



**THE ANALYZE OF SERVICE QUALITY AND  
RELATIONSHIP QUALITY IMPACT ON  
CUSTOMER LOYALTY**

(A Survey of Rural Credit Bank Customers BPR Cikarang  
Raharja, BPR Nusamba Sukaraja, and BPR Astanajapura, in  
West Java)

**By**

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## **PANEL OF EXAMINERS APPROVAL SHEET**

The Panel of Examiners declares that the skripsi entitled “**THE ANALYZE OF SERVICE QUALITY AND RELATIONSHIP QUALITY IMPACT ON CUSTOMER LOYALTY (A Survey of Rural Credit Bank Customers of BPR Cikarang Raharja, BPR Nusamba Sukaraja, and BPR Astanajapura, West Java)**” that was submitted by Imam Abdul Khamid majoring in Management from the Faculty of Business was assessed and approved to have passed the Oral Examinations on March 21, 2014.

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This skripsi entitled “**THE ANALYZE OF SERVICE QUALITY AND RELATIONSHIP QUALITY IMPACT ON CUSTOMER LOYALTY (A Survey of Rural Credit Bank Customers of BPR Cikarang Raharja, BPR Nusamba Sukaraja, and BPR Astanajapura, West Java)**” prepared and submitted by Imam Abdul Khamid in partial fulfillment of the requirements for the degree of Bachelor in the Faculty of Business has been reviewed and found to have satisfied the requirements for a skripsi fit to be examined. I therefore recommend this skripsi for Oral Defense.

Cikarang, Indonesia, March 19, 2014

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## **DECLARATION OF ORIGINALITY**

I declare that this skripsi, entitled **“THE ANALYZE OF SERVICE QUALITY AND RELATIONSHIP QUALITY IMPACT ON CUSTOMER LOYALTY (A Survey of Rural Credit Bank Customers of BPR Cikarang Raharja, BPR Nusamba Sukaraja, and BPR Astanajapura, West Java)”** is, to the best of my knowledge and beliefs, an original piece of work that has not been submitted, either in a whole or in a part, to another university to obtain a degree.

Cikarang, Indonesia, March 19, 2014

**Imam Abdul Khamid**

## ABSTRACT

The focus of the research is about Relationship of Service Quality and Relationship Quality towards Customer Loyalty in Rural Credit Bank, particularly in Bekasi, Sukabumi, and Cirebon Region in West java Province, Indonesia. Non-Probability sampling is used as sampling technique which is purposive sampling as the researcher found difficulty to find or identify certain respondents. Rural Credit Bank has decreased in the growth of customers in 2013 compared to 2012 and 2011. The variable used in this research is Tangible ( $X_1$ ), Reliability ( $X_2$ ), Responsiveness ( $X_3$ ), Assurance ( $X_4$ ), Empathy ( $X_5$ ), Trust ( $X_6$ ) and Commitment ( $X_7$ ) towards Customer Loyalty ( $Y$ ) with 25 valid questions. Data collected are primary data through questionnaire. Data are processed through Factor Analysis including Validity, Reliability test, and Classical Assumptions and Multiple Regression analysis to conduct hypothesis. Result of the analysis found that 4 independent variable has significance influence towards Customer Loyalty, with Commitment as the dominant. 57.1% of the variations of Customer Loyalty can be explained by 4 independent variables, while the other 42.9% can be explained by other variable outside the 4 within this research.

**Keywords:** *Service Quality, Relationship Quality, Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, Commitment, Customer loyalty.*

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# CHAPTER I

## INTRODUCTION

### 1.1. Research Background

In today's world, economy is one of the core subjects for the development of any country, thus banking sector plays a key role in circulation of money, which is done through the banking system. Banking is an evolutionary concept, which is in continuous expansion concerning its different activities and functions.

Indonesia is a bank-based financial system. In financial sector, the existence of banks is very important since circulation of money is done through the banking system. Banking is an evolutionary concept, which expands continuously in different activities and function, assisting in deposits, business loans, auto loans, mortgage lending, and basic investment product. According to Hafeez and Muhammad (2012), services become one of the most important elements to gain a sustainable competitive advantage in the marketplace due to its approach to manage business process in order to ensure full satisfaction of the customers, which will help to increase competitiveness and effectiveness of the industry (Markovic & Raspor, 2010; Mizenur, Abdullah, & Rahman, 2011). According to Mosahab et al (2010), customers have become more aware of standard services, and the expectation of costumers will always be higher than their perceptions of the banks operation

Rural Credit Banks, commonly known in Indonesia abbreviated as BPR, is one of the known types of banks serving groups of micro, small and medium enterprises with locations that are generally close to where the people who need it. BPR is a financial institution that accepts deposits only in the form of time deposits, savings, and/or other equivalent forms of it and distribute funds as BPR business. BPR are allowed to accept deposits, but are limited in terms of location, function and portfolio composition (BWTP Asia Resource Centre



for Microfinance, 2003). Bank is a service-oriented typed company, If the service provided to customer was good then it will have a positive impact on business performance, otherwise if the service provided to customers is not good it will negatively affect business performance. To deal with it, banking industry need to improve its performance by increasing productivity and efficiency as well as quality of service to the customers.

Improving costumers' relation is a way to direct bank into customer satisfaction. By maintaining good relationship with customers, bank will know what the customers expect to provide. Through that, it will help bank in determining customers' demand and match it with resources supply own by the bank. By fulfilling their demand, surely customers will be satisfied. Not only that, improving customer relation in terms of providing information about products frequently will help brand to get top of mind. Then, banks come to the hardest part, which is maintaining the trust of the currently owned customer. Innovation is the best way. The way to do it is by coming back to the cycles of improving costumers' relationship, determining demands in market, providing the correct supplies in fulfilling those demands and voila, loyal customers are produced.

Eastern culture such as Indonesia has high competitive market since they place high value in building a long-term relationship by knowing that loyalty will be compensated in the form of special favors. This favor is used as special care given to others. By maintaining what customer wants and needs as the mediator in the effect of service quality improvement and development, banks may achieve costumers' loyalty. This costumer loyalty is very important because it promotes the competitiveness and effectives of the banking industry.

The five dimensions of SERVQUAL added by two dimensions from Relationship Quality will become the measurement of services which given by Rural Credit Bank (BPR) towards its customer loyalty. Therefore, this study is titled "The Analyze of Service Quality and Relationship Quality Impact on Customer Loyalty in Rural Credit Bank: A Survey of Customers of BPR

Cikarang Raharja, BPR Nusamba Sukaraja, and BPR Astanajapura in West Java.”

## 1.2. Problem Identification

Table 1.1 Total Customers in West Java

Growth per month							
2010		2011		2012		2013	
2,127,398	1.20%	2,254,967	-1.96%	2,490,051	-3.17%	2,635,732	0.99%
2,282,074	7.27%	2,330,821	3.36%	2,494,068	0.16%	2,650,712	0.57%
2,141,517	-6.16%	2,384,259	2.29%	2,493,589	-0.02%	2,643,919	-0.26%
2,154,439	0.60%	2,373,987	-0.43%	2,630,694	5.50%	2,721,043	2.92%
2,159,679	0.24%	2,378,534	0.19%	2,531,723	-3.76%	2,678,534	-1.56%
2,175,045	0.71%	2,453,209	3.14%	2,581,465	1.96%	2,744,569	2.47%
2,197,469	1.03%	2,440,061	-0.54%	2,604,383	0.89%	2,702,965	-1.52%
2,215,356	0.81%	2,452,898	0.53%	2,559,950	-1.71%	2,699,166	-0.14%
2,224,742	0.42%	2,594,006	5.75%	2,579,119	0.75%	2,807,528	4.01%
2,284,031	2.66%	2,487,505	-4.11%	2,617,792	1.50%	2,752,545	-1.96%
2,257,631	-1.16%	2,472,179	-0.62%	2,739,110	4.63%	N/A	N/A
2,299,967	1.88%	2,571,555	4.02%	2,610,016	-4.71%	N/A	N/A
25,968,033		28,135,107		30,511,168		32,022,677	Full Year
7.06%		8.35%		8.45%		4.95%	%September-August
17,452,977		19,068,736		20,385,923		21,476,640	January-August
5.59%		9.26%		6.91%		5.35%	% January-August

Source: [www.bi.go.id](http://www.bi.go.id)

According to Bank Indonesia, the total customer of Rural Credit Bank in West Java is increasing from year to year, but the growth show different result. The highest growth was on 2012, which reached 8.45%. But now declines to 4.95%

The main problems faced by banks are not only that customers thinks the service given is unreliable, but also customer thinks that the bank are not fulfilling their demands and cannot be trusted. If the bank failed to perceive

the service and message in the communication, it means bank need to improve the quality of service and relationship on customers. The failure will result in decreasing trust, customer retention, and sales. Since the objective of Rural Credit Bank (BPR) is targeting on customers who cannot be reached by commercial banks, and to better equalization of banking services, researcher concludes that Rural Credit Bank (BPR) strive to prioritize customers' wants and needs as important factors through service and relationship quality. Therefore, present research is attempted to analyze service quality and relationship quality impact on customer loyalty in three (3) Rural Credit Bank.

### **1.3. Statement of Problem**

The research is concerned to analyze the impact of service quality and relationship quality on customer loyalty. The problem of the research could be summarized as:

1. Is there simultaneous significant influence from Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment to Customer Loyalty in Rural Credit Bank?
2. Is there partial significant influence from Tangibles dimension of Service Quality to Customer Loyalty in Rural Credit Bank?
3. Is there partial significant influence from Reliability dimension of Service Quality to Customer Loyalty in Rural Credit Bank?
4. Is there partial significant influence from Responsiveness dimension of Service Quality to Customer Loyalty in Rural Credit Bank?
5. Is there partial significant influence from Assurance dimension of Service Quality to Customer Loyalty in Rural Credit Bank?
6. Is there partial significant influence from Empathy dimension of Service Quality to Customer Loyalty in Rural Credit Bank?
7. Is there partial significant influence from Trust dimension of Relationship Quality to Customer Loyalty in Rural Credit Bank?

8. Is there partial significant influence from Commitment dimension of Relationship Quality to Customer Loyalty in Rural Credit Bank?

#### **1.4. Research Objectives**

Based on the statement above, the objective of this research is to find:

1. To find out whether Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment simultaneously influence Customer Loyalty in Rural Credit Bank.
2. To find out whether Tangible dimension of Service Quality partially influence Customer Loyalty in Rural Credit Bank.
3. To find out whether Reliability dimension of Service Quality partially influence Customer Loyalty in Rural Credit Bank.
4. To find out whether Responsiveness dimension of Service Quality partially influence Customer Loyalty in Rural Credit Bank.
5. To find out whether Assurance dimension of Service Quality partially influence Customer Loyalty in Rural Credit Bank.
6. To find out whether Empathy dimension of Service Quality partially influence Customer Loyalty in Rural Credit Bank.
7. To find out whether Trust dimension of Relationship Quality partially influence Customer Loyalty in Rural Credit Bank.
8. To find out whether Commitment dimension of Relationship Quality partially influence Customer Loyalty in Rural Credit Bank.

#### **1.5. Significance of study**

Every study has its significance and importance not only for the students, but also for academic and other parties. As the outcome, this research will help some of the stated issues below:

- 1.5.1. For the author

The researcher expect that this study can provide a better understanding of service and relationship quality from banks to customers, the roles of banks, as well as the problem faced by customers in reality.

#### 1.5.2. For bank customers

The researcher wishes that this research can give useful information about banks perspective in giving services and relations.

#### 1.5.3. For banks

The researcher hopes that this study can be used as an input for banks in understanding expectation of service and relation needed. This research is expected to give information of customer difficulties in regards of perceived service and relation.

#### 1.5.4. For academic community

The researcher hopes that this study can give a description to academic community about the customer perspective of service and relation.

#### 1.5.5. Future Research

This study will provide analyze between Service Quality and Relationship Quality impact on Customer Loyalty, as well as how the independent influence the dependent variable.

## **1.6. Definition of Terms**

1. Service is an act of assistance given to other people.
2. Quality is an essential attributes used in technical-efficiency level.
3. Tangible is the appearance of personnel, physical facilities and equipment.
4. Reliability is an ability to perform promised services.

5. Responsiveness is the willingness to help customers.
6. Assurance is knowledge and courtesy towards customers.
7. Empathy is an individualized attention to its customers.
8. Trust is an individual belief towards behavior of others to perform.
9. Commitment is an act of dedicate towards idea or system.
10. Loyalty is faithful or staying true and unwavering allegiance to other person.

## **1.7. Scope and Limitation**

### **Scope**

This Study aims to assess the analyze of Service Quality and Relationship Quality impact on Customer Loyalty of BPR Cikarang Raharja in Bekasi, BPR Nusamba Sukaraja in Sukabumi and BPR Astanajapura in Cirebon, West Java.

### **Limitation**

The limitation of this study is only for customer of Rural Credit Bank (BPR), which has Rural Credit Bank (BPR) account and at least has more than three times transaction.

# **CHAPTER II**

## **LITERATURE REVIEW**

### **2.1 Theoretical Review**

#### **2.1.1 Bank**

##### **2.1.1.1 Definition of Bank**

Bank definition can be vary depends on different point of view. According to F.E. Perry (1983), he define a bank as an establishment which deals in money, receiving it on deposit from customers, honoring customer's drawings against such deposits on demand, and lending or investing surplus deposits until they are required for repayment.

A bank is any business offering deposits subject to withdrawal on demand (such as by writing a check or making an electronic transfer of funds) and making loans of a commercial or business nature (such as granting credit to private business seeking to expand the inventory of goods on their shelves or purchase new equipment) (Rose & Hudgins, 2010).

According to Decree (Surat Keputusan) Indonesian Ministry of Finance Number 792, 1990, it defines bank as an institution which acts as a financial intermediaries between parties which have excess funds to parties with deficit funds, bank also supporting the flow of payments.

The legal basis is the Law of the Republic of Indonesia Number 7, 1992 concerning Banking as amended by Act No. 10 of 1998. Banks are business entities that raise funds from the public in the form of savings and channel them to the public in the form of credit and or other forms in order to improve the living standard of the people.

### **2.1.1.2 The Roles of Bank**

Today, the function of banking has developed into many roles in order to remain competitive and meet the public needs, as stated by Rose and Hudgins (2010), those roles are included:

- a The intermediation role: the bank main role, which receives funds from surplus budget parties, then distributes it to deficit budget parties.
- b The payments role: carry out payments for goods and services on behalf of customers (i.e. issuing and clearing checks).
- c The guarantor role: standing behind customers to pay off debts when those customers cannot pay (i.e. issuing letter of credit).
- d The risk management role: assist customers to prepare financially for the risk of loss in property, persons, and financial assets.
- e The investment-banking role: assist corporations and governments in marketing securities and raise new funds.
- f The savings advisor role: helping customers to prepare their long-term goals by saving and investing funds.
- g The safekeeping role: safeguarding a customer's valuables.
- h The agency role: act on behalf of their customers to manage and protect their property.
- i The policy role: serving as a conduct for government policy in attempting to regulate the growth of the economy and achieve social goals.

