0.011	**accepted**
H2	CS---> AL	0.171	0.002	**accepted**
H3	IQ---> AL	0.49	<0.001	**accepted**
H4	SR---> AL	0.164	0.001	**accepted**
H5	NQ---> BL	0.17	0.003	**accepted**
H6	CS---> BL	0.035	0.271	**not accepted**
H7	IQ---> BL	0.084	0.076	**not accepted**
H8	SR---> BL	0.145	<0.001	**accepted**
H9	AL---> BL	0.431	<0.001	**accepted**

In table 4 the regression coefficient and P value can answer questions on the research hypothesis. The regression coefficient can show how much influence the hypothesized variables have. Meanwhile, the P value shows that the influence between these variables is significant or not, if the p value is below 0.05, it can be said that these variables have a significant influence. Obtained based on the processing of researchers using WarpPLS shown in table 4 it can be concluded that H1, H2, H3, H4, H5, H8 and H9 are accepted, while H6 and H7 are rejected.

Structural equations were obtained from the relationships between variables in a research model by Widodo et al (2020). The above equation shows that the Attitudinal Loyalty variable is influenced by Network Quality, Customer Service, Information Quality and Security with regression coefficients on each variable. In addition to the regression coefficient, the structural equation also shows information about R2 and error variance. R2 which has a value of 0.599 in the structural equation shows information that 59.9% of the Attitudinal Loyalty variable has been explained through the variables that influence it in this research. The remaining 40.1% can be explained by the error variance. There is a possibility that there are other variables that can explain Attitudinal loyalty. The equation above shows that the Behavioral loyalty variable is influenced by Network Quality, Customer Service, Information Quality, Security and Attitudinal loyalty with a regression coefficient for each variable. In addition to the regression coefficient, the structural equation also shows information about R2 and error variance. R2 which has a value of 0.634 in the structural equation shows information that 63.4% of the behavioral loyalty variable has been explained through the variables that influence it in this study. The remaining 36.6% can be explained by the error variance. There is a possibility that there are other variables that can explain behavioral loyalty.

AL= 0.143*NQ+0.171*CS+0.49*IQ+0.164*SR, Errorvar= 0,401 R2=0.599

BL= 0.17*NQ+0.035*CS+0.084*IQ+0.145*SR+0.431*AL, Errorvar= 0,366 R2=0.634

Table 5 Indirect Effect Test Results (Indirect Effect)

Hypothesis	Causal Relationship	Direct Effect	Indirect Effect	Total Effect	P-Value Significance	Role of Attitudinal loyalty
H10	NQ-->AL-->BL	0.17	0.062	0.232	<0.001	Strengthening the Effect
H11	CS--> AL--> BL	0.035	0.074	0.108	0.032	Strengthening the Effect
H12	IQ--> AL--> BL	0.084	0.211	0.295	<0.001	Strengthening the Effect
H13	SR--> AL--> BL	0.145	0.071	0.216	<0.001	Strengthening the Effect

It can be concluded in table 5 that the hypotheses H10, H11, H12 and H13 show a P value below 0.05, so it can be said that the Attitudinal loyalty variable has a significant influence on Behavioral loyalty (BL).

Table 6 Internet Usage Lavel Moderation Test Results

Hypothesis	Causal Relationship	Effect of IUL	P-Value Significance	Conclusions
H14	NQ---> AL	0.007	0.471	not supported
H15	CS---> AL	0.105	0.042	supported
H16	IQ---> AL	0.04	0.313	not supported
H17	SR---> AL	0.008	0.454	not supported
H18	NQ---> BL	0.081	0.218	not supported

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H19	CS---> BL	0.085	0.268	not supported
H20	IQ---> BL	0.022	0.355	not supported
H21	SR---> BL	0.025	0.348	not supported

The results of table 6 show that the results of moderation from the level of internet users have not had a significant influence. There is only a significant influence between the Customer Service variable and Attitudinal Loyalty, which obtains a smaller p value of 0.05 with a regression coefficient effect of 0.105.

