

# The Determinant of BRI Customer Loyalty Using Path Analysis

\*Rafiqoh Rafiqoh

Business Administration Politeknik Negeri Nunukan  
Politeknik Negeri Nunukan PNN  
Nunukan Indonesia  
[fiqopolnes@yahoo.com](mailto:fiqopolnes@yahoo.com)

Arkas Viddy

Business Administration Politeknik Negeri Nunukan  
Politeknik Negeri Nunukan PNN  
Nunukan Indonesia  
[viddy.arkas@yahoo.com](mailto:viddy.arkas@yahoo.com)

**Abstract**—Customer satisfaction and loyalty will be fulfilled since the company could provide the best products and promotions programs. The purpose of this study is to determine the effects of product and promotion on customer satisfaction and customer loyalty for BRI Bank in Indonesia, specifically in Nunukan, North Kalimantan. Path analysis will be used for analyzing this research which used 100 customers as respondents. The customers consist of 50 BRI Bank's customers. By using Smart PLS for analysis path coefficients, while by using SPSS for pre analyzing the validity and reliability test. This research examined that product quality has positive significant effects on customer satisfaction. The promotion program has positive significant effects on customer, Product quality has no significant effect on customer loyalty, while promotion and customer satisfaction has significant effect customer loyalty.

**Keywords**—product quality, promotion, customer satisfaction, customer loyalty

## I. INTRODUCTION

The bank has the main function as the party who has funds with those who need funds. Other functions of banks are also explained in article 1 paragraph (2) of Law no. 10 of 1998 concerning changes to Law No. 7 of 1992 concerning banking is a business entity that collects funds from the public in the form of credit or loans and other forms in order to improve people's lives. This is because banking is one of the financial systems that functions as a Financial Intermediary. Therefore, bank activities must run efficiently at various scales.

For improving the quality of bank management done by government banks or private banks, it will be supported by high quality of services. Each bank strives for optimal performance so as not to decline. The great influence on the condition of the quality of

bank management becomes an important factor for banks to improve the service system offered.

The efforts made such as bank product (services) improvement and innovative product updates and quality promotions that can attract public interest so they can compete. Efforts to improve the service system carried out at each bank will have a direct impact on customer satisfaction and will affect customer loyalty to the bank that is trusted.

Bank consist of two type such as central bank and commercial bank. Central bank has function such as monetary policy which should control the velocity and amount of money. (Goodhart 1995) The primary functions of a commercial bank are accepting deposits and also lending funds. (Anbar and Alper 2011)

Service quality one of the most important factor in improving Bank brand image including BRI. Service quality could lead satisfy the customers. Wang and Shieh found that he results indicate that the overall service quality has a significantly positive effect on overall user satisfaction. (Wang and Shieh 2006).

Other factor is decided could improve the customer satisfaction is promotion such as sales promotion, discount price, advertising and personel selling. Janna et.al found that promotion has a significant positive effect on customer satisfaction. (Jannah, Mappatempo et al. 2019)

Product quality has a significant positive effect on customer loyalty through customer satisfaction; and promotion has a significant positive effect on customer loyalty through customer satisfaction. (Jannah, Mappatempo et al. 2019).

It is noted that some of bank already implemented the high quality of services, and promoting their services continuously and consistently, but some of the bank still got loss. So it is necessary to explore this kind of research.

## II. LITERATURE REVIEW

### 2.1 Service Quality

Product quality is the overall features and characteristics of a product or service on the ability to satisfy stated or implied needs. (Kotler 2005) if the company wants to maintain its competitive advantage in competition, the company must understand what aspects of the dimensions are used by consumers to distinguish the products offered by competing products. (Orville).

### 2.2 The relationship between service quality and customer satisfaction

Service quality is everything that can meet the needs offered by a company for use by consumers. Service quality can affect customer satisfaction. Satisfaction depends on the quality of a company's services, because if the higher the level of quality of eating products the higher the level of consumer satisfaction. (Kotler and Keller 2009).

### 2.3 The relationship between service quality and customer loyalty

Services sold offer good quality, consumers will buy and use them, if consumers are satisfied, consumers will be loyal. In order to be able to compete, and survive and develop, companies are required to be able to provide quality services that can meet the needs and desires of customers. (Pires, Stanton et al. 2006).

### 2.4 Promotion

Promotion is a marketing promotion that encourages promotions that increase information, increase / direct and direct the market for the company and its services in order to be accepted, buy and loyal to the products offered by the company offered. (Tjiptono 2002).