### **2.1.1.3 Types of Bank**

Based on the type, banks can be defined as two (3) types, they are:



a. Central Banks

Central Bank functioning as the bank for national government, which is responsible in overseeing the monetary system of a nation. It holds a wide range of responsibilities including maintaining inflation rate, issuing currency, regulates credit system, overseeing commercial banks, managing reserves and act as lender of last resort.

b. Commercial Banks

Commercial Bank is a bank conducting business in a conventional and sharia.

c. Rural Credit Banks (BPR)

BPR is a bank conducting conventional business and or based on sharia principles. Legal forms of commercial banks and rural banks can be a Limited Liability Company, Local Company, and Cooperative.

Based on the ownership, banks in Indonesia are categorized into several types, which are:

- a. State Owned Bank; is bank that owned by Indonesian government, which consist of Bank Mandiri, Bank Rakyat Indonesia (BRI), Bank Negara Indonesia (BNI), Bank Tabungan Negara, Bank Ekspor Indonesia (BEI).
- b. Private Owned Bank; is bank that owned by private parties which divided into two categories based on their transactions:
  - Foreign Exchange Commercial Bank; this type of bank allowed to do international transactions. (i.e. Bank Central Asia (BCA), Bank Danamon, Bank Bukopin, Bank CIMB Niaga, Bank Mega, Bank Artha Graha, etc.)
  - Non-Foreign Exchange Commercial Bank; this type of bank can't do international transactions (i.e. Bank Panin Syariah, Bank Harmoni, Bank Andara, Bank Barclays Indonesia, Bank Mayora, etc.)

- c. Regional Development Bank (Bank Pembangunan Daerah); is bank that focus and operate only on their region (i.e. Bank DKI, Bank Jateng, Bank Jabar, Bank Jatim, etc.)
- d. Joint Venture Bank; is bank that formed through combination between two or more parties (i.e. Bank OCBC NISP Indonesia, Bank DBS Indonesia, Bank UOB Indonesia, ANZ Panin Bank, Bank Mizuho Indonesia, etc.)
- e. Foreign Bank; is bank that owned by foreign parties (i.e. Citibank N.A, ABN Amro Bank, Bank of America N.A., Bank of China, Standard Chartered, HSBC Bank, Deutsche Bank etc.)

### **2.1.2 Service Quality**

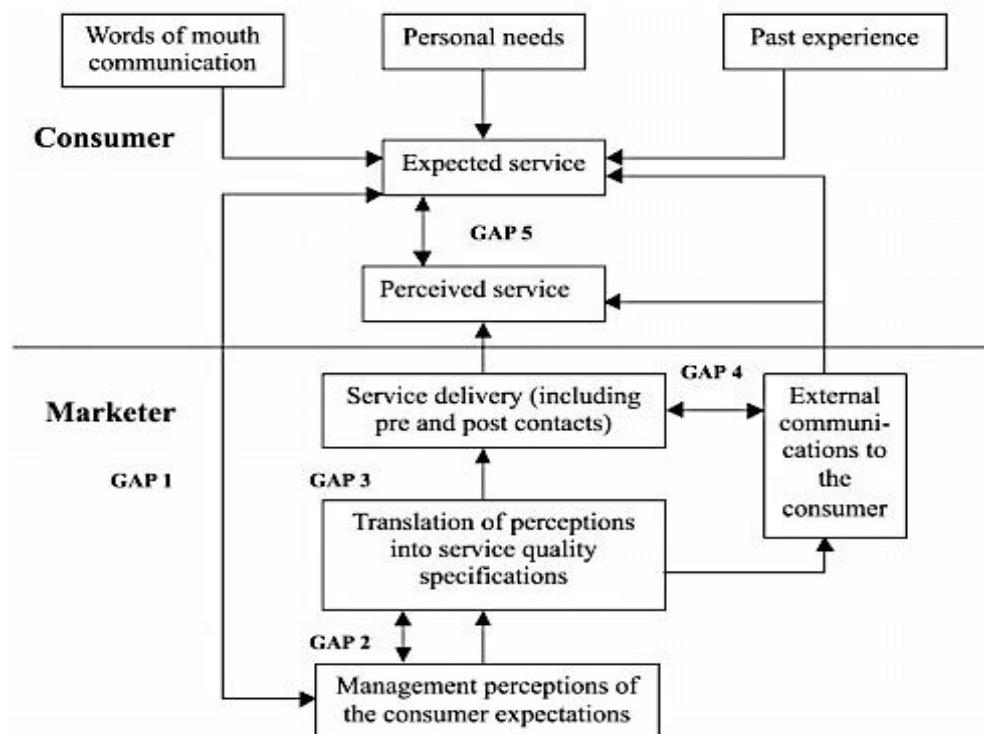
Service Quality was first developed by Parasuraman, Berry and Zeithaml (1985). Subsequent research has been done in various service industries. An examinant of the content of the final items by Parasuraman et al (1988), making up each of SERVQUAL's five dimensions consist of:

1. Tangible includes physical facilities, equipment, and appearance personnel.
2. Reliability includes the ability to perform promised service dependently and accurately.
3. Responsiveness includes willingness to help customers and provide prompt service.
4. Assurance includes knowledge and courtesy of employees and their ability to inspire trust and confidence.
5. Empathy includes caring individualized attention the firm provides its customers.

Services are increasingly becoming a larger portion of many organizations' regionally, nationally, and globally as it being considered as a tool of revenue streams. In measuring the quality of service is difficult because service quality

has unique characteristic. The success of services will be determined on how it can fulfill the expectation of customers. Customer will always compare their before-service expectation and the actual-service they receive from the company. Excellent satisfaction will be granted when the expectation of customer is exceeded by the company, good or adequate will be given if the service is equal to their expectation and if the service does not meet their expectation it will be rated as bad (Varela-Neira, 2010). Thus it will also determine customers' level of satisfaction and the loyalty that prevail.

**Figure 2.1. GAP Model**



**Source:** (Parasuraman, Zeithaml, & Berry, 1985)

The GAP Model Consists of:

**1. Gap Between Management Perceptions and the Expected Service**

The management of a company is not always able to understand what the customer wants exactly. As a result, the Management does not know how the services should be designed, and support services according to consumer want.

**2. Gap Between Management Perceptions and Translation of Service Quality Specification**

Management is quite able to understand exactly what the customer wants, but they do not prepare a clear certain performance standards. This could be due to three factors, namely the lack of total commitment to quality of service management, lack of resources, or because of excess demand.

**3. Gap Between Translation of Service Quality Specification and Service Delivery**

One of the causes of the gap can be sourced from poorly trained personnel that unable to carry out specified work standards.

**4. Gap Between Service Delivery and External Communication**

Customer expectations can be influenced by advertisement for statements made by the company. The problem is when the statement is not fulfilled by bank.

Through the GAP Model, SERVQUAL is determined by calculating the difference between two scores, where better service quality resulting in smaller gap (Landrum, 2008). SERVQUAL Itself is divided into five factors, which are Tangibles, Reliability, Responsiveness, Assurance, and Empathy.

**5. Gap between perceived service and expected service**

It happens when the customer measure the performance of companies in different ways. The fifth gap with regard to the perspective of the customer is five dimensions of service quality, namely tangible, reliability, responsiveness, assurance, and empathy.

**2.1.2.1 Tangible**

Tangible described as physical facilities, equipment and appearance of personnel and access to facilities, safety, and convenience (Castro, 1997

as cited by Bellini, Lunardi, & Henrique, 2005) that influence customer loyalty

### 2.1.2.2 Reliability

Reliability is considered as reputation that can be the most reliable indicator of service quality which could be related to customers past experiences (Ndubisi, 2006)

**Table 2.1.** Five Broad Dimension of Service Quality

<b>Dimension</b>	<b>Definition</b>
Tangible	Appearance of physical facilities, equipment, personnel and written materials
Reliability	Ability to perform the promised service dependably and accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Employees' knowledge and courtesy and their ability to inspire trust and confidence
Empathy	Caring, easy access, good /communication, customer understanding and individualized attention given to customers

**Source:** Adapted from Zeithaml et al (1990)

### 2.1.2.3 Responsiveness

Parasuraman et al (1988) defined responsiveness as the willingness to help customer and provide prompt service. It is likely to have positive relation towards customer satisfaction (Joseph 2005; Glaveli et al, 2006).

### 2.1.2.4 Assurance

The knowledge and courtesy of employees and their ability to inspire trust and confidence is Parasuraman et al. (1988) definition about Assurance. Several studies also suggest that in both traditional selling

and relationship marketing, exchange of information is very important to share common understanding (Ndubisi, 2006; Lymperopoulos, 2006).

#### **2.1.2.5 Empathy**

It is defined empathy as the caring, individualized attention the firm provides for its customers, which proved to be influential to customer loyalty (Ndubisi, 2006; Ehigie, 2006).

### **2.1.3 Relationship Quality**

#### **2.1.3.1 Relationship Trust**

In building and maintaining successful relationship, Trust is viewed as the essential components (Mousavi, 2012). Trust is a believed that someone will perform actions to achieve good outcomes. Ha et al (2004) defined trust as willingness to rely, believe and put confidence to the partner's trustworthiness from expertise, reliability, or intention of that partner. In business, when customer trusts a company, that customer believes the company has good intention and strives beneficial positive outcome for its customer. Align with it, Caceres et al (2007) mentioned that supplier who concerns about customer's positive outcome will be trusted more than supplier who concerns only for their own benefit. High level of trust characteristic of relationship exchange will promote long-term relationship benefits and decrease the willingness to exploit new relationship in order to maintain long-term cooperation (Zineldin & Jonsson, 2000).

*“...Trust is major determinant of relationship commitment...Trust influences relationship commitment... Relationships characterized by trust are so highly valued that parties will desire to commit themselves to such relationship. Thus, it can be theorized that trust is a major determinant of relationship commitment.” (Zineldin & Jonsson, 2000)*

Thus, when there is confidence in partner's reliability and integrity, trust will influence relationship quality (Morgan & Hunt, The commitment-trust theory of relationship marketing, 1994)

### 2.1.3.2 Relationship Commitment

Commitment is said to be a major factor in relationship and very important since it drives customer loyalty in service industries (Fullerton, 2003). According to Gundlack, Achrol et al (as cited in Rutherford, 2007), a successful relationship needs commitment in between customer and company.

*“An exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it; that is, the committed party believes the relationship is worth working on to ensure that it endures indefinitely” (Morgan & Hunt, 1994)*

Thus, commitment positively relates to loyalty and repeated purchase, because relationship performance is critical to repurchase decision in relational exchange (Morgan & Hunt, 1994).

**Table 2.2.** Relationship Quality Dimensions

<b>Dimension</b>	<b>Definition</b>
Trust	Customers' willingness to rely on service provider for conducting activities and transactions.
Commitment	The customers' future intention to return indicating that the relationship exists over time to predict the continuity of the relationship with the banks.

**Source:** Adapted from Alawneh (2013)

### 2.1.4 Customer Loyalty

Customer Loyalty is the primary goal of business organizations, due to the advantage of customer retention. (Ehigie, 2006) Many service organizations have developed customer loyalty programs as a part of relation development activities According to Mattila as cited by (Ali, 2011) in *Proactive Vs Reactive Measure Building Quality Relationship with Customers in Banking Sector*, revealed that many loyalty programs alone is not enough. Companies should make customers feel respected and that they special (Morais, M.J., & Backman, 2004).

## 2.2 Previous Research

**Table 2.3 Previous Researches**

RESEARCH TITLE	YEAR	RESEARCHER NAME	INDEPENDENT VARIABLES	RESEARCH HIGHLIGHT	RESEARCH RESULT
Assessing the Dimensions of Relationship Quality in B2C E-Banking Services: An Empirical Comparative Study	2013	Ali Ahmad Alawneh	<ul style="list-style-type: none"> <li>a. Trust</li> <li>b. Satisfaction</li> <li>c. Commitment</li> </ul>	<p><u>Summary:</u> Investigating the dimensions of relationship quality from e-Banking services and explores the differences among customers of Jordanian and foreign banks; Survey data from 350 customers from four Jordanian banks and four foreign banks in Amman city the capital of Jordan were collected and used to test the proposed hypotheses</p> <p><u>Data Methodology:</u> Structural Equation Modelling and</p>	<ul style="list-style-type: none"> <li>a. Approximately, 92% and 96% of the variance of relationship quality level in the customers of Jordanian banks group and customers of foreign banks group, respectively (<math>R^2 = 0.92, 0.96</math>) is explained by trust, satisfaction, and commitment.</li> <li>b. <b>Trust</b> factor contributes significantly and positively in enhancing the relationship quality</li> </ul>



				T-test	<p>between Jordanian and foreign banks towards its customers; it accounts for 46% and 40% of the change and variance in relationship quality.</p> <p><b>Satisfaction</b> factor contributes significantly and positively in enhancing the relationship quality between Jordanian and foreign bank towards its customers; it accounts for 31% and 32% of the change and variance in relationship quality.</p> <p><b>Commitment</b> factor contributes significantly and positively in enhancing the relationship quality between Jordanian</p>
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					and foreign bank towards its customers; it accounts for 35% and 34% of the change and variance in relationship quality.
The Impact of Relationship Marketing Tactics on Customer Loyalty: The Mediation Role of Relationship Quality (INSURANCE)	2011	Habibollah Doaei, Abbas Rezaei, and Rozita Khajei	<ul style="list-style-type: none"> <li>a. Trust</li> <li>b. Relational Satisfaction</li> <li>c. Relational Commitment</li> <li>d. Tangible Reward</li> <li>e. Interpersonal Communication</li> <li>f. Preferential</li> <li>g. Direct mails</li> </ul>	<p><u>Summary:</u> This study was conducted in Karafarin Insurance Representatives in Mashhad, Iran for identifying Relationship Marketing (RM) tactics impacts on loyalty due to Relationship Quality (RQ). There are 125 available customers for sampling</p> <p><u>Data Methodology:</u> Cronbach's Alpha Method with a rate of 0.88% and 0.92% for managers and customers questionnaires.</p>	<ul style="list-style-type: none"> <li>a. RQ had a positive influence to create customer Loyalty..</li> <li>b. Ranked in order of their performance in enhancing of customer loyalty by the tested RQ tactics to relationship satisfaction &gt; relationship commitment &gt; trust.</li> </ul>
ANALISIS	2010	Juzan Tri Hartanto	a. Tangible	<u>Summary:</u>	a. Empathy is considered to be