Table 7. Switching Cost Moderation Test Results

Hypothesis	Causal Relationship	Effect of Switching Cost	P-Value Significance	Conclusions
H22	NQ---> AL	0.049	0.446	not supported
H23	CS---> AL	-0.047	0.212	not supported
H24	IQ---> AL	-0.071	0.475	not supported
H25	SR---> AL	-0.073	0.024	supported
H26	NQ---> BL	-0.017	0.462	not supported
H27	CS---> BL	-0.018	0.46	not supported
H28	IQ---> BL	-0.049	0.076	not supported
H29	SR---> BL	0.013	0.485	not supported

The results of Table 7 show that the moderating results of Switching Costs have not had a significant influence. There is only a significant influence between the Security variable and Attitudinal Loyalty, which obtains a p value smaller than 0.05 with a regression coefficient effect of -0.073 but the regression coefficient becomes negative, so if Switching Cost increases, the influence of Customer Service on Attitudinal Loyalty becomes weak or decreases.

5. Conclusions

Network Quality has a positive and significant influence on Attitudinal Loyalty in a positive direction with a path coefficient value of 0.143 and a P value of 0.011. Customer Service has a positive and significant influence on Attitudinal Loyalty in a positive direction with a path coefficient value of 0.171 and a P value of 0.002. Information Quality has a positive and significant influence on Attitudinal Loyalty in a positive direction with a path coefficient value of 0.49 and a P value of <0.001. Security has a positive and significant influence on Attitudinal Loyalty in a positive direction with a path coefficient value of 0.164 and a P value of 0.001.Network Quality has a positive and significant influence on Behavioral Loyalty in a positive direction with a path coefficient value of 0.17 and a P value of 0.003. Customer Service has no positive and significant influence on Behavioral Loyalty in a positive direction with a path coefficient value of 0.035 and a P value of 0.271. Information Quality has no positive and significant influence on Behavioral Loyalty in a positive direction with a path coefficient value of 0.084 and a P value of 0.076. Security has a positive and significant influence on Behavioral Loyalty in a positive direction with a path coefficient value of 0.145 and a P value of <0.001. Attitudinal Loyalty has a positive and significant influence on Behavioral Loyalty in a positive direction with a path coefficient value of 0.431 and a P value of <0.001.

Based on descriptive testing shows that Attitudinal Loyalty is influenced by Network Quality, Customer Service, Information Quality, and Security by 59.9% while the rest is influenced by other factors not examined in this study. Behavioral loyalty is influenced by Network Quality, Customer Service, Information Quality, and Security by 63.4% while the rest is influenced by other factors not examined in this study.

Attitudinal Loyalty mediates the influence of Network Quality on Behavioral Loyalty in a positive direction with a total effect value of the regression coefficient of 0.232 and a P value of <0.001. It also mediates the influence of Customer Service on Behavioral Loyalty in a positive direction with a total effect value of the regression coefficient of 0.108 and a P value of 0.032, mediates the influence of Information Quality on Behavioral Loyalty in a positive direction with a total effect value of the regression coefficient of 0.295 and a P value of <0.001 and mediates the influence of Security on Behavioral Loyalty in a positive direction with a total effect value of the regression coefficient of 0.216 and a P value of <0.001.

The Internet Usage Lavel moderation variable has no significant influence on the Network Quality variable and the Attitudinal Loyalty variable which shows a P value of 0.471 and in a positive direction with an effect value of the regression coefficient of 0.007. The Internet Usage Lavel moderation variable has a

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significant influence on the Customer Service variable and the Attitudinal Loyalty variable which shows a P value of 0.042 and in a positive direction with an effect value of the regression coefficient of 0.105. The Internet Usage Lavel moderation variable has no significant influence on the Information Quality variable and the Attitudinal loyalty variable which shows a P value of 0.313 and in a positive direction with an effect value of the regression coefficient of 0.04. The Internet Usage Lavel moderation variable has no significant influence on the Security variable and the Attitudinal Loyalty variable, which shows a P value of 0.454 and has a positive direction with a regression coefficient effect value of 0.009. The Internet Usage Lavel moderation variable has no significant influence on the Network Quality variable and the Behavioral loyalty variable which shows a P value of 0.218 or at and in a positive direction with an effect value of the regression coefficient of 0.081. The Internet Usage Lavel moderation variable has no significant influence on the Customer Service variable and Behavioral loyalty variable which shows a P value of 0.268 and in a positive direction with an effect value of the regression coefficient of 0.85. The Internet Usage Lavel moderation variable has no significant influence on the Information Quality variable and Behavioral loyalty variable which shows a P value of 0.355 and in a positive direction with an effect value of the regression coefficient of 0.022. The Internet Usage Lavel moderation variable has no significant influence on the Security variable and Behavioral loyalty variable which shows a P value of 0.348 and in a positive direction with an effect value of the regression coefficient of 0.025.