### 2.5 Relationship Promotion to the level of customer satisfaction

Promotion as a different form of activity to attract and get the attention of customers especially for buying products or services through personal selling, public relations, advertising sales promotions. Promotion of products or services helps in the best way to build relationships with customers because everyone is looking for the best deal that suits them. (Khan, Ghauri et al. 2012). Similarly, Oghojafor found that promotion and distribution have a higher impact on the level of customer satisfaction. (Oghojafor, Ladipo et al. 2014)

### 2.6 Relationship Promotion to the level of customer loyalty

Research by (Grover and Srinivasan 1992), as well as (Pi and Huang 2011) explains that promotion has a positive effect on customer loyalty. It is noted that there is positive relationship between sales promotion and customer loyalty. (Oyeniya 2011). On the other hand, Jannah found that promotion has a significant positive effect on customer loyalty through customer satisfaction. (Jannah, Mappatempo et al. 2019). Similarly, Oyeniya found that there is positive relationship between sales promotion and customer loyalty. (Oyeniya 2011)

### 2.7 Customer Satisfaction

Consumer satisfaction is someone's feeling of pleasure or disappointment arising from comparing the perceived performance of the services (results) to their expectations. If performance is as expected, the customer will be satisfied. If performance does not meet expectations, the customer will be dissatisfied. If performance exceeds expectations, the customer will be very satisfied. (Kotler and Keller 1956).

### 2.8 The relationship between customer satisfaction and customer loyalty

Influence between customer satisfaction and loyalty, that satisfaction will lead to customer loyalty. One of the factors that influence the occurrence of customer loyalty. Consumers who have a high degree of authority will experience loyalty from these consumers. This satisfaction occurs due to the products used in accordance with the wishes or expectations of consumers. Satisfaction is a feeling of pleasure or disappointment that arises after comparing between his perception and his impression of the product's performance and its expectations. (Fandy 2008).

### 2.9 Customer Loyalty

Consumer loyalty is a deeply held commitment to buy or support a product or service that is preferred in the future even though the influence of the situation and marketing efforts have the potential to cause customers to switch. (Kotler and Keller 1956).

### 2.10 Hypothesis

Based on the literature reviews and previous research some hypothesis can be built as follows:

1. Product (service) has significant effect on customer satisfaction.
2. Promotion has significant effect on customer satisfaction.
3. Product (service) has significant effect on customer loyalty.
4. Promotion has significant effect on customer loyalty.

- Customer satisfaction has significant effect on customer loyalty.

### III. RESEARCH METHODS

The road map of this research could be done by path analyzing or by using the software of Smart Partial Least Square (PLS) with the steps as follows:

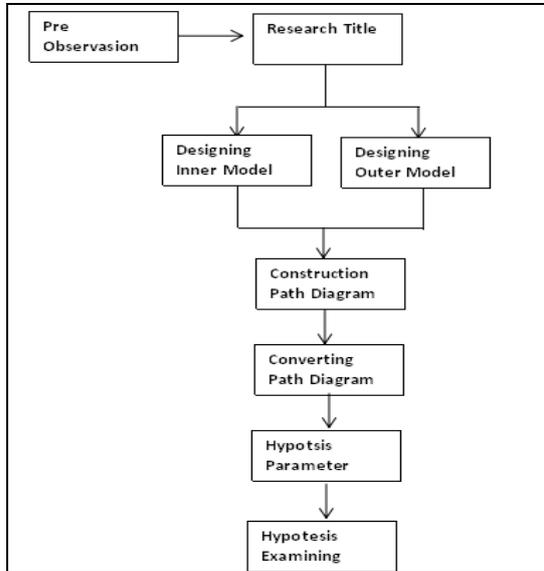


Fig 1 : Research Road Map

From Figure, the first steps to be done is literature reviews and followed by deciding a research title. The next step is designing the structural equation model or inner model and the followed by designing the measurement model (outer model) but it is not necessary to be done, because this is a pure quantitative research. Construction a path diagram or research model is the next step and then followed by converting a path diagram to regression formulation.

Based on the model, hypothesis parameter needs to be designed and its hypothesis needs to be examined with the steps as follows:

#### 3.1 Pilot Test

This test consists of validity test and reliability with the purpose is to identify whether the questions are valid or reliable. Valid means the questions identified the right matters, while reliable means the questions will be answered by respondents consistently.