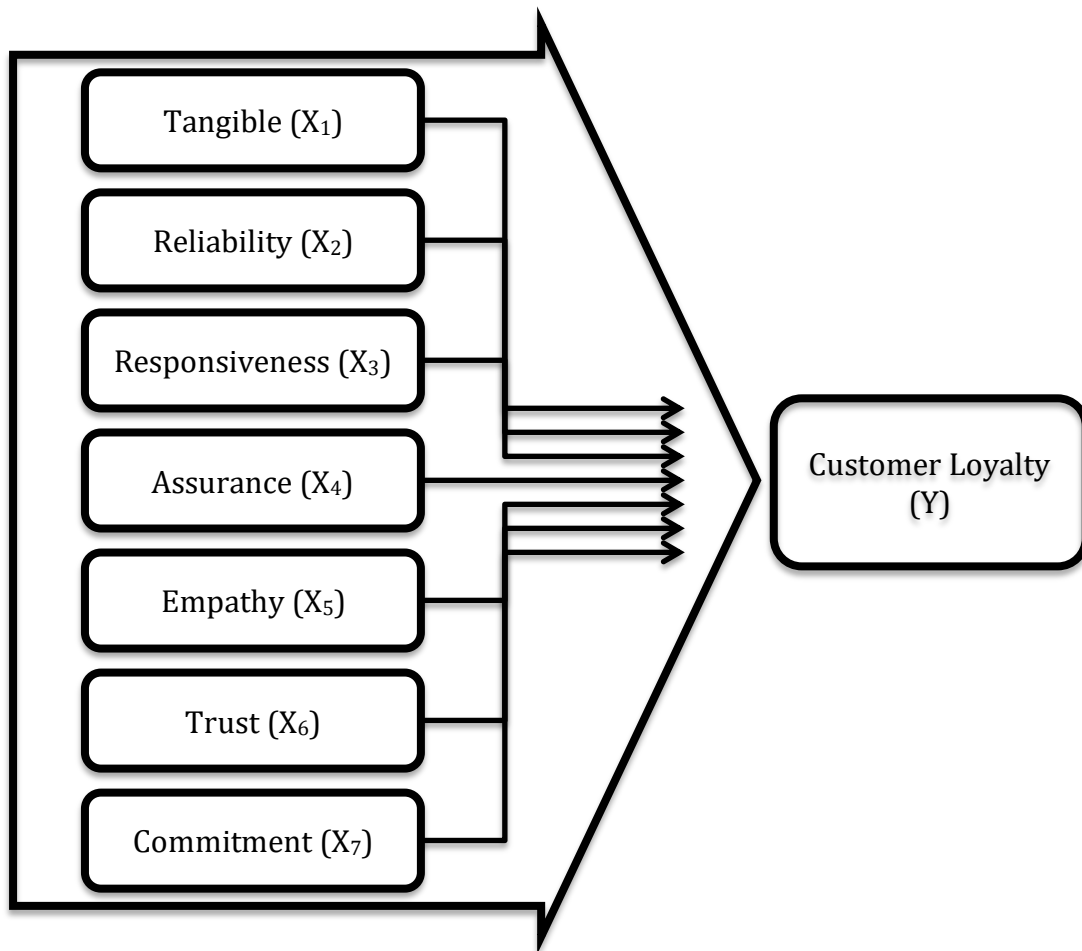
<p>PENGARUH KUALITAS PELAYANAN JASA PERBANKAN TERHADAP KEPUASAN NASABAH (Study Kasus Pada PD. BPR Bank Jogja)</p>			<ul style="list-style-type: none"> <li>b. Reliability</li> <li>c. Responsiveness</li> <li>d. Assurance</li> <li>e. Empathy</li> </ul>	<p>As financial institutions that rely on public trust banks are required to provide optimum service to put quality of service so that customers will feel satisfied and safe in the transaction in banking; The author use 80 customer of PD Bank BPR as the sample due to not all the population studied;</p> <p>Data Methodology: Accidental Sampling, Multiple Regreseion.</p>	<p>significant with positive influence towards customer loyalty.</p> <ul style="list-style-type: none"> <li>b. Tangible, Reliability, Responsiveness, and Assurance are not considered significant, but have positive influence towards Customer Loyalty.</li> </ul>
<p>ANALISIS FAKTOR – FAKTOR YANG MEMBANGUN KEPUASAN NASABAH UNTUK MENINGKATKAN LOYALITAS PELANGGAN</p>	<p>2010</p>	<p>Elisabeth R. Simamora</p>	<ul style="list-style-type: none"> <li>a. Tangible</li> <li>b. Reliability</li> <li>c. Responsiveness</li> <li>d. Assurance</li> <li>e. Empathy</li> <li>f. Brand Equity</li> <li>g. Customer Value</li> <li>h. Customer</li> </ul>	<p>Summary: PT. Bank Tabungan Negara (BTN) of Semarang branch try to gain a competitive advantage in the face of competition by using SERVQUAL, Brand Equity, Customer Value, and Customer Satisfaction towards Customer</p>	<ul style="list-style-type: none"> <li>a. Hypothesis of Service Quality, Brand Equity, Customer Value and Customer Satisfaction are proved.</li> </ul>

(Studi empiris nasabah PT. Bank Tabungan Negara cabang Semarang)			Satisfaction	Loyalty  Data Methodology: Confirmatory Factor Analysis, Regression Weight Structural Equation Modelling.	
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Source: Self-Developed Questionnaire by Researcher

### 2.3.Theoretical Framework

Figure 2.2 Theoretical Frameworks



Constructed by Researcher, adapted from Mosahab et al (2010) SERVQUAL Model

The Figure 2.2 illustrates the process of SERVQUAL and RELQUAL Model, where tangible, reliability, responsiveness, assurance, empathy, trust and commitment toward customer loyalty. The Researcher uses eight (8) variables, which consist of seven independent variables, and one dependent variable. Reliability, responsiveness, assurance, empathy, trust and commitment act as independent variable, which will influences customer loyalty as dependent variable.

### **2.3 Hypothesis**

- H<sub>1</sub>** There are positive and significant influence between Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment towards Customer Loyalty.
- H<sub>2</sub>** There is positive and significant influence between Tangible dimension and Customer Loyalty.
- H<sub>3</sub>** There is positive and significant influence between Reliability dimension and Customer Loyalty.
- H<sub>4</sub>** There is positive and significant influence between Responsiveness dimension and Customer Loyalty.
- H<sub>5</sub>** There is positive and significant influence between Assurance dimension and Customer Loyalty.
- H<sub>6</sub>** There is positive and significant influence between Empathy dimension and Customer Loyalty.
- H<sub>7</sub>** There is positive and significant influence between Trust dimension and Customer Loyalty.
- H<sub>8</sub>** There is positive and significant influence between Commitment dimension and Customer Loyalty.

# CHAPTER III

## RESEARCH METHODOLOGY

### 3.1 Research Method

There are two methods in doing scientific research those are qualitative and quantitative research. The differences between qualitative and quantitative research are the type of data, research process, instrument in collecting data and the purpose of research.

**3.1.1** Qualitative method usually gathered by observations, interviews or focus groups and the data also is gathered from written documents and through case studies, it less emphasis on counting numbers of people who think or behave in certain ways and more emphasis on explaining why people think and behave in certain ways.

**3.1.2** Quantitative method involves smaller numbers of respondents, Utilizes open-ended questionnaires or protocols, Best used to answer how and why questions. (Quantitative and Qualitative Method, 2013)

Quantitative observations are made using scientific tools and measurements. The results can be measured or counted, and any other person trying to quantitatively assess the same situation should end up with the same results. In Quantitative method pieces of information that can be counted mathematically, it usually gathered by surveys from large numbers of respondents selected randomly and it is analyzed using statistical methods Best used to answer what, when and who questions (Quantitative and Qualitative Method, 2013). The researcher use quantitative method in conducting research.

Factor Analysis and Multiple regressions Analysis are applied to this research. In this research, factor analysis is used for structure detection to recognize or identify an important set of variables. As a basis for this factor analysis, KMO and Bartlett's test used to indicate the suitability data of structure detection

(Factor Analysis – Structure Detection., 2013). Extraction communalities are estimates of the variance in each variable accounted for by the factors in the factor solution. In this study, if there are variables that show the value extraction is in below 0.3, then the variable is reduced (Waal, 2013). Therefore, there are only valid variables in this analysis then proceed to the next stage of data analysis, the multiple regression analysis.

Multiple Regressions analysis is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable to be predicted is called the dependent variable (or sometimes, the outcome, target or criterion variable). The variables that used to predict the value of the dependent variable are called the independent variables (or sometimes, the predictor, explanatory or regressor variables) (Multiple Regression, 2013).

Therefore, this study uses the quantitative method with Factor Analysis and Multiple regressions Analysis to answer the research questions.

### **3.2 Sampling Design**

Sampling Design is part of statistical methodology that related in taking a portion of the population. If a sampling is done correctly, statistical analysis can be used to generalize a whole population. There are two major types of sampling design: probability and nonprobability sampling. In probability sampling, the elements in the population have some known non-zero chance or probability of being selected as sample subjects. In non-probability sampling, the elements do not have a known or predetermined chance of being selected as subjects (Sekaran & Bougie, 2010).

In this research, the questionnaire was distributed through people preference, which has bank account of Rural Credit Bank in West Java province. The questionnaire was first distributed in Bekasi Region (BPR Cikarang), Sukabumi Region (BPR Nusamba Sukaraja), Cirebon Region (BPR Astanajapura).



### 3.2.1 Population

The Population refers to total collection of elements or the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran & Bougie, 2010; Cooper & Schindler, 2006). In this study, research population is focused on people in West Java who have Rural Credit Bank Account.

### 3.2.2 Sample

Since the number of population is not provided or unknown, researcher determines the sample size according to Comrey, et al and Schott Smith. Comrey and Lee (1992) cited by MacCallum et al., (1999), offered a rough rating scale for adequate sample sizes in factor analysis 100 = poor, 200 = fair, 300 = good, 500 = very good and 1000 or more = excellent. Therefore for this research, researcher aimed 500 respondents for its sample size. According to Schott Smith (2013), Sample size for unknown population can be calculated by:

$$\text{Necessary sample size} = \frac{(Z\text{-score})^2 * StdDev * (1 - StdDev)}{(\text{margin of error})^2}$$

Source: (Schott Smith, 2013)

$$= \frac{((1.96)^2 * .5 * (1 - .5))}{(.05)^2}$$

$$= \frac{.9604}{.0025}$$

$$\text{Sample Size} = 384.16$$

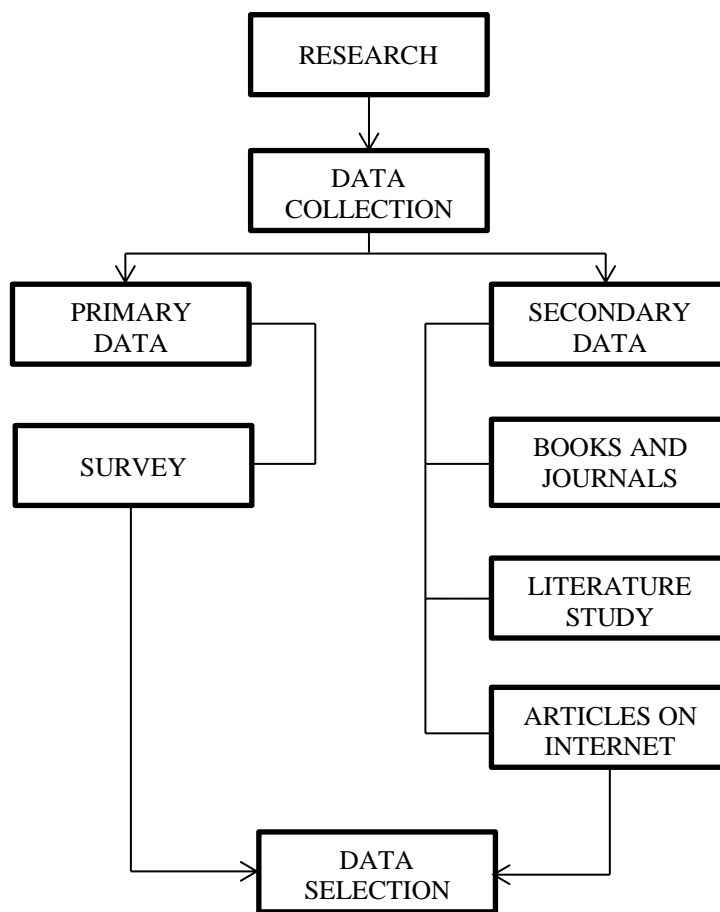
### 3.2.3 Sample Techniques

In this research, 500 samples which are customer of Rural Credit Bank (*Bank Perkreditan Rakyat*) which taken in West Java province. Since the number of population is unknown and researcher specifies the characteristic of a population of interest, sample will be chosen by using non-probability

sampling. Non-probability means it chooses unknown particular sample of population (Zigmund & Babin, 2007). Researcher chose samples by using subset of purposive sampling technique, and snowball sample. It was used to achieve other participants to suggest someone else who might be willing to participate. It is appropriate to use in research when the population is difficult to locate (Crossman, 2014).

### 3.3 Research Instrument

**Figure 3.1:** Data Collection Method



Source: Wiharja (2013)

Research Instrument is the tool that used to answer the research questions that stated in the previous chapter. The Researcher intention is to gather the information from as much various sources. Data can be obtained from primary or secondary data, Primary data refers to information obtained first-hand by the researcher on the variables of interest for specific purpose of the study and

secondary data refer to information gathered from sources that already exist (Sekaran & Bougie, 2010). In order to fulfill the validity of this research, the researcher use both primary and secondary data.

### 3.3.1 Questionnaire

In this research, questionnaire consists of three parts (Part A, B and C). The first part (Part A) consists of question related to general information:

1. Gender
2. Age
3. Education
4. Occupation
5. Income
6. Rural Credit Bank Branch

The second part (Part B) is asked to give an opinion on how much the following statement in accordance to service quality, relationship quality and customer loyalty.

**Table 3.1 Likert Scale**

<b>Relative Grading Statement</b>	<b>Score</b>
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

The last part (Part C) consists of total 40 questions; each five questions come from different variable. Researcher uses seven independents variable (Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust and Commitment), and 1 dependent variable (Customer Loyalty).