The Moderating Switching Cost variable has no significant influence on the relationship between the Network Quality and Attitudinal Loyalty variables, shown as P value of 0.446 and in a positive direction with an effect value of the regression coefficient of 0.049. The Moderating Switching Cost variable has no significant influence on the relationship between the Customer Service and Attitudinal Loyalty variables, showing a P value of 0.212 and in a negative direction with an effect value of the regression coefficient -0.047. The Moderating Switching Cost variable has no significant influence on the relationship between the Information Quality and Attitudinal Loyalty variables, shown as P value of 0.475 and in a negative direction with an effect value of the regression coefficient -0.071. The Moderating Switching Cost variable has a significant influence on the relationship between the Security and Attitudinal Loyalty variables, showing a P value of 0.024 and in a negative direction with an effect value of the regression coefficient -0.073. The Moderating Switching Cost variable has no significant influence on the relationship between the Network Quality and Behavioral loyalty variables, showing a P value of 0.462 and in a negative direction with an effect value of the regression coefficient -0.017. The Moderating Switching Cost variable has no significant influence on the relationship between the Customer Service and Behavioral loyalty variables, showing a P value of 0.46 and in a negative direction with an effect value of the regression coefficient -0.018. The Moderating Switching Cost variable has no significant influence on the relationship between the Information Quality and Behavioral loyalty variables, showing a P value of 0.076 and in a negative direction with an effect value of the regression coefficient -0.049. The Moderating Switching Cost variable has no significant influence on the relationship between the Security and Behavioral loyalty variables, showing a P value of 0.485 and a positive direction with an effect value of a regression coefficient of 0.013.

6. Limitations and future research directions

There are several limitations to this study, therefore the researchers suggest a number of factors that can be taken into consideration for future researchers: This research only limits internet subscribers for Indihome services so that future research should be able to examine other areas or companies so the results can be more generalizable; Based on this research, it was found that the model has good precision power of 59.9% for the Attitudinal loyalty variable and 63.4% for the Behavioral loyalty variable, it is suggested that future researchers can use this model for future researchers; Future researchers can add the Customer Satisfaction variable as a mediating variable between Service Quality dimensions on loyalty according to the research by Jaudeh et al (2018) and Thaicon et al (2015) where there is an increased influence between the Service Quality dimensions on loyalty.

References

[1] Almarabeh, T., & Majdalawi, Y. K. (2016). Internet Usage, Challenges, and Attitudes among University Students: Case Study of the University of Jordan. *Journal of Software Engineering and Application*, 577-587.https://doi.org/10.4236/JSEA.2016.912039

[2] Aydin, S., Özer, G., & Arasil, Ö. (2005). Customer loyalty and the effect of switching costs as a moderator variable A case in the Turkish mobile phone market. *Marketing Intelligence & Planning*, Vol. 23 No. 1 pp. 89-103.https://doi.org/10.1108/02634500510577492

[3] Bennett, D. R., & Thiele, S. R. (2002). A comparison of attitudinal loyalty measurement approaches. *Journal of Brand Management*, 9(3). pp. 193-209.https://doi.org/10.1057/palgrave.bm.2540069

[4] Bowen, J. T., & Chen, S.-L. (2001). The relationship between customer loyalty and customer satisfaction. *International Journal of Contemporary Hospitality Management*, Vol. 13 Iss: 5 pp. 213 - 217.https://doi.org/10.1108/09596110110395893

[5] Cameron, A. F., Thorne, D., Foster, K., & Fisher, S. (2007). Fixed access network technologies. *BT Technology Journal*, Vol 25 Nos 3 & 4.https://doi.org/10.1007/s10550-007-0067-8