The criteria for valid instrument is since Pearson Correlation are greater than 0.3, the criteria for reliable instrument since Cronbach's Alpha greater than 0.6

#### 3.2 Designing Structural Model

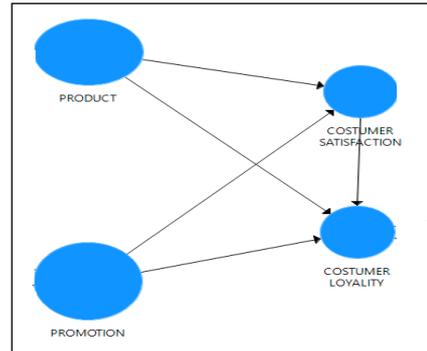


Fig 2: Model Design

Whereas :

$\alpha_1$  = direct influence X1 to Y1

$\alpha_2$  = direct influence X2 to Y1

$\partial_1$  = direct influence X1 to Y2

$\partial_2$  = direct influence X2 to Y2

$\partial_3$  = direct influence Y1 to Y2

Each variable has some indicators such as follows:

Products or services quality are tangible, reliability, assurance, responsiveness and empathy (Alaan 2016)  
 Promotion indicators are sales promotion, advertising, price discount, personal selling (Kaharu and Budiarti 2016).

Customer satisfaction indicators ia service quality activities (SOLEYMANI, NEZHADALI et al. 2014)  
 Customer loyalty indicators re-buying, to recommend buying, felling after buying (Selang 2013)

#### 3.3 Designing the measurement model (outer model)

This is a pure quantitative research, so there is no designing the measurement model or outer model.

#### 3.4 Constructing Path Diagram

For constructing the path diagram, the regression needs to be estimated by using PLS with the data as follows:

This research is to analyze the influences between the independent variables and the dependent variables, so the formulation can be built as follows:

$$Y_1 = \alpha_1 X_1 + \alpha_2 X_2 + \epsilon_1 \quad (1)$$

$$Y_2 = \partial_1 X_1 + \partial_2 X_2 + \partial_3 Y_1 + \mu \quad (2)$$

Whereas :

$\epsilon_1$  = error term of Y1

$\mu$  = error term of Y2

X1 = Quality product

X2 = Promotion

Y1 = Customer Satisfaction

Y2 = Customer Loyalty

3.5 Data Collected

The data collected by using accidental random sampling technic by distributing questioners to all of respondents which generated by some variables such as product quality, promotion, customer loyalty and customer loyalty.

The next steps is testing of the validity and reliability of instrument by using SPSS 21 version for ensure the all of the items of questioners are appropriate. For analysing the data Path Analysis instrument is used by using SmartPLS 3.20 version with the steps such as designing the structural model (inner and outer model), constructing a path diagram, converting a path diagram to regressions, hypothesis parameter, and examining the hypothesis.

The reasons using SmartPLS 3.20 version are this research using small sample only 50 respondents, this research is path analysis research, using SmartPLS is quite easy because the data is not necessary normal, and linier, moreover not only significance of direct effect but also the significance of indirect effect can be resulted.

IV. RESULTS AND DISCUSSION

Based on the result of survey for 50 respondents, the structural model can be designed, path coefficient, T-Statistic can be explored by using SmartPLS 3.20 Version.

Before analysis to be done, the requirements are validity test and reliability test.

4.1 Validity and Reliability

By using SPSS 25 version, the results can be displayed as follows:

Tabel 1: BNI Validity Test

Items	Pearson Correlation	Description
X1.1	0.601	Valid
X1.2	0.471	Valid
X2.1	0.377	Valid
X2.2	0.471	Valid
X2.3	0.533	Valid
X2.4	0.583	Valid
Y1.1	0.620	Valid
Y1.2	0.754	Valid
Y1.3	0.675	Valid
Y2.1	0.705	Valid
Y2.2	0.584	Valid
Y2.3	0.581	Valid
Y2.4	0.723	Valid

Source : survey, processed 2021

Based on data tested, it could be decided that all of the items are valid, because all of the Pearson Correlation are greater than 0.3(Sugiyono 2014)