**Table 3.2 Questionnaires**

No	Variable	Definition	Question	Author
1	Tangible	Described as physical facilities, equipment and appearance of personnel and facilities	<ol style="list-style-type: none"> <li>1. The appearance of the physical facilities of the bank should be in keeping with the type of services provided.</li> <li>2. Up-to-date equipment and instrument facilities of Rural Credit Bank (BPR).</li> <li>3. Rural Credit Bank's physical facilities should be visually appealing.</li> <li>4. Employees of Rural Credit Bank (BPR) are well dressed and appear neat.</li> <li>5. Rural Credit Bank (BPR) is in appropriate location.</li> </ol>	<p>1-4: (Rahaman, Abdullah, &amp; Rahman, 2011)</p> <p>5: (Markovic &amp; Raspor, 2010)</p>
2	Reliability	Ability to perform the promised service dependably and accurately	<ol style="list-style-type: none"> <li>1. Rural Credit Bank (BPR) delivers service on time.</li> <li>2. Rural Credit Bank (BPR) have ability to solve complains.</li> <li>3. Rural Credit Bank (BPR) performs right the first time.</li> <li>4. Rural Credit Bank</li> </ol>	<p>1-5: (Prasad &amp; Verma, 2013)</p>

			<p>(BPR) promises to do something by a certain time</p> <p>5. Rural Credit Bank (BPR) solves the problems of customers</p>	
3	Responsive ness	Willingness to help customers and provide prompt service	<ol style="list-style-type: none"> <li>1. Employees of Rural Credit Bank (BPR) gives prompt services.</li> <li>2. Employees of Rural Credit Bank (BPR) arrange special care to special customer</li> <li>3. Employees of Rural Credit Bank (BPR) gives good response/reply when asked by customers</li> <li>4. Employees of Rural Credit Bank (BPR) are willing to help customers.</li> <li>5. Employees of Rural Credit Bank (BPR) tells exactly when the services will be performed.</li> </ol>	<p>1, 3-5: (Ong &amp; Pambudi, 2014)</p> <p>2: (Rahaman, Abdullah, &amp; Rahman, 2011)</p>
4	Assurance	Employee's knowledge and courtesy and their ability to inspire trust and confidence	<ol style="list-style-type: none"> <li>1. Clients can trust employees of their Bank.</li> <li>2. Customers should feel safe in transactions with Rural Credit Bank</li> </ol>	<p>1-2, and 4-5: (Rahaman, Abdullah, &amp; Rahman, 2011)</p>

			<p>(BPR).</p> <p>3. Employees of Rural Credit Bank (BPR) able to answer questions related to service offered.</p> <p>4. Employees of Rural Credit Bank (BPR) are polite.</p> <p>5. When customers have problems, Rural Credit Bank (BPR) should be sympathetic and reassuring.</p>	<p>3: (Ong &amp; Pambudi, 2014)</p>
5	Empathy	Caring, easy access, good communication, customer understanding, and individualized attention given to customers	<p>1. Employees of Rural Credit Bank (BPR) understand customer's needs</p> <p>2. Employees of Rural Credit Bank (BPR) give individual attention to customers.</p> <p>3. Employees Rural Credit Bank (BPR) treating customers with care.</p> <p>4. Employees of Rural Credit Bank (BPR) prioritize customer's needs.</p> <p>5. Rural Credit Bank (BPR) has a good operational hour.</p>	<p>1-5: (Ong &amp; Pambudi, 2014)</p>
6	Trust	Customers'	<p>1. Rural Credit Bank</p>	<p>1-5:</p>

		willingness to rely on service provider for conducting activities and transactions	<p>(BPR) is honest with its customers about any problems with its service.</p> <p>2. Customers can trust Rural Credit Bank.</p> <p>3. Rural Credit Bank (BPR) is concerned about the welfare of its customers.</p> <p>4. Rural Credit Bank (BPR) tries to understand customers' problems when they arise.</p> <p>5. Rural Credit Bank (BPR) tries to understand how its actions will affect its customers.</p>	(Beatson, Lings, & Gudergan, 2008)
7	Commitment	Customer's future intention to return indicating that the relationship exit over time to predict the continuity of the relationship with the banks	<p>1. I am loyal to Rural Credit Bank (BPR).</p> <p>2. I am committed to my relationship with Rural Credit Bank (BPR). Because I like being associated with them.</p> <p>3. I feel strongly attached to Rural Credit Bank (BPR).</p> <p>4. I would like to develop a long term relationship</p>	1-5: (Beatson, Lings, & Gudergan, 2008)

			with Rural Credit Bank (BPR). 5. I feel a sense of belonging to Rural Credit Bank (BPR).	
8	Customer Loyalty	Special kind of customer behavior towards the organization.	1. I would love to recommend Rural Credit Bank (BPR) to my friends and colleagues. 2. I will do transaction with Rural Credit Bank (BPR) even if its administration and transaction cost increases 3. When considering banks, Rural Credit Bank (BPR) will be my first choice. 4. I consider Rural Credit Bank (BPR) as the most trustable Bank 5. I consider myself to be loyal to Rural Credit Bank (BPR).	1, 2, 5: (Samiharti) 3, 4: (Bingei)

Source: Questions from journal modified by researcher

### 3.3.2 Instrument Distribution

This research used three methods of collecting data, which are using snowball, and modified version of through-questionnaire-mailed-to-informants method

Snowball approach is when researcher needs to find out specific or potential respondents, which that one respondent will help recommend the questionnaire to other respondent with the same criteria.



Modified version of through-questionnaire-mailed-to-informants method is when researcher uploads the questionnaire in a website, to access the questionnaire; researcher gives a link to the questionnaire. It makes both parties easy to access whenever and wherever.

### **3.3.3 Primary Data**

Primary data is the specific information collected by the person who is doing the research. It can be obtained through clinical trials, case studies, true experiments and randomized controlled studies. This information can be analyzed by other experts who may decide to test the validity of the data by repeating the same experiments

Primary data in this research is obtained directly from the questionnaires that used for survey. Questionnaires are a technique of data collection done by giving series of written statements that are consists of research variables. These questionnaires will be spread to the numbers of samples.

### **3.3.4 Secondary Data**

Secondary data is information gathered for purposes other than the completion of a research project and Secondary data is also used to gain initial insight into the research problem (Secondary Data, 2013). Secondary data is the data that have been already collected by and readily available from other sources. Such data are cheaper and more quickly obtainable than the primary data and also may be available when primary data cannot be obtained at all (Secondary Data, 2013).

Secondary data on this research is the literature studies to formulate and identify the problem. A literature studies is a technique of data collection based on information gathered from books and journals related to the research discussion. Data collected by learning and selecting from previous literature studies, books, journals and related websites.

### **3.4 Data Analysis**

In analyzing the data obtained, the researcher uses two major programs that are statistic-related. The first program that the researcher uses is Microsoft Excel. The employment of this program is intended to tabulate the data obtained from questionnaires distribution. It simplifies the researcher to analyze the data.

The second program is Statistical Package for Social Science (SPSS). SPSS is commonly utilized by researchers to quantitatively examine the data obtained from questionnaires distribution. It has been recognized to be helpful to investigate statistical data. SPSS in this research was used to analyze reliability, validity, factor analysis, classic assumption and multiple linear regression analysis.

Factor analysis is a multivariate technique that confirms the dimensions of the concept that have been operationally defined, as well as indicating which of items are most appropriate for each dimension (establishing construct validity) (Sekaran & Bougie, 2010).

#### **3.4.1 Reliability and Validity Test**

##### **3.4.1.1 Reliability Test**

The first requirement of a good instrument was reliability. The Reliability test of a measure indicates the extent to which it is without bias (error free) and hence ensures consistent measurement across the time and across the various items in the instrument. In other words, the reliability of a measure is an indication of the stability and consistency with which the instruments measures the concept and helps to assess the goodness of measure (Sekaran & Bougie, 2010). Accurate questionnaire may deflect the right question which is means when the question is asked for several times, the interpretation would be the same from one respondent to another.

Priyatno (2012) explained reliable instrument is the instrument that has alpha score more than 0.6. Measurement of Reliability (Internal-Consistency) in this

research will use the Cronbach's Alpha Coefficient; the equation is (Reliability, 2013):

$$\text{Cronbach's } \alpha = \frac{(k * r)}{1 + (k - 1)r}$$

Where:

k = number of items

r = average correlation between any two items

$\alpha$  = reliability of the **average or sum**

**Table 3.1:** Cronbach's Alpha

<b><i>Cronbach's <math>\alpha</math></i></b>	<b>Internal Consistency</b>
<b><i>Cronbach's <math>\alpha \geq 0.9</math></i></b>	Excellent
<b><i>0.8 \leq Cronbach's <math>\alpha &lt; 0.9</math></i></b>	Good
<b><i>0.7 \leq Cronbach's <math>\alpha &lt; 0.8</math></i></b>	Acceptable
<b><i>0.6 \leq Cronbach's <math>\alpha &lt; 0.7</math></i></b>	Questionable
<b><i>0.5 \leq Cronbach's <math>\alpha &lt; 0.6</math></i></b>	Poor
<b><i>Cronbach's <math>\alpha &lt; 0.5</math></i></b>	Unacceptable

Source: (George & Mallery, 2003)

### 3.4.1.2 Validity Test

The purpose of validity testing is to eliminate the proper question that will answer the research objectives. Validity test is used to determine at the Quantitative interpretation of the degree of linear relationship existing is shown in the following range of values. In Factor Analysis, Kaiser Meyer Olkim and Barlett's Test, Commonalties, Total Variance Explained, and Rotated Component matrix the first step of the decision whether the statements of the variable are valid or not.

### **3.4.2 Classic Assumption**

#### **1. Normality Test**

Normality test are used to determinant if a data set is well modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed.

The indicator of it is when histogram chart show the bell-shaped curve, and if the P-Plot of regression standardized residual shows the residual distributed in the pattern of residuals in diagonally shaped on the Normal P-Plot of Regression Standardize Residual graph.

#### **2. Multicollinearity Test**

It is a term used when two variables are highly correlated, means that one can be linearly predicted from VIF with less than 10 and Tolerance value range 0 to 1; multicollinearity is indicated for a particular variable if the tolerance value is 0.01 or less and VIF greater than 10.

#### **3. Auto Correlation**

According to Mason, et.al (2003), autocorrelation is the relationship between members of a time series of observation. Auto correlation test is performed for time series data, not for cross sectional data. Good regression model is free autocorrelation doesn't exist in regression. If D-W value is in between -2 until +2 ( $-2 < DW \text{ Value} < +2$ ), it means there is no autocorrelation in the data.

#### **4. Heteroscedasticity**

Heteroscedasticity typically occurs when a variable is not normally distributed. It reflects inconstant error variance. This test will be conducted through scatter plot using SPSS 20.00 for windows. Heteroscedasticity is considered occurs when the graphic shows some kind of pattern.

### 3.4.3 Multiple Regressions

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_7 X_7 + \varepsilon$$

Multiple Regressions are used to assess of multiple variables on independent measures. If the significance value is greater than 0.05, it means that the independent being measured does not have significant influence toward dependent variable (Santoso, 2009).

The interpretation of regression in this research will be using standardized regression coefficient, due to the independent variables are rely on likert scale measurement. The interpretation represent the amount of change in the dependent variable associated with one-unit change in independent variable, with other independent held constant (Newton & Rudestam, 2012).

### 3.4.4 Hypothesis Testing

#### 3.4.4.1 F Test

F test used to evaluate whether there is a simultaneously influence between independent variables (Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment) towards dependent variable (Customer loyalty). In this research, researcher use:

HO<sub>1</sub> Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment are not simultaneously influence towards Customer Loyalty.

HA<sub>1</sub> Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment are simultaneously influence towards Customer Loyalty.

The basic decisions in F-Test are:

**H<sub>0</sub>:**  $\beta_1=0$ , Null hypothesis is accepted if significance value is greater than 0.05

**H<sub>A</sub>:**  $\beta_1 \neq 0$ , Alternative hypothesis is accepted if significance value is less than 0.05

If H<sub>A</sub> is accepted and reject H<sub>0</sub> means independent variables have significance variable toward dependent simultaneously.

#### **3.4.4.2 T Test**

T-test aim to determine whether independents variable have partially influences towards dependent variable.

**HO<sub>2</sub>** There is negative and insignificant influence between Tangible dimension and Customer Loyalty.

**HA<sub>2</sub>** There is positive and significant influence between Tangible dimension and Customer Loyalty.

**HO<sub>3</sub>** There is negative and insignificant influence between Reliability dimension and Customer Loyalty.

**HA<sub>3</sub>** There is positive and significant influence between Reliability dimension and Customer Loyalty.

**HO<sub>4</sub>** There is negative and insignificant influence between Responsiveness dimension and Customer Loyalty.

**HA<sub>4</sub>** There is positive and significant influence between Responsiveness dimension and Customer Loyalty.

**HO<sub>5</sub>** There is negative and insignificant influence between Assurance dimension and Customer Loyalty.

**HA<sub>5</sub>** There is positive and significant influence between Assurance dimension and Customer Loyalty.

**HO<sub>6</sub>** There is negative and insignificant influence between Empathy dimension and Customer Loyalty.

**HA<sub>6</sub>** There is positive and significant influence between Empathy dimension and Customer Loyalty.

**HO<sub>7</sub>** There is negative and insignificant influence between Trust dimension and Customer Loyalty.

**HA<sub>7</sub>** There is positive and significant influence between Trust dimension and Customer Loyalty.

**HO<sub>8</sub>** There is negative and insignificant influence between Commitment dimension and Customer Loyalty.

**HA<sub>8</sub>** There is positive and significant influence between Commitment dimension and Customer Loyalty.

The basic decisions in T-Test are:

**H<sub>0</sub>**:  $\beta_1=0$ , Null hypothesis is accepted if significance value is greater than 0.05

**H<sub>A</sub>**:  $\beta_1\neq 0$ , Alternative hypothesis is accepted if significance value is less than 0.05

If H<sub>A</sub> is accepted and reject H<sub>0</sub> means independent variables have partially significance toward dependent variable.

### **3.4.5 Coefficient Determination**

The coefficient of determination (adjusted R<sup>2</sup>) was essentially measures how far the model's ability to explain the variation in the dependent variable. The closer to 1, the value indicates that the independent variables provide almost all the information needed to predict dependent variables (Sirkin, 2006).

# CHAPTER IV

## ANALYSIS AND INTERPRETATION

### OF RESULTS

#### 4.1 Company Profile

##### 4.1.1 History of Rural Credit Bank

RCB in Indonesia started in the 19th century during Dutch colonial with the founding of the *Bank Kredit Rakyat* and *Lumbung Desa* that was built with the purpose of helping the farmers, servants and workers in order to escape from a loan shark (loan sharks) that give burden with very high interest.

During the Dutch Colonies Government, Rural Credit communities are known by the term *Lumbung Desa*, *Bank Tani* and *Bank Dagang Desa*, which currently exists only in Java and Bali Island. In 1929 the agency that handles rural credit are, *Bank Kredit Desa* (BKD), which located on the island of Java and Bali, while for the Supervision and Development, Government of the Netherlands form Cash Center and the Department of Rural Credit, which the institution is *Instansi Kas Pusat* (IKP).