[6] Chaudhuri, A., & Holbrook, M. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, Vol. 65, 81–93.https://doi.org/10.1509/jmkg.65.2.81.18255

[7] Choi, Y. G., Ok, C., & Hyun, S. S. (2017). Relationships between brand experiences, personality traits, prestige, relationship quality, and loyalty: An empirical analysis of coffeehouse brands. *International Journal of Contemporary Hospitality Management*, Vol. 29 Iss 4https://doi.org/10.1108/IJCHM-11-2014-0601

[8] Chou, P.- F., & Lu, C.- S. (2009). Assessing Service Quality, Switching Costs and Customer Loyalty in Home-Delivery Services in Taiwan. *Transport Reviews: A Transnational Transdisciplinary Journal*, 29:6, 741-758.https://doi.org/10.1080/01441640902796349

[9] Demirci-Orel, F., & Kara, A. (2015). Assessing the Role of Service Quality of Retail Self-Checkouts on Customer Satisfaction and Loyalty: Empirical Evidence from an Emerging Market. *Marketing Dynamism & Sustainability: Things Change, Things Stay the Same*, 226.https://doi.org/10.1007/978-3-319-10912-1_73

[10] Dickinger, A., & Stangl, B. (2013). Website performance and behavioral consequences: A formative measurement approach. *Journal of Business Research*, vol. 66(6), pages 771-777.https://doi.org/10.1016/j.jbusres.2011.09.017

[11] Dovalieno, A., & Ž, P. (2007). Trust as an Antecedent of Long-term Relationships with Service Customers: the Case of Odontology Services. *Economics and Management*, Vol. 12, pp.246-355.https://doi.org/10.14208/BF03353813

[12] Edward, M., & Sahadev, S. (2011). Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage. *Asia Pacific Journal of Marketing and Logistics*, Vol. 23 No. 3.https://doi.org/10.1108/13555851111143240

[13] Fandi, T. (2014). *Service, Quality & Satisfaction. Edisi 3.* Yogyakarta: Andi.

[14] Ferdinand, A. (2014). *Metode Penelitian Manajemen.* Yogyakarta: Universitas Dipenogoro.

[15] Gay, R. C. (2007). Online Marketing: a customer-led approach. *New York : Oxford University Press*.

[16] Geçti, F., & Zengin, H. (2013). The Relationship between Brand Trust, Brand Affect, Attitudinal Loyalty and Behavioral Loyalty: A Field Study towards Sports Shoe Consumers in Turkey. *International Journal of Marketing Studies*, Vol. 5, No. 2.https://doi.org/10.5539/ijms.v5n2p111

[17] Guo, X., Ling, K., & Liu, M. (2012). Evaluating Factors Influencing Consumer Satisfaction towards Online Shopping in China. *Canadian Center of Science and Education*, Vol. 8, No. 13.https://doi.org/10.5539/ass.v8n13p40

[18] Hair, J. F. (2010). *Multivariate data analysis:*. Upper Saddle River: NJ: Pearson.

[19] Hair, J. F., Hult, G. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) Third Edition.* Los Angeles, London, New Delhi, Singapore, Washington DC, Melbourne: SAGE Publications Ltd.

[20] He, Y., Cheung , S.-M., & Tse, S.-K. (2009). The role of switching costs on service loyalty: a canonical correlation analysis. *Journal of Chinese Entrepreneurship*, Vol. 1 Iss 2 pp. 154 - 164.https://doi.org/10.1108/17561390910956305

[21] Howard, G., Lubbe, S., & Klopper , R. (2011). The Impact of Information Quality on Information Research. *INTERNATIONAL JOURNAL FOR THE STUDY OF SOUTHERN AFRICAN LITERATURE AND LANGUAGES 4*, 288 – 305.http://hdl.handle.net/10500/11233

[22] Jones, T., & Taylor, S. F. (2007). The conceptual domain of service loyalty:how many dimensions? *Journal of Services Marketing*, Vol. 21 Iss: 1 pp. 36 - 51.https://doi.org/10.1108/08876040710726284