Table 2: BNI Reliability Test

Items	Cronbach's Alpha	Description
X1.1	0.861	Reliable
X1.2	0.868	Reliable
X2.1	0.867	Reliable
X2.2	0.865	Reliable
X2.3	0.863	Reliable
X2.4	0.863	Reliable
Y1.1	0.867	Reliable
Y1.2	0.863	Reliable
Y1.3	0.865	Reliable
Y2.1	0.863	Reliable
Y2.2	0.868	Reliable
Y2.3	0.881	Reliable
Y2.4	0.865	Reliable

Source : survey, processed 2021

Based on data tested, it could be decided that all of the items are reliable, because all of the Cronbach's Alpha are greater than 0.6 (Sugiyono 2014)

4.2 Designing Structural Model

Based on the variables were be decided such product quality, promotion, customer satisfaction and customer loyalty, so the structural model can be built as follows:

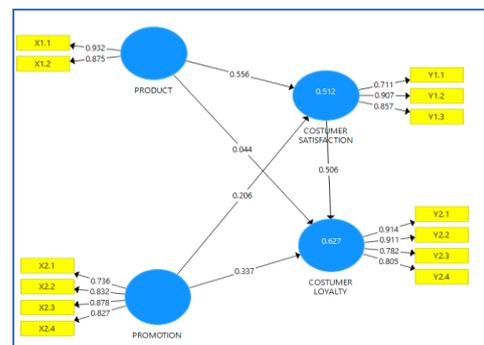


Fig 3: BRI Path Coefficient

Source : survey, processed 2021

From Figure 3, the coefficient can be mentioned as follows:

$\alpha_1 = 0,556, \alpha_2 = 0.205, \beta_1 = 0.206, \beta_2 = 0.337, \beta_3 = 0.506$

4.3 Designing the measurement model (outer model)

From the Figure 3, the outer model can be measured as fo follows:

$\alpha_1 = 0,556,$  it means that when the quality product increase leads customer satisfaction increase

$\alpha_2 = 0.205,$  it means that when the promotion increase leads customer loyalty increase

$\beta_1 = 0.206,$  it means that when the quality product increase leads customer loyalty

increase  
 $\beta_2 = 0.337$ , it means that when the promotion increase leads customer loyalty increase  
 $\beta_3 = 0.506$ , it means that when the customer satisfaction increase leads customer loyalty increase

4.4 Constructing Path Diagram

Using by SmartPLS the bootstrapping result can be explored as follows:

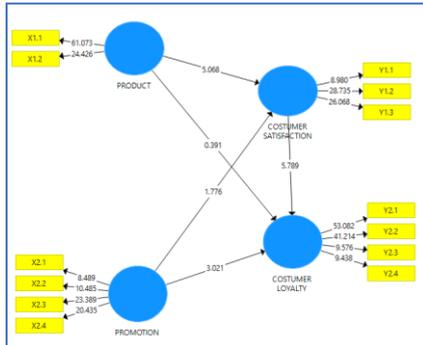


Fig 4: BRI Bootstrapping and T-Statistic  
 Source : survey, processed 2021

From the Figure 4 and Table 5, path structural model formulation can be explored as follows:

$Y_1 = 0.556X_1 + 0.206X_2$   
 $Y_2 = 0.044X_1 + 0.337X_2 + 0.506Y_1$

The most dominant effect on customer satisfaction is promotion, while the most dominant effect on customer loyalty is product.

4.5 Examining the Hypothesis

All hypothesis need to be examined by using SmartPLS 3.2 version. The criteria of hypothesis examination is since the P-Value less than 0.05, so H0 is rejected and Ha is accepted. It means the hypothesis is accepted.

1) Examining Hypothesis 1

Hypothesis 1

There is significant effect between quality product and customer satisfaction in BNI Nunukan.

From the Table 4, it can be showed that P-Value is 0.041, so this T-Statistic 5,068 greater than 2,201 so H0 is rejected and Ha is accepted or it can be decided that **there is significant effect between quality product and customer satisfaction**

This result is supported by the respondent descriptions that more than 65 percent have middle up level of income or their income between Rp 10 million to 15 million, and the customer at this level of income usually concern on quality of product. Moreover, in this bank more than 70 percent respondent prefer the BNI product which provided competitive returns for the customers. It is also confirmed by Kotler and Keller who stated that

Satisfaction depends on the quality of a company's products, because if the higher the level of quality of eating products the higher the level of consumer satisfaction.(Kotler and Keller 2009).

For these reasons, It can be decided that there is significantly effect between product quality and customer satisfaction.