After Indonesian independence, the government encouraged the establishment of banks and particularly well known as established within the market and aims to provide financial services to the market. Then based on Pakto in 1988 the market confirmed as Rural Credit bank (BPR). Since then BPR in Indonesia flourish.

On the October 27, 1988, the government deregulated banking policy known as Pakto 88, as a continuation of Pakto 88 before. The government issued several provisions in banking package, which is a refinement from the previous provisions. Accordingly, the government enhanced Law No.14,



1967. The law was further refined in Act 10, 1998, which stated that Indonesia has two types of bank. They are commercial bank and rural credit bank.

#### **4.1.2 The Principle of BPR**

In implementing BPR efforts, based economic democracy by using the precautionary principle. Democracy Indonesian economy is the economic system that is run in accordance with Article 33 UUD 1945, which has 8 positive characteristics as a supporter and 3 negative traits to be avoided (free fight liberalism, etatisme, and monopoly).

#### **4.1.3 The Purpose of BPR**

Support the implementation of national development in order to improve equity, economic growth and national stability towards improving the welfare of the people.

#### **4.1.4 Objectives of BPR**

Serving the needs of farmers, ranchers, fishermen, traders, small businessmen, and retired as the target can not be reached by commercial banks and to better realize the equalization of banking services, equal opportunity endeavor, income distribution, and so they do not fall into the hands of moneylenders (moneylenders).

#### **4.1.5 Rural Credit Bank Do's:**

1. Collect funds from the public in the form of deposits in the form of time deposits, savings, and / or other equivalent forms of it
2. Giving Credit
3. Provide funding for customers based on the principle of profit sharing in accordance with the provisions stipulated in the Government Regulation
4. Placing funds in Certificates of Bank Indonesia (SBI), time deposits, certificates of deposit, and / or savings on another bank. SBI is a certificate

offered by Bank Indonesia to BPR when experienced over excess liquidity or liquidity.

## 4.2 Data Analysis

### 4.2.1 Respondent Profile

Based on the research methodology in chapter III, the questionnaire that has been distributed and collected are:

Questionnaire distributed : 500

Questionnaire collected : 434

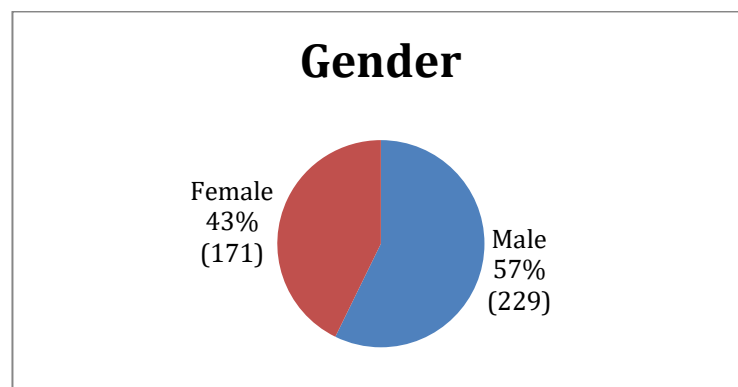
Questionnaire qualified : 400

Questionnaire result that has been successfully collected is 434 from 500 respondents, with 400 can be calculated since all of the statement in the questionnaires has been filled by the respondents, while 34 questionnaire considered not qualified and cannot be used because the respondents not filled all of the statements in those questionnaire or there is more than one answer on one single statements

After doing data collection, the next step is processing qualified data with Microsoft excel and SPSS 20.0 for windows. The characteristic of this research as follow:

#### 1) Gender

**Figure 4.1 Demographic Views (Gender)**

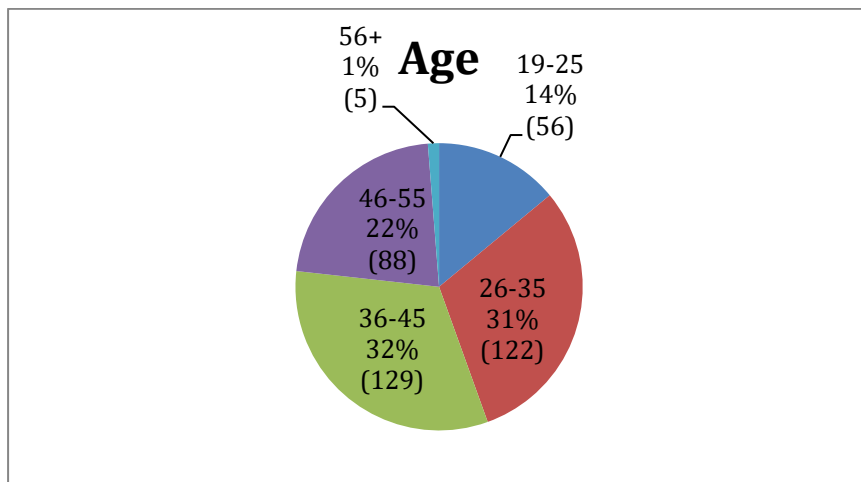


Source: Ms. Excel 2010 and Primary Data

From Figure 4.1, we can see that most respondents of this research are male, as many as 229 people with percentage of 57%. The second is female, as many as 171 people with percentage of 43%. Based on this figure, researcher can conclude that majority gender of the respondent in this research is dominantly male.

## 2) Age

**Figure 4.2 Demographic Views (Age)**



Source: Ms. Excel 2010 and Primary Data

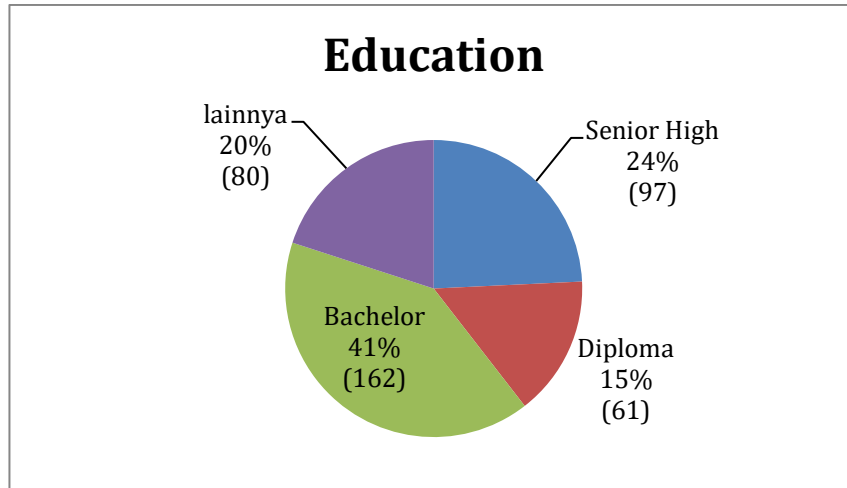
Based on Figure 4.2, researcher can see that the most respondents in this research are in the age of 36 to 45 years old as many as 129 people with percentage of 32%, lowered by 1 percentage the age of 26 to 35 years old as many as 122 people with percentage of 31%. Following age of 46 to 55 years old as many as 88 people with 22%, then 19 to 25 years old as many as 56 people with 14%, and the last is 56+ as many as 5 people with 1%, which is the smallest age of respondents. Based on this figure, researcher can conclude that majority age of the respondents is 36 to 45 years old.

## 3) Education

On the Figure 4.3 demographic view for education level, there were around 41% Or 162 respondents are a bachelor, 24% or 97 respondents who at least high school on their education, 20% or 80 respondents are at others, and the

last is diploma which are 15% or 61 respondents. Thus, researcher concludes that the majority of respondent is a bachelor.

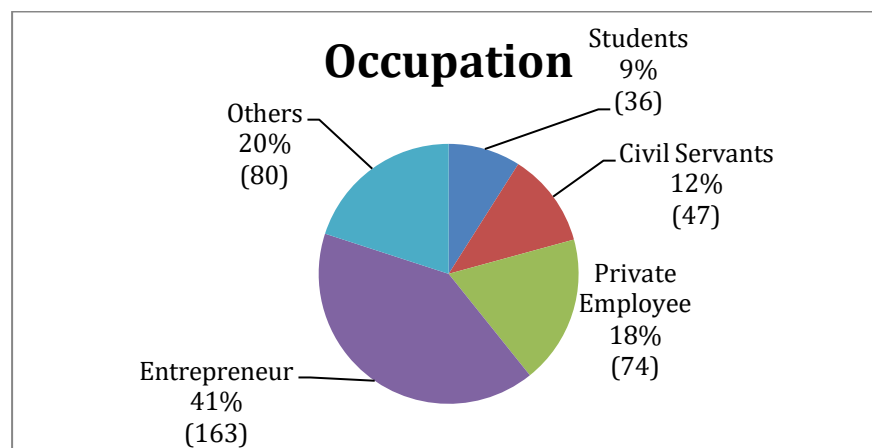
**Figure 4.3 Demographic Views (Education)**



Source: Ms. Excel 2010 and Primary Data

#### 4) Occupation

**Figure 4.4 Demographic Views (Occupation)**



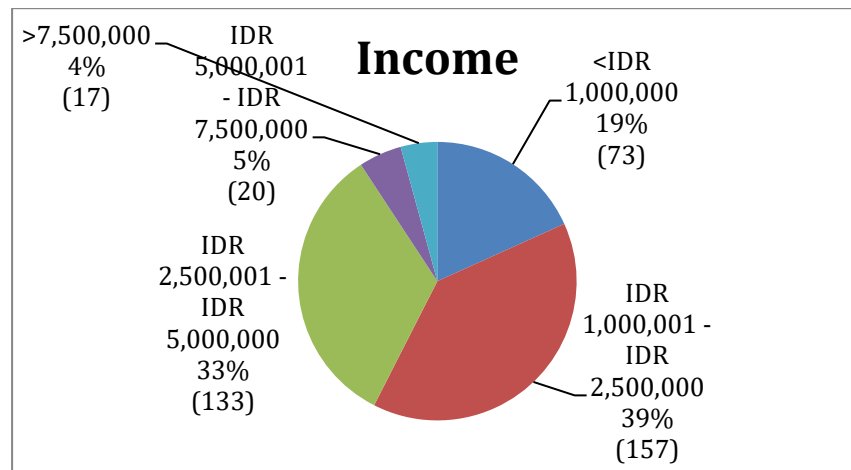
Source: Ms. Excel 2010 and Primary Data

On the Figure 4.4 Demographic Views for Occupation level, there were around 41% or 163 respondents are an entrepreneur, 20% or 80 respondents are others job, 18% or 74 respondents are private employee, 12% or 47

respondents are Civil Servants, and the last is 9% or 36 respondents are students. Thus, researcher concludes that the majority of respondent is an entrepreneur.

### 5) Income

**Figure 4.5 Demographic Views (Income)**



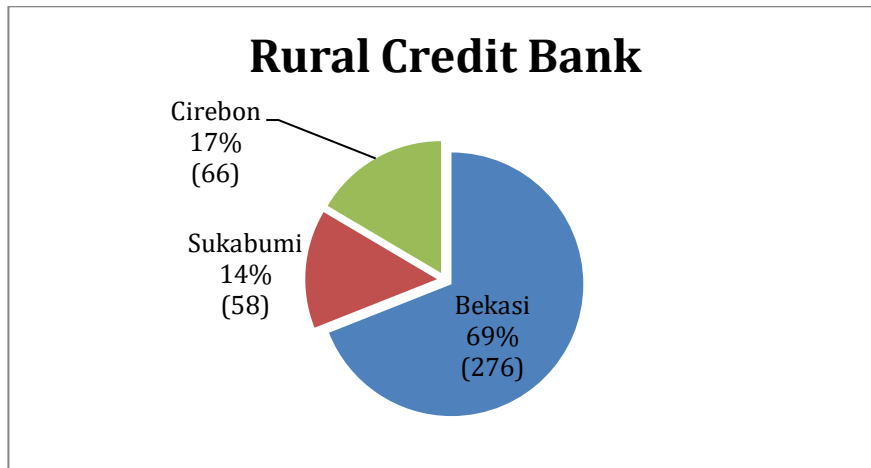
*Source: Ms. Excel 2010 and Primary Data*

From Figure 4.5 Demographic Views for Income, there were around 39% or 157 respondents who earn IDR 1,000,001-IDR 2,500,000 per month, 33% or 133 respondents who earn IDR 2,500,001-IDR 5,000,000 per month, 19% or 73 respondents who earn < IDR 1,000,000 per month, 5% or 20 respondents who earn IDR 5,000,001-IDR 7,500,000, and the last 4% or 17 respondents who earn > IDR 7,500,000. Based on the Figure Demographic for Income above, researcher can conclude that most of customers of Rural Credit Bank earn at least IDR 1,000,001 to IDR 2,500,000.

### 6) Rural Credit Bank Branch

On the Figure 4.6 Demographic View for customer of Rural Credit Bank in Bekasi Region there were 69% or 276 respondents, for Cirebon Region 17% or 66 respondents, for Sukabumi Region 14% or 58 respondents. Based on Figure 4.x Demographic for Rural Credit bank Branch, most of respondents came from Bekasi Region Branch.

**Figure 4.6 Demographic Views (Rural Credit Bank Branch)**



*Source: Ms. Excel 2010 and Primary Data*

#### **4.2.2 Factor Analysis: Validity**

##### **4.2.2.1 KMO**

**Table 4.1 Table KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.913
Bartlett's Approx. Chi-Square Test of Sphericity	5559.737
Df	300
Sig.	0.000

*Source: SPSS 20.0 and Self-Developed Primary Data*

Kaiser Meyer Olkin and Barlett's Test is the first step to decide whether the statements of the variable are valid or not. The requirement for valid statements is KMO measure of sampling adequacy should be greater than 0.5. If KMO measure of sampling adequacy fails to reach 0.5, it will be considered invalid and must be eliminated.

From Table 4.1 above, KMO and Barlett's test is conducted with the value of .913 (greater than 0.5), which indicates factor analysis accepts that. Barlett's test of

Sphericity examines the null hypothesis test, which in this research is Service Quality and Relationship Quality has no significant towards Customer Loyalty. The result of Barlett's test of Sphericity on the Table 4.1 above has shown a significance value 0.000 that is less than 0.05. Therefore, the null hypothesis rejected and factor analysis can be continued.

#### 4.2.2.2 Commonalities

##### 4.2.2.2.1 SERVQUAL Dimensions: Tangible Variable

Table 4.2 Communalities Table of SERVQUAL Tangible Variable

Communalities		
	Initial	Extraction
Tan1	1.000	.712
Tan2	1.000	.665
Tan3	1.000	.095
Tan4	1.000	.339
Tan5	1.000	.549

Extraction Method: Principal

Component Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.2 above, there are 2 invalid statements (less than .5), which are Tan3 and Tan4. So, the researcher must eliminate it.