[23] Joudeh, M. J., & Dandis, A. O. (2018). Service Quality, Customer Satisfaction and Loyalty in an Internet. *International Journal of Business and Management*, Vol. 13, No. 8.https://doi.org/10.5539/ijbm.v13n8p108

[24] Kelly, G., & McKenzie, B. (2002). Security, privacy, and confidentiality issues on the Internet. *JOURNAL OF MEDICAL INTERNET RESEARCH*, vol. 4, iss. 2, e12, p. 1.https://doi.org/10.2196/jmir.4.2.e12

[25] Kim, G. S. (2012). Investigating the value of sociomaterialism in conceptualizing it capability of a firm. *Journal of Management Information Systems*, 29(3), 327–362.https://doi.org/10.2753/MIS0742-1222290310

[26] Kock, N., & Hadaya, P. (2016). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Info Systems Journal*, 12131.https://doi.org/10.1111/isj.12131

[27] Lee, J., Lee, J., & Feick, L. (2001). The impact of switching costs on the customer satisfaction-loyalty link: mobile phone service in France. *JOURNAL OF SERVICES MARKETING*, VOL. 15 NO. 1, pp. 35-48.https://doi.org/10.1108/08876040110381463

[28] Li, X., & Li, J. (2011). *Quality-Based Content Delivery over the Internet.* Shanghai: Springer Berlin, Heidelberg.https://doi.org/10.1007/978-3-642-19146-6

[29] Odin, Y., Odin, N., & Florence, P. V. (2001). Conceptual and operational aspects of brand loyalty: an empirical investigation. *Journal of Business Research*, Volume 53, Issue 2 Pages 75-84.https://doi.org/10.1016/S0148-2963(99)00076-4

[30] Okuthe, J. A., & Terzoli , A. (2022). Quantifying the Shift in Network Usage Upon Bandwidth Upgrade. *AFRICOMM 2021* (p. vol 443). Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering: Springer, Cham.https://doi.org/10.1007/978-3-031-06374-9_22

[31] Perju-Mitran, A., Zirra, D., Cărutasu, G., Pîrjan, A., & Stănică, J.-L. (2020). Applying the Technology Acceptance Model to Assess the Intention to Use an Aftermarket eCall Based on 112 Device for Passenger Vehicles to Ensure Sustainable Rescue Operations on European Roads. *Sustainability*, 12(22), 9488.**https://doi.org/10.3390/su12229488**

[32] Quach, T. N., Thaichon, P., & Jebarajakirthy, C. (2016). Internet service providers' service quality and its effect on customer. *Journal of Retailing and Consumer Services*, 29. 104–113.https://doi.org/10.1016/j.jretconser.2015.11.012

[33] Ruyter, K. d., Bloemer, J., & Peeters, P. (1997). Merging service quality and service satisfaction. An empirical test of an integrative model. *Journal of Economic Psychology*, Elsevier, vol. 18(4), pages 387-406.https://doi.org/10.1016/S0167-4870(97)00014-7

[34] Teo, T. S., Lim, V. K., & Lai, R. Y. (1999). Intrinsic and extrinsic motivation in Internet usage. *Omega The International Jurnal of Managemenet Science*, 25±37.https://doi.org/10.1016/S0305-0483(98)00028-0

[35] Thaichon, P., & Quach, T. N. (2015). The relationship between service quality, satisfaction, trust, value, commitment and loyalty of Internet service providers' customers. *Journal of Global Scholars of Marketing Science*, 25:4, 295-313.https://doi.org/10.1080/21639159.2015.1073419

[36] Wang, X., Wang , Z., & Li , Y. (2022). Internet Use on Closing Intention–Behavior Gap in Green Consumption—A Mediation and Moderation Theoretical Model. *International Jurnal of Environmental Research and Public Health*, 20, 365.https://doi.org/10.3390/ijerph20010365

[37] Widodo, T. (2020). The Role of Switching Cost in Increasing the Effect of Service Quality on Customer Loyalty. *International Seminar & Conference on Learning Organization*, 1. 015.

[38] Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Conseque of Service Quality. *Journal of Marketing*, Vol. 60, No. 2, pp. 31-46 (16 pages).https://doi.org/10.1177/002224299606000203