2) Examining Hypothesis 2

Hypothesis 2

There is significant effect between promotion and customer satisfaction

From the Table 4, it can be showed that T-Statistic is less than 0.05 so H0 is accepted and Ha is rejected or it can be decided that **there is significant effect between promotion and customer satisfaction.**

This result is supported by the respondent descriptions that more than 60 percent have middle up level of income or their income between Rp 10 million to 15 million and they have their own business. These customers usually interest on any activities and especially for their business, including in choosing to save their fund. Unfortunately, the BRI customer not very often to read promotion, so it leads not significant. It is also confirmed by Khan, Ghauri et.al. who stated that Promotion of products or services helps in the best way to build relationships with customers because everyone is looking for the best deal that suits them.(Khan, Ghauri et al. 2012).

(2) For these reasons, it can be decided that there is significantly effect between promotion and customer satisfaction.

3) Examining Hypothesis 3

Hypothesis 3

There is significant effect between quality product and customer loyalty in BRI Nunukan.

From the Table 4, it can be showed that T-Statistic is 0,397, so it less than 2,201 so H0 is accepted and Ha is rejected or it can be decided that **there is no significant effect between product and customer loyalty.**

This result is supported by the respondent descriptions that more than 60 percent have middle up level of income or their income between Rp 10 million to 15 million and they have their own business. These customers usually not easy to loyal to one bank because several reason such as, firstly they have high level expectation quality of product, secondly they have to distribute the financial risk, so although the quality has positive effect for the customer loyalty, but it is only slightly positive effect and not significant. Moreover, in this bank more than 75 percent respondent interest on 1 or 2 the BNI products. This study refused the argument fromPire, Stanton et.al. who argued that companies are required to be able to provide quality products that can meet the needs and desires of customers and it

leads the customer loyal. (Pires, Stanton et al. 2006).

For these reasons, it can be decided that there is no significant effect between product quality and customer loyalty.

#### 4) *Examining Hypothesis 4*

Hypothesis 4

There is significant effect between promotion and customer loyalty in BNI Nunukan.

From the Table 4, it can be showed that P-Value is 0.039, so this P-Value is less than 0.05 so H<sub>0</sub> is rejected and H<sub>a</sub> is accepted or it can be decided that **there is significant effect between promotion and customer loyalty.**

This result is supported by the respondent descriptions that more than 60 percent have middle up level of income or their income between Rp 10 million to 15 million and they have their own business. These customers usually interest on any activities and especially for their business especially regarding to promotion and it is expected consumer could satisfaction and could be consumer fulfill their customer loyalty. These customers also have very high level of promotion quality, and surprisingly more than 75 percent the respondent interest on BRI promotion. This result confirmed by Grover and Srinivasan and also Pi and Huang who argued that promotion has a positive effect on customer loyalty.

For these reasons, it can be decided that there is significant effect between promotion and customer loyalty.

#### 5) *Examining Hypothesis 5*

Hypothesis 5

There is significant effect between customer satisfaction and customer loyalty in BRI Nunukan.

From the Table 4, it can be showed that P-Value is 0.193, so this P-Value is greater than 0.05 so H<sub>0</sub> is accepted and H<sub>a</sub> is rejected or it can be decided that **there is no significant effect between customer satisfaction and customer loyalty.**

This result is supported by the respondent descriptions that more than 60 percent have middle up level of income or their income between Rp 10 million to 15 million and they have their own business. These customers usually interest on any activities and especially for their business, including in choosing. Most of respondent fill satisfaction and leads the customers to be loyal, to save their fund especially regarding to the quality product and the quality of promotions. Unfortunately, these customer behavior especially to fulfill their satisfaction. Although the BRI already provided appropriate quality of product and promotion, actually most the customer fill satisfied at 70 persen, and a few people fill unsatisfied and it leads the customer to be loyal, This result to is confirmed Fandy research result that satisfaction occurs due to the products used in accordance with the wishes or expectations of

consumers. Satisfaction is a feeling of pleasure or disappointment that arises after comparing between his perception and his impression of the product's performance and its expectations (Fandy 2008)

For these reasons, it can be decided that there is no significant effect between customer satisfaction and customer loyalty.