Table 4.3 Communalities Table of SERVQUAL Tangible Variable

Communalities		
	Initial	Extraction
Tan1	1.000	.820
Tan2	1.000	.825

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.3 above, there are 3 statements have extraction value greater than 0.5 (Tan1, Tan2, and Tan5). Researcher considered them as valid statements.

#### 4.2.2.2.2 SERVQUAL Dimensions: Reliability Variable

Table 4.4 Communalities Table of SERVQUAL Reliability Variable

Communalities

	Initial	Extraction
Rel1	1.000	.714
Rel2	1.000	.634
Rel3	1.000	.650
Rel4	1.000	.323
Rel5	1.000	.320

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.4 above, there are 2 invalid statements (less than .5), which are Rel4 and Rel5. So, the researcher must eliminate it.

Table 4.5 Communalities Table of SERVQUAL Reliability Variable

Communalities

	Initial	Extraction
Rel1	1.000	.775
Rel2	1.000	.697
Rel3	1.000	.686

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.5 above, there are 3 statements have extraction value greater than 0.5 (Rel1, Rel2, and Rel3). Researcher considered them as valid statements.



#### 4.2.2.2.3 SERVQUAL Dimensions: Responsiveness Variable

Table 4.6 Communalities Table of SERVQUAL Responsiveness Variable

Communalities

	Initial	Extraction
Res1	1.000	.650
Res2	1.000	.677
Res3	1.000	.520
Res4	1.000	.660
Res5	1.000	.439

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.6 above, there is 1 invalid statement (less than .5), which is Res5. So, the researcher must eliminate it.

Table 4.7 Communalities Table of SERVQUAL Responsiveness Variable

Communalities

	Initial	Extraction
Res1	1.000	.692
Res2	1.000	.736
Res3	1.000	.536
Res4	1.000	.641

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.7 above, there are 4 statements have extraction value greater than 0.5 (Res1, Res2, Res3, and Res4). Researcher considered them as valid statements.

#### 4.2.2.2.4 SERVQUAL Dimensions: Assurance Variable

Table 4.8 Communalities Table of SERVQUAL Assurance Variable

Communalities

	Initial	Extraction
As1	1.000	.616
As 2	1.000	.757
As 3	1.000	.707
As 4	1.000	.576
As 5	1.000	.144

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.8 above, there is 1 invalid statement (less than .5), which is As5. So, the researcher must eliminate it.

Table 4.9 Communalities Table of SERVQUAL Assurance Variable

Communalities

	Initial	Extraction
As1	1.000	.652
As 2	1.000	.779
As 3	1.000	.704
As 4	1.000	.567

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.9 above, there are 4 statements have extraction value greater than 0.5 (As1, As2, As3, and As4). Researcher considered them as valid statements.

#### 4.2.2.2.5 SERVQUAL Dimensions: Empathy Variable

Table 4.10 Communalities Table of SERVQUAL Empathy Variable

Communalities

	Initial	Extraction
Emp1	1.000	.307
Emp2	1.000	.467
Emp3	1.000	.707
Emp4	1.000	.714
Emp5	1.000	.222

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.10 above, there are 3 invalid statements (less than .5), which are Emp1, Emp2, and Emp5. In this variable, researcher only eliminated 2 statements with the lowest values, which is Emp1 and Emp5.

Table 4.11 Communalities Table of SERVQUAL Empathy Variable

Communalities

	Initial	Extraction
Emp2	1.000	.546
Emp3	1.000	.798
Emp4	1.000	.733

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.11 above, there are 3 statements have extraction value greater than 0.5 (Emp2, Emp3, and Emp4). Researcher considered them as valid statements.

#### 4.2.2.2.6 Relationship Quality Dimensions: Trust Variable

Table 4.12 Communalities Table of RQ Trust Variable

Communalities

	Initial	Extraction
Tr1	1.000	.738
Tr2	1.000	.745
Tr3	1.000	.741
Tr4	1.000	.676
Tr5	1.000	.612

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.12 above, there are no invalid, which the 5 statements have extraction value greater than 0.5 (Tr1, Tr2, Tr3, Tr4, and Tr5). Researcher considered them as valid statements.

#### 4.2.2.2.7 Relationship Quality Dimensions: Commitment Variable

Table 4.13 Communalities Table of RQ Commitment Variable

Communalities

	Initial	Extraction
Com1	1.000	.491
Com2	1.000	.635
Com3	1.000	.772
Com4	1.000	.601
Com5	1.000	.683

Extraction Method: Principal Component

Analysis

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.13 above, there is 1 invalid statement (less than .5), which is Com1. So, the researcher must eliminate it.

Table 4.14 Communalities Table of RQ Commitment Variable

Communalities

	Initial	Extraction
Com2	1.000	.676
Com3	1.000	.783
Com4	1.000	.646
Com5	1.000	.681

Source: SPSS 2.0 and Self-Developed

Primary Data

From Table 4.14 above, there are 4 statements have extraction value greater than 0.5 (Com2, Com3, Com4, and Com5). Researcher considered them as valid statements.

**Table 4.15 Communalities Result**

	Initial	Extraction
Tan1	1.000	.820
Tan2	1.000	.825
Rel1	1.000	.761
Rel2	1.000	.696
Rel3	1.000	.701
Res1	1.000	.713
Res2	1.000	.782
Res3	1.000	.568
Res4	1.000	.623
As1	1.000	.699
As2	1.000	.806
As3	1.000	.706
As4	1.000	.581
Emp2	1.000	.537
Emp3	1.000	.832
Emp4	1.000	.787
Tr1	1.000	.764
Tr2	1.000	.770
Tr3	1.000	.760
Tr4	1.000	.690
Tr5	1.000	.628
Com2	1.000	.716
Com3	1.000	.784
Com4	1.000	.677
Com5	1.000	.693

Source: SPSS 20.0

In this factor analysis, the communalities extraction value is the second step to decide whether the statements of the variable are valid or not. The requirement for valid statements is a statement with communalities values 0.5 or higher. Fail to reach 0.5 will be considered invalid and must be eliminated from the table. There are 10 statement of dependent variable that researcher considered to be eliminated; Tangible (Tan3, Tan4, and Tan5), Reliability (Rel5 and Rel4), Responsiveness (Res5), Assurance (As5), and Commitment (Comm1).

#### 4.2.2.3 Total Variance Experience

Table 4.16 Total Variance Experiences

Components	Rotation Sums of Squared loadings		
	Total	% of Variance	Cumulative %
1	4.412	12.605	12.605
2	3.581	10.230	22.835
3	3.453	9.867	32.702
4	3.333	9.524	42.226
5	3.134	8.954	51.180
6	1.922	5.493	56.672
7	1.649	4.713	61.385

Source: SPSS 20.0 and Self-Developed Primary Data

After did some analyzing and removing few statements, the researcher got the best results for this research.

Table 4.17 Total Variance Experiences

Components	Rotation Sums of Squared loadings		
	Total	% of Variance	Cumulative %
1	3.685	14.740	14.740
2	2.749	10.994	25.734
3	2.704	10.814	36.548
4	2.679	10.714	47.263
5	2.316	9.265	56.528
6	2.004	8.015	64.543
7	1.783	7.132	71.675

Source: SPSS 20.0 and Self-Developed Primary Data

Total variance explained shows all variables, which are extractable from the analysis along with their eigenvalues. In this research, total variance explained shows how strong new variable formed contribute to the customer loyalty through the cumulative variance amount. On Table 4.17, it can be noticed all 25 valid variables have formed seven new factors. These seven new factors contribute totally 71.675% to the customer loyalty. Meanwhile, the rest 28.325% could not be represented.

**Table 4.18 Commonalities Table and Rotated Component Matrix Table**

Commonalities and Rotated Component Matrix										
	Initial	Extra ction	Remark	Rotated Component Matrix						
				Component						
				1	2	3	4	5	6	7
Tr3	1.000	760	Valid	.816						
Tr2	1.000	770	Valid	.801						
Tr1	1.000	764	Valid	.778						
Tr4	1.000	690	Valid	.765						
Tr5	1.000	628	Valid	.606						
As2	1.000	806	Valid		.830					
As1	1.000	699	Valid		.788					
As3	1.000	706	Valid		.661					
As4	1.000	581	Valid		.640					
Com2	1.000	716	Valid			.754				
Com4	1.000	677	Valid			.737				
Com3	1.000	784	Valid			.723				
Com5	1.000	693	Valid			.630				
Res2	1.000	782	Valid				.832			
Res1	1.000	713	Valid				.765			
Res4	1.000	623	Valid				.654			
Res3	1.000	568	Valid				.637			
Rel1	1.000	761	Valid					.820		
Rel3	1.000	701	Valid					.778		
Rel2	1.000	696	Valid					.767		
Emp3	1.000	832	Valid						.840	
Emp4	1.000	787	Valid						.796	
Emp2	1.000	537	Valid						.533	
Tan2	1.000	825	Valid							.812
Tan1	1.000	820	Valid							.787

Source: SPSS 20.0 and Self-Developed Primary Data

From Table 4.18, all statements have extraction value more than 0.5 in the column extraction, so researcher decided all statements are valid for this research. The seven factors (latent variables) formed can be analyzed thoroughly as follow:

### 1. Factor Tangible

The seven factors have the variance value of 71.675% (see Table 4.16). The seven factors consist of three manifest variables, which are illustrated, in Table 4.19 below:

**Table 4.19 Factor 7 Variable Operation: SERVQUAL Dimension Tangible**

	Variables	Values
Tan2	Up-to-date equipment and instrument facilities of Rural Credit Bank (BPR).	.812
Tan1	The appearance of the physical facilities of the bank should be in keeping with the type of services provided.	.787

Source: SPSS 20.0 and Self-Developed Primary Data

The seventh factor should be termed “Tangible.” The factor discusses bank’s tangible, which includes up-to-date equipment, related service and physical facilities.

### 2. Factor Reliability

The fifth factor has the variance value of 56.528% (see Table 4.16). The fifth factor consists of three manifest variables, which are illustrated, in Table 4.20 below:

**Table 4.20 Factor 5 Variable Operation: SERVQUAL Dimension Reliability**

	Variables	Values
Rel1	Rural Credit Bank (BPR) delivers service on time.	.820
Rel3	Rural Credit Bank (BPR) performs right the first time.	.778
Rel2	Rural Credit Bank (BPR) have ability to solve complains.	.767

Source: SPSS 20.0 and Self-Developed Primary Data



The fifth factor should be termed “Reliability.” The factor discusses bank’s reliability, which includes giving service on time, perform right the first time, and have the ability to solve complaint.

### 3. Factor Responsiveness

The fourth factor has the variance value of 47.263% (see Table 4.16). The fourth factor consists of four manifest variables, which are illustrated, in Table 4.21 below:

**Table 4.21 Factor 4 Variable Operation: SERVQUAL Dimension Responsiveness**

	Variables	Values
Res2	Employees of Rural Credit Bank (BPR) arrange special care to special customer.	.832
Res1	Employees of Rural Credit Bank (BPR) gives prompt services.	.765
Res4	Employees of Rural Credit Bank (BPR) are willing to help customers.	.654
Res3	Employees of Rural Credit Bank (BPR) gives good response/reply when asked by customers	.637

Source: SPSS 20.0 and Self-Developed Primary Data

The fourth factor should be termed “Responsiveness.” The factor discusses responsiveness, which includes special care, prompt services, willingness to help, and gives good response/reply.

### 4. Factors Assurance

The second factor has the variance value of 25.734% (see Table 4.16). The second factor consists of four manifest variables, which are illustrated, in Table 4.22 below:

**Table 4.22 Factor 2 Variable Operation: SERVQUAL Dimensions Assurance**

	Variables	Values
As2	Customers should feel safe in transactions with Rural Credit Bank (BPR).	.830
As1	Clients can trust employees of their Bank.	.788
As3	Employees of Rural Credit Bank (BPR) able to answer questions related to service offered.	.661
As4	Employees of Rural Credit Bank (BPR) are polite.	.640

Source: SPSS 20.0 and Self-Developed Primary Data

The second factor should be termed “Assurance.” The factor discusses assurance, which includes feeling safe in transaction, customers’ trust in employee, able to answer question related to service offered, and the politeness of employees to its customers.

## 5. Factor Empathy

The sixth factor has the variance value of 64.543 % (see Table 4.16). The sixth factor consists of three manifest variables, which are illustrated, in Table 4.23 below:

**Table 4.23 Factor 6 Variable Operation: SERVQUAL Dimension Empathy**

	Variables	Values
Emp3	Employees Rural Credit Bank (BPR) treating customers with care.	.840
Emp4	Employees of Rural Credit Bank (BPR) prioritize customer's needs.	.796
Emp2	Employees of Rural Credit Bank (BPR) give individual attention to customers.	.533

Source: SPSS 20.0 and Self-Developed Primary Data

The sixth factor should be termed “Empathy.” The factor discusses bank’s empathy, which includes treating customer with care, prioritize customer's needs, and give individual attention to customers.

## 6. Factor Trust

The first factor has the variance value amount of 14.740% (see Table 4.16). The first factor consists of five manifest variables, which are illustrated, in Table 4.24 below:

**Table 4.24 Factor 1 Variable Operation: RQ Dimensions Trust**

	Variables	Values
Tr3	Rural Credit Bank (BPR) is concerned about the welfare of its customers.	.816
Tr2	Customers can trust Rural Credit Bank.	.801
Tr1	Rural Credit Bank (BPR) is honest with its customers about any problems with its service.	.778
Tr4	Rural Credit Bank (BPR) tries to understand customers' problems when they arise.	.765
Tr5	Rural Credit Bank (BPR) tries to understand how its actions will affect its customers.	.606

Source: SPSS 20.0 and Self-Developed Primary Data

The first factor should be termed “Trust.” The factor discuss trust, which includes the concern of employee to the customer, how well Rural Credit Bank maintain trust, honesty about any problem with its service, understand customer s’ problem and understand how its actions will affect customers.

## 7. Factor Commitment

**Table 4.25 Factor 3 Variable Operation: RQ Dimension Commitment**

	Variables	Values
Com2	I am committed to my relationship with Rural Credit Bank (BPR) because I like being associated with them.	.754
Com4	I would like to develop a long-term relationship with Rural Credit Bank (BPR).	.737
Com3	I feel strongly attached to Rural Credit Bank (BPR).	.723
Com5	I feel a sense of belonging to Rural Credit Bank (BPR).	.630

Source: SPSS 20.0 and Self-Developed Primary Data

The third factor has the variance value of 36.548% (see Table 4.16). The third factor consists of four manifest variables, which are illustrated, in Table 4.25.

The third factor should be termed “Commitment.” The factor discusses commitment, which includes committed relationship, develops relationship, feel strongly attached and sense of belonging.

### 4.2.3. Reliability Test

The reliability test is needed to figure out whether the new factors are accurate, precise and consistent enough to be utilized. According to Malhotra cited by Brinxma and Ramdharie (2012), if the value of Cronbach Alpha is 0.6 or less indicates unsatisfactory reliability of particular factor. The computed alpha values of each variable for the research are as follow:

**Table 4.26 Reliability Table of Tangible (X1) Variable**

#### Reliability Statistics

Cronbach's Alpha	N of Items
.800	2

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.27 Item-Total Statistics of Tangible (X1)**

#### Variable

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Tan1	3.8325	.556	.676	
Tan2	3.7575	.781	.676	

Source: SPSS 20.0 and Self-Developed Primary Data

From Table 4.26 Reliability Statistic, the value of Cronbach Alpha for Tangible (X1) variables is 0.800, which is considered reliable.

**Table 4.28 Reliability Table of Reliability (X2) Variable**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.802	3

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.29 Item-Total Statistics of Reliability (X2) Variable**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Rel1	6.9425	2.400	.704	.669
Rel2	6.7300	2.879	.628	.755
Rel3	7.2775	2.482	.623	.761

Source: SPSS 20.0 and Self-Developed Primary Data

From Table 4.28 Reliability Statistic, the value of Cronbach Alpha for Reliability (X2) variables is 0.802, which is considered reliable.

**Table 4.30 Reliability Table of Responsiveness (X3) Variable**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.816	4

Source: SPSS 20.0 and Self-Developed Primary Data

From Table 4.30 Reliability Statistic, the value of Cronbach Alpha for Responsiveness (X3) variables is 0.816, which is considered reliable.

**Table 4.31 Item-Total Statistics of Responsiveness  
(X3) Variable**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Res1	11.3750	4.471	.666	.756
Res2	11.3875	4.288	.703	.737
Res3	11.7800	4.297	.553	.814
Res4	11.7550	4.471	.639	.767

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.32 Reliability Table of Assurance (X4) Variable**  
**Reliability Statistics**

Cronbach's Alpha	N of Items
.839	4

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.33 Item-Total Statistics of Assurance (X4)  
Variable**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
As1	11.2550	3.980	.649	.807
As2	11.3075	3.642	.763	.755
As3	11.3150	3.865	.697	.786
As4	11.4375	4.242	.584	.834

Source: SPSS 20.0 and Self-Developed Primary Data

From Table 4.32 Reliability Statistic, the value of Cronbach Alpha for Assurance (X4) variables is 0.839, which is considered reliable.

**Table 4.34 Reliability Table of Empathy (X5) Variable**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.758	3

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.35 Item-Total Statistics of Empathy (X5)**

**Variable**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Emp2	7.0925	3.367	.493	.819
Emp3	6.7450	3.604	.693	.569
Emp4	6.8075	3.865	.617	.653

Source: SPSS 20.0 and Self-Developed Primary Data

From Table 4.34 Reliability Statistic, the value of Cronbach Alpha for Empathy (X5) variables is 0.758, which is considered reliable.

**Table 4.36 Reliability Table of Trust (X6) Variable**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.893	5

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.37 Item-Total Statistics of Trust (X6) Variable**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Tr1	12.9175	11.585	.767	.863
Tr2	13.1025	11.400	.774	.862
Tr3	13.2475	11.330	.772	.862
Tr4	13.1700	11.289	.719	.875
Tr5	12.7825	12.767	.668	.885

From Table 4.36 Reliability Statistic, the value of Cronbach Alpha for Trust (X6) variables is 0.893, which is considered reliable.

**Table 4.38 Reliability Table of Commitment (X7) Variable**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.854	4

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.39 Item-Total Statistics of Commitment (X7) Variable**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Com2	10.6850	5.294	.676	.822
Com3	10.7600	4.804	.774	.780
Com4	10.6475	5.422	.655	.831
Com5	10.6800	4.910	.683	.821

Source: SPSS 20.0 and Self-Developed Primary Data



From Table 4.38 Reliability Statistic, the value of Cronbach Alpha for Commitment (X7) variables is 0.854, which is considered reliable.

**Table 4.40 Reliability Table of Customer Loyalty (Y) Variable**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.721	3

Source: SPSS 20.0 and Self-Developed Primary Data

**Table 4.41 Item-Total Statistics of Customer Loyalty (Y) Variable**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CL2	6.3675	2.945	.530	.646
CL3	6.1650	3.015	.483	.702
CL5	6.1225	2.699	.615	.541

Source: SPSS 20.0 and Self-Developed Primary Data

From Table 4.40 Reliability Statistic, the value of Cronbach Alpha for Customer Loyalty (Y) variables is 0.721, which is considered reliable.

#### 4.2.4 Classic Assumption

This research used classic assumption before it can be continued to the next steps, which are normality, multicollinearity and heteroscedasticity by using SPSS 20.0.

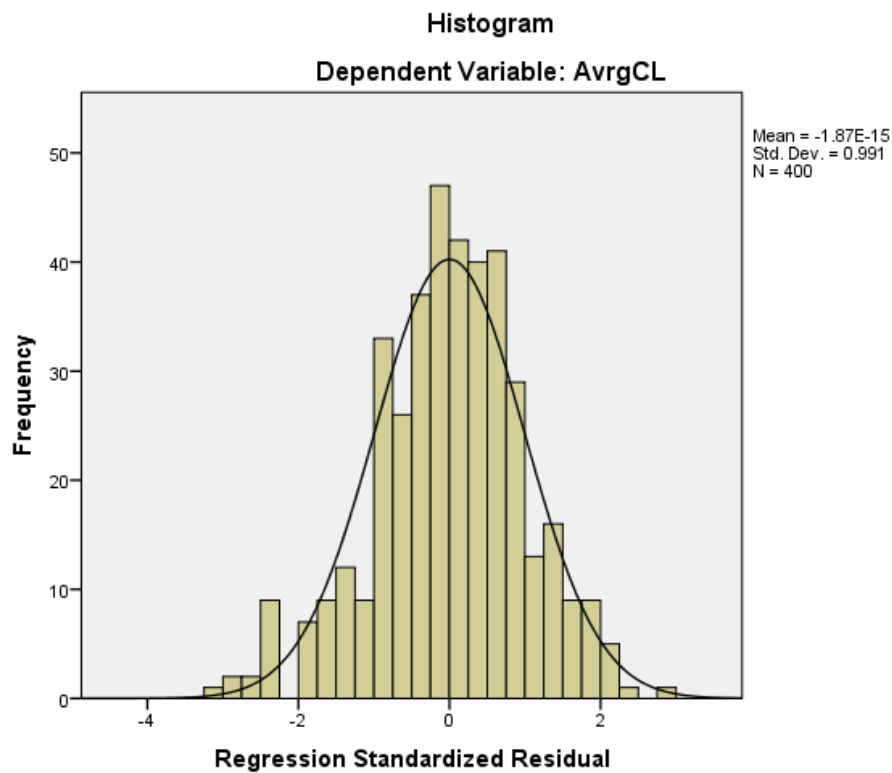
##### 4.2.4.1 Normality Test

Normality test are used to determine If a data set is a well-modeled normal distribution. When the histogram chart shows bell –shaped curve, and if the P-

Plot of Regression standardized residual shows the residual distributed in the pattern of diagonal line, then the data is normally distributed. According to Santoso (2009), Normality can be detected by analyzing the distribution of residuals in diagonally shaped on the Normal P=Plot of Regression Standardized Residual Graph.

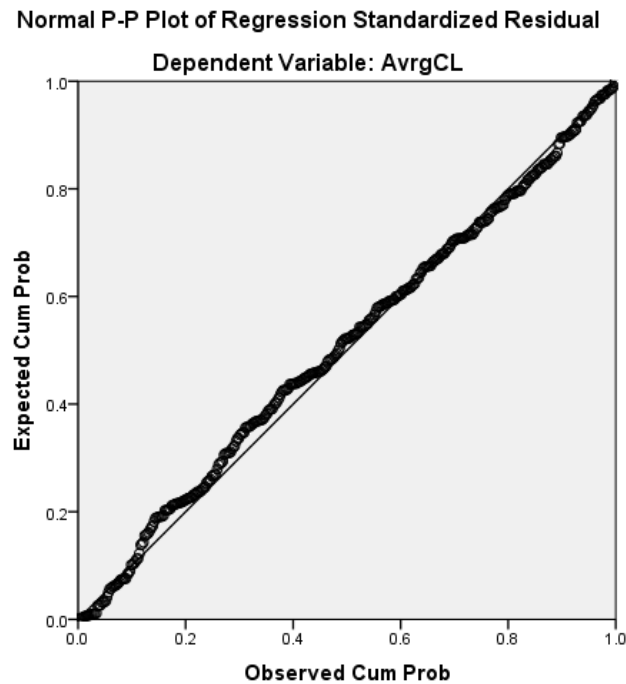
Based on Figure 4.7, Histogram of Normal Distribution, it shows the histograms are bell-shaped. Researcher can conclude the data in this research is normally distributed.

Figure 4.7 Histogram of normal Distribution



Source: SPSS 20.0 and Self-Developed primary Data

Figure 4.8 Normal P-Plot of Regression Standardized Residual



Source: SPSS 20.0 and Self-Developed primary Data

Based on figure 4.8, P-Plot of Regression Standardized, it shows the dots scattered along the diagonal line. Researcher can conclude that the data in this research is normally distributed.

#### 4.2.4.2 Multicollinearity

Multicollinearity is a linear correlation between Independent variable in multiple regressions.

Table 4.42 Output of Multicollinearity

Model	Colinearity Statistics		Result
	Tolerance	VIF	
AvrgTan	0.605	1.653	Non Multicollinearity
AvrgRel	0.698	1.433	Non Multicollinearity
AvrgRes	0.556	1.799	Non Multicollinearity
AvrgAs	0.565	1.768	Non Multicollinearity
AvrgEmp	0.583	1.716	Non Multicollinearity
AvrgTr	0.502	1.992	Non Multicollinearity
AvrgCom	0.456	2.193	Non Multicollinearity

Source: SPSS 20.0 and Self-Developed Primary Data

According to Meyers (2006), multicollinearity indicates the tolerance value is 0.01 or less and if the VIF is greater than 10. Based on table 4.42, all variable show the tolerance of greater than 0.100 and Variance Inflation Factor (VIF) score lower than 10.000. Researcher can conclude that all of the variables indicators used in this research are free from Multicollinearity.

It is a term used when two variables are highly correlated, means that one can be linearly predicted from VIF with less than 10 and Tolerance value range 0 to 1; multicollinearity is indicated for a particular variable if the tolerance value is 0.01 or less and VIF greater than 10.

#### 4.2.3.3 Auto Correlation

Table 4.43 Auto Correlation Test  
Model Summary

Model	Durbin-Watson
1	1.787

a Predictors: (Constant), AvrgCom, AvrgRel, AvrgEmp, AvrgTan, AvrgAs, AvrgRes, AvrgTr

b Dependent Variable: AvrgCL

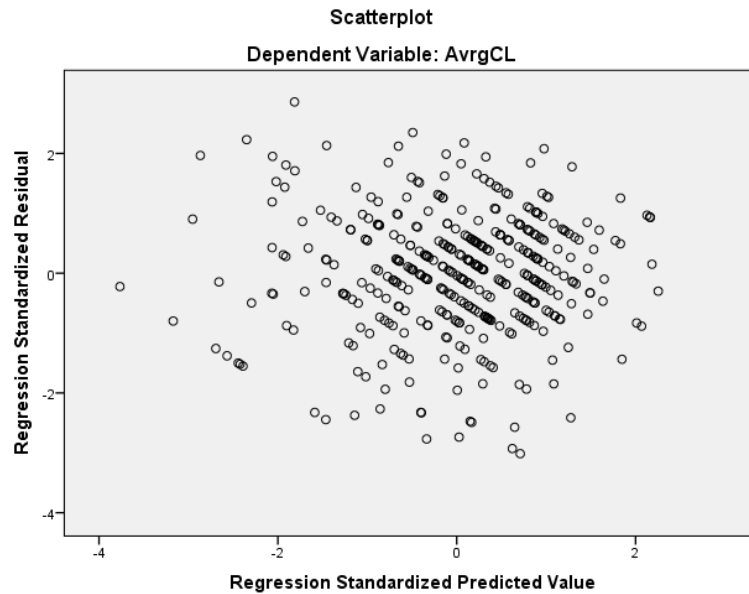
Source: SPSS 20.0

Based on the both table 4.43 above, it shows that auto-correlation test from Durbin-Watson (DW) results of is 1.787, or  $-2 < 1.787 < +2$  indicates there is no auto-correlation in these regression results. These results are a good regression model, because the value is in a range of  $-2 < DW < +2$ .

#### 4.2.4.4 Heteroscedascity

Heteroscedascity is a linear correlation between independent variables I multiple regression. According to Purwoto (2007), if the graphic shows any certain kind of pattern, it means heteroscedascity is occurs. If the graphic shows of spread plots and did not indicate any form of pattern, it means there is no occurrence of heteroscedasticity.

Figure 4. 9 Scatterplot of Heteroscedasticity



Source: SPSS 20.0 and Self-Developed Primary Data

Based on Figure 4.9, the pattern of residuals are also spread below and above of score 0 on Y-axis. Researcher can conclude there is no occurrence of heteroscedasticity and the data in this research is normal and cleared to be used for further research process

#### 4.2.5 Testing the Hypothesis

In chapter III, the researcher has stated some hypothesis related to the problem. Researcher will use T-test and F-test to determine which hypothesis will be accepted or rejected.

##### 4.2.5.1 F-Test

F test is used to test the effect of all independents variable towards dependent variable simultaneously.

**HO<sub>1</sub>** There are negative and insignificant influence between Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment towards Customer Loyalty.

**HA<sub>1</sub>** There are positive and significant influence between Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment towards Customer Loyalty.

**Table 4.44 F-Test Result**

ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	117.997	7	16.857	76.847	.000 <sup>b</sup>
Residual	85.987	392	.219		
Total	203.984	399			

a. Dependent Variable: AvrgCL

b. Predictors: (Constant), AvrgCom, AvrgRel, AvrgEmp, AvrgTan, AvrgAs, AvrgRes, AvrgTr

Source: SPSS 20.0 and Self-Developed Primary Data

The requirement value to achieve in this F-test is the sig. value has to be less than 0.05 and F value has to be greater than 1.96. From table 4.44 above, **HA<sub>1</sub>** accepted and **H<sub>01</sub>** rejected. Researcher can conclude that “**HA<sub>1</sub>**: There are positive and significant influence between Tangible, Reliability, Responsiveness, Assurance, Empathy, Trust, and Commitment towards Customer Loyalty,” are proved.

#### 4.2.5.2 T- Test

**Table 4.45 T-Test Result- Sig Value**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.393	.167		2.349	.019
AvrgTan	-.007	.040	-.007	-.164	.870
AvrgRel	.183	.037	.196	5.002	.000
AvrgRes	-.032	.046	-.031	-.698	.486
AvrgAs	-.039	.048	-.035	-.809	.5419
AvrgEmp	.167	.034	.210	4.886	.000
AvrgTr	.170	.039	.200	4.331	.000
AvrgCom	.397	.047	.409	8.412	.000

Source: SPSS 20.0 and Self-Developed Primary Data

T-test is used into analyze whether each independent variable has partially influence toward customer Loyalty. The requirement for each independent to be partially influence is if each value of p is less than 0.05.

- 1) According from the table 4.45, Independent variable for Reliability, Empathy, trust and Commitment are significant towards Customer Loyalty.
- 2) Tangible (X1) has sig. of .870, which is greater than .05. It means Tangible is not significant towards Customer Loyalty and  $H_{0.1}$  is accepted and reject  $H_{A.1}$  from hypothesis.
- 3) Reliability (X2) has sig. of .00, which is less than .05. It means Reliability is significant towards Customer Loyalty and  $H_{A.2}$  is accepted and rejects  $H_{0.2}$  from hypothesis.
- 4) Responsiveness (X3) has sig. of .486, which is greater than .05. It means Responsiveness is not significant towards Customer Loyalty and  $H_{0.3}$  is accepted and rejects  $H_{A.3}$  from hypothesis.
- 5) Assurance (X4) has sig. of .419, which is greater than .05. It means Assurance is not significant towards Customer Loyalty and  $H_{0.4}$  is accepted and rejects  $H_{A.4}$  from hypothesis.
- 6) Empathy (X5) has sig. of .00, which is less than .05. It means Empathy is significant towards Customer Loyalty and  $H_{A.5}$  is accepted and rejects  $H_{0.5}$  from hypothesis.
- 7) Trust (X6) has sig. of .00, which is less than .05. It means Trust is significant towards Customer Loyalty and  $H_{A.6}$  is accepted and rejects  $H_{0.6}$  from hypothesis.
- 8) Commitment (X7) has sig. of .00, which is less than .05. It means Commitment is significant towards Customer Loyalty and  $H_{A.7}$  is accepted and rejects  $H_{0.7}$  from hypothesis.

9) According from Table 4.45, researcher can conclude that the most significant among seven independent variables is Commitment Variable (X7), which in t column has the highest score (8.412).

10) According from the table, Independent variable for Tangible, Responsiveness and Assurance are not significant towards Customer Loyalty.

#### 4.2.5.3 Multiple Regressions Model

From Table 4.44, researcher calculates the regressions as follows:

*Customers loyalty*

$$= .196\text{Reliability} + .210 \text{Empathy} + .200 \text{Trust} + .409 \text{Commitment}$$

**Table 4.46 Significance Value**

#### Coefficients<sup>a</sup>

Independent Variable	Significance Value	Standard Value 0.05
Tangible	.870	Not Significance
Reliability	.000	Significance
Responsiveness	.486	Not Significance
Assurance	.419	Not Significance
Empathy	.000	Significance
Trust	.000	Significance
Commitment	.000	Significance

Source: SPSS 20.0 and Self-Developed Primary Data

Therefore, the value of regression coefficient of reliability is .196 with p-value of .000 indicates that the increase in reliability by one unit results in an increase in customer loyalty, keeping the empathy, trust and commitment constant.

The value of regression coefficient of empathy is .210 with p-value of .000 indicates that the increase in empathy by one unit result in an increase in customer loyalty, keeping reliability, trust and commitment constant.



The value of regression coefficient of trust is .200 with p-value of .000 indicates that the increase in trust by one unit results in an increase in customer loyalty, keeping the reliability, empathy and commitment constant.

The value of regression coefficient of commitment is .409 with p-value of .000 indicates that the increase in commitment by one unit results in an increase in customer loyalty, keeping the reliability, empathy and trust constant.

#### 4.2.5.4 Measuring Variability of Regression Models

This measurement is used to examine whether this multiple regressions models able to assist in predicting the Growth of Customer Loyalty of BPR Cikarang Raharja, BPR Nusamba Sukaraja, and BPR Astanajapura in West Java.

Table 4.47 showed that Adjusted R Square value is 57.1%, which describe strong correlation between Service Quality and Relationship Quality Impact on Customer Loyalty. The adjusted R Square is .571 that described 4 independent variables affecting 57.1% to Customer Loyalty; the rest 42.9% is explained by other factors, which not discussed in this research.

**Table 4.47 Model Summary**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 <sup>a</sup>	.578	.571	.46835

a. Predictors: (Constant), AvrgCom, AvrgRel, AvrgEmp, AvrgTan, AvrgAs, AvrgRes, AvrgTr

b. Dependent Variable: AvrgCL

Source: SPSS 20.0 and Self-Developed Primary Data

### 4.3 Interpretation of Results

#### 4.3.1 Tangible (X1), Reliability (X2), Responsiveness (X3), Assurance (X4), Empathy (X5), Trust (X6) and Commitment (X7) towards Customer Loyalty (Y)

It showed that all independent variables have significant (F=76.847, Sig=.000) impact or influence towards dependent variable.

Based on statement above and related with the questionnaire, it showed that customer concern all the appearance of physical facilities, ability to perform, willingness to help, employees courtesy, individual attention, willingness to rely on service and customer future intention given by banks.

#### **4.3.2 SERVQUAL Dimension: Tangible (X1) towards Customer Loyalty**

It showed that Tangible variable is categorized as variable that can influence the Customer Loyalty, but it is not significance ( $t = -.164$ ,  $\beta = -.007$ ,  $\text{sig} = .6870$ ) toward Customer Loyalty.

Based on statement above and related with questionnaire in Tangible part, it showed that the tangible itself does not give significance affect towards customer loyalty, and customers does not concern whether the building, personnel appearance, equipment, is appealing or not.

#### **4.3.3 SERVQUAL Dimension: Reliability (X2) towards Customer Loyalty**

It showed that Reliability variable is categorized as variable that can influence the Customer Loyalty and significance ( $t = 5.002$ ,  $\beta = .196$ ,  $\text{sig} = .000$ ) toward Customer Loyalty.

Based on statement above and related with questionnaire in Reliability part, it showed that the Reliability itself gives significance affect towards customer loyalty, and customers concern whether employees have the ability to perform right the first time, deliver service on time, fulfill promises, and ability to handle and solve problems/complaints.

#### **4.3.4 SERVQUAL Dimension: Responsiveness (X3) towards Customer Loyalty**

It showed that Responsiveness variable is categorized as variable that can influence the Customer Loyalty, but it is not significance ( $t = -.698$ ,  $\beta = -.031$ ,  $\text{sig} = .486$ ) toward Customer Loyalty.

Based on statement above and related with questionnaire in Responsiveness part, it showed that the Responsiveness does not give significance affect towards customer loyalty, and customers does not concern whether employees

willing to help, gives good response, prompt services, and arrange special care to the customer.

#### **4.3.5 SERVQUAL Dimension: Assurance (X4) towards Customer Loyalty**

It showed that Assurance variable is categorized as variable that can influence the Customer Loyalty, but it is not significance ( $t = -.809$ ,  $\beta = -.035$  sig=.419) toward Customer Loyalty.

Based on statement above and related with questionnaire in Assurance part, it showed that it does not give significance affect towards customer loyalty, and customers not gives much concern whether the employee can make the customer trust and safe to have a transaction, can give good service with good attitude, and reassuring.

#### **4.3.6 SERVQUAL Dimension: Empathy (X5) towards Customer Loyalty**

It showed that Empathy variable is categorized as variable that can influence the Customer Loyalty and significance ( $t = 4.886$ ,  $\beta = .210$ , sig=.000) toward Customer Loyalty.

Based on statement above and related with questionnaire in Empathy part, it showed that the Empathy it gives significance affect towards customer loyalty, and customers concern whether employees understand and prioritize the needs of their customers, give individual attention, treat customers with care, and convenient operating hours.

#### **4.3.7 Relationship Quality Dimension: Trust (X6) towards Customer Loyalty**

It showed that Trust variable is categorized as variable that can influence the Customer Loyalty and significance ( $t = 4.331$ ,  $\beta = .200$ , sig=.000) toward Customer Loyalty.

Based on statement above and related with questionnaire in Trust part, it showed that the it gives significance affect towards customer loyalty, and customers gives concern whether employees can be honest to customers whenever they face problem related product or service to customers, concern

the welfare and problem of the customers, and think it twice the action they give to customers because it will affect the customer loyalty.

#### **4.3.8 Relationship Quality Dimension: Commitment (X7) towards Customer Loyalty.**

It showed that Commitment variable is categorized as variable with the most influence the Customer Loyalty and significance ( $t=8.412$ ,  $\beta=.409$ ,  $\text{sig}=.000$ ) toward Customer Loyalty.

Based on statement above and related with questionnaire in Commitment part, it showed that the Commitment it gives significance affect towards customer loyalty, and customers concern whether customers lie being associated with bank, attached to the bank, to help bank by giving non customers recommendation and maintain long relationship with the bank.

# CHAPTER V

## CONCLUSION AND RECOMMENDATION

### 5.1 Conclusion

The result of this research based on the Relationship Between Service Quality and Relationship Quality towards Customer Loyalty in BPR Cikarang Raharja, BPR Nusamba Sukaraja, and BPR Astanajapura in West Java Province.

1. Overall, independent variables have significance influence to dependent variable, Customer Loyalty. Therefore  $H_1$  “There is simultaneous relationship that Reliability, Responsiveness, Assurance, Empathy, Tangible, Trust, and Commitment dimension of Service Quality and Relationship Quality influence Customer Loyalty in Rural Credit Bank” is proved to be correct.
2. Independent Variable, Tangible, does not have significance influence to dependent variable, Customer Loyalty. Therefore  $H_2$  “There is partial significant influence of Tangibles dimension of Service Quality toward Customer Loyalty in Rural Credit Bank” is not proved to be correct.
3. Independent Variable, Reliability, does have significance influence to dependent variable, Customer Loyalty. Therefore  $H_3$  “There is partial significant influence of Reliability dimension of Service Quality toward Customer Loyalty in Rural Credit Bank” is proved to be correct
4. Independent Variable, Responsiveness, does not have significance influence to dependent variable, Customer Loyalty. Therefore  $H_4$  “There is partial significant influence of Responsiveness dimension of Service Quality toward Customer Loyalty in Rural Credit Bank” is not proved to be correct.

5. Independent Variable, Assurance, does not have significance influence to dependent variable, Customer Loyalty. Therefore  $H_5$  “There is partial significant influence of Assurance dimension of Service Quality toward Customer Loyalty in Rural Credit Bank” is not proved to be correct.
6. Independent Variable, Empathy, does have significance influence to dependent variable, Customer Loyalty. Therefore  $H_6$  “There is partial significant influence of Empathy dimension of Service Quality toward Customer Loyalty in Rural Credit Bank” is proved to be correct.
7. Independent Variable, Trust, does have significance influence to dependent variable, Customer Loyalty. Therefore  $H_7$  “There is partial significant influence of Trust dimension of Relationship Quality toward Customer Loyalty in Rural Credit Bank” is proved to be correct.
8. Independent Variable, Commitment, does have significance influence to dependent variable, Customer Loyalty. Therefore  $H_8$  “There is partial significant influence of Commitment dimension of Relationship Quality toward Customer Loyalty in Rural Credit Bank” is proved to be correct.

## **5.2 Recommendations**

### **5.2.1 For Rural Credit Bank:**

Tangible, Responsiveness, and Assurance does not give significant affect towards Customer Loyalty. Even though the result is not good, but the variables mentioned before gives an influence. These influences can be by employees give standard information in pamphlet or advertisements, give good response, or because the employees deliver reassuring services. As the negative result that customers get maybe from the gap between customer expectation and customer perceived service., lack of standard performance, poorly trained personnel, and low of understanding is several problems that faced by Service Provider company.

My recommendations, first supervisor of the employees need to gives a suggestion that the front liners are the spearhead of the company, so they

need to be patience and endure complaint from customers and keep smile. As customers judge the service is good or not by how we react with their actions. The best actions to take while handling customers are to understand their needs, their problem, empathy and willing to solve or help their problem. Second, if the customer services lack of attitude, supervisor need to give employee training and give advices that not every customer is the same with others, some want to receive special care and some are always want to the point to reach their objectives. Third, make a standard performance within organization, always keep smile in front of customers also can help to increase quality of performance. Supervisor need to give advices to the employees that how employees react to the customer action can affect the service. At least employees need to understand how the actions of the employees can affect the customers.

It is proved that Commitment from Relationship Quality is the best dependent variable that influences Customer Loyalty. Therefore, Rural Credit Bank should maintain and improve the quality of their relationship. That is why, Rural Credit Bank need to improve the quality of performance regarding variable.

### **5.2.2 For Future Research:**

It is not only recommended for the next researcher to conduct research to find out other 42.9% of influence which is explained by other factors or variables outside the factors or variables used within this research. But also for future researcher who want to use a variable or two to be used in the next research.

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## APPENDICES

APPENDIX A  
QUESTIONNAIRE

In competitive market, bank should maintain the service they gave towards their customers in order to keep their customer loyal to them. On the other hand, customer needs their bank to can be trusted, reliable, responsive, and fulfilling their demand. If bank fails to perform these criteria, bank will not only lose their customer, but the trust in people as well as its own market. Thus, through this questionnaire, SERVQUAL and RELQUAL, with its dimension: Tangibles, Reliability, Responsiveness, Assurance, Empathy, Trust and Commitment will become the measurement of services given by *Bank Perkreditan Rakyat* to generate customer loyalty. This questionnaire consists of 3 (three) parts:

**A) Personal Information**

**B) General Instruction**

**C) Statement of Service Quality, Relationship Quality and Customer Loyalty.**

## PART A

In this section you are asked to fill your profile. Please fill, cross (☐), circle (○) or put tick mark (✓) in the corresponding answer.

### Respondent Profile

Gender	: Male	( )	Female	( )
Age	: 19-25	( )	26-35	( )
	36-45	( )	46-55	( )
	56+	( )		
Education	: Senior High	( )	Diploma	( )
	Bachelor	( )	Others	.....
Occupation	: Students	( )	Civil Servants	( )
	Entrepreneur	( )	Others	.....
	Private Employee	( )		
Income	<IDR 1.000.000			( )
	IDR 1.000.001 - IDR 2.500.000			( )
	IDR 2.500.001 - IDR 5.000.000			( )
	IDR 5.000.001 - IDR 7.500.000			( )
	>IDR 7.500.000			( )
Rura Credit Bank				
Branch	: Cikarang Raharja	( )		
	Nusamba Sukaraja	( )		
	Astanajapura	( )		



## PART B

In this section you are asked to give an opinion on how much the following statement in accordance to service quality and customer loyalty