## V. CONCLUSION

.Based on the result and discussion, it can be concluded as follows:

1. The service quality has significant effect on customer loyalty, but promotion has no significant effect on customer loyalty in BRI Bank Nunukan. It is expected that the company should keep maintain the service quality especially their reliability in servicing. It is also expected the company has to evaluate their promotion strategy especially their advertising, should more aggressive.
2. The service quality has no significant effect on customer loyalty in BRI Bank Nunukan, while promotion and customer loyalty have significant effect on customer loyalty. It is expected that the BRI should keep focus on customer by more aggressive in promoting all of their services especially their diversification of advertising.

## ACKNOWLEDGMENT

There were many barriers in doing this research both essential matters and non-essential matters. For fulfill this research requirements, there are several figures need to be appreciated as follows:

1. The Director of Politeknik Negeri Nunukan, who already guided us for improving the essential matters for this research.
2. Vice Director 1 of Politeknik Negeri Nunukan, who already motivated us in achieving the research performance.
3. The Head Branch Office of Nunukan BNI, who allowed us to make this research and also allowed their customers to be our respondents.

## REFERENCES

- [1] Alaan, Y. (2016). "Pengaruh Service Quality (Tangible, Empathy, Reliability, Responsiveness dan Assurance) terhadap Customer Satisfaction: Penelitian pada Hotel Serela Bandung." *Jurnal Manajemen Maranatha* 15(2).
- [2] Anbar, A. and D. Alper (2011). "Bank specific and macroeconomic determinants of commercial bank profitability: Empirical evidence from Turkey." *Business and economics research journal* 2(2): 139-152.
- [3] Fandy, T. (2008). "Strategi pemasaran." *Yogyakarta: Andi*.

- [4] Goodhart, C. (1995). The central bank and the financial system, Springer.
- [5] Grover, R. and V. Srinivasan (1992). "Evaluating the multiple effects of retail promotions on brand loyal and brand switching segments." Journal of Marketing Research **29**(1): 76-89.
- [6] Jannah, R., et al. (2019). "The Influence of Product Quality and Promotion on Customer Satisfaction and Its Impact on Customer Loyalty PT. Mahakarya Sejahtera Indonesia." Proceeding UII-ICABE **1**(1): 201-206.
- [7] Kaharu, D. and A. Budiarti (2016). "Pengaruh Gaya Hidup, Promosi, Dan Kualitas Produk Terhadap Keputusan Pembelian Pada Cosmic." Jurnal Ilmu dan Riset Manajemen (JIRM) **5**(3).
- [8] Khan, I., et al. (2012). "Impact of brand related attributes on purchase intention of customers. A study about the customers of Punjab, Pakistan." Interdisciplinary journal of contemporary research in business **4**(3): 194-200.
- [9] Kotler, P. (2005). According to Kotler: The world's foremost authority on marketing answers your questions, Amacom Books.
- [10] Kotler, P. and K. Keller (1956). "L.(2009)." Marketing management **13**.
- [11] Kotler, P. and K. L. Keller (2009). "Marketing management (13th end)." New Jersey.
- [12] Oghojafor, B., et al. (2014). "Determinants of customer satisfaction and loyalty in the Nigerian telecommunications industry."
- [13] Orville, L. "Boyd.(2005)." Marketing Management A Strategic Decision Making Approach. New York: McGraw-Hill.
- [14] Oyeniya, O. (2011). "Sales promotion and consumer loyalty: A study of nigerian telecommunication industry." Journal of Competitiveness: 66-77.
- [15] Pi, W.-P. and H.-H. Huang (2011). "Effects of promotion on relationship quality and customer loyalty in the airline industry: The relationship marketing approach." African Journal of Business Management **5**(11): 4403-4414.
- [16] Pires, G. D., et al. (2006). "The internet, consumer empowerment and marketing strategies." European journal of marketing **40**(9/10): 936-949.
- [17] Selang, C. A. (2013). "Bauran pemasaran (marketing mix) pengaruhnya terhadap loyalitas konsumen pada fresh mart Bahu Mall Manado." Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi **1**(3).
- [18] SOLEYMANI, M., et al. (2014). "Effective indicators in Bank customer satisfaction."
- [19] Sugiyono (2014). "Metodologi Penelitian Pendekatan Kuantitatif Kualitatif."
- [20] Tjiptono, F. (2002). "Strategi Pemasaran, edisi kedua." Cetakan Keenam. Penerbit. Andy. Yogyakarta.
- [21] Wang, I.-M. and C.-J. Shieh (2006). "The relationship between service quality and customer satisfaction: the example of CJCUC library." Journal of Information and Optimization Sciences **27**(1): 193-209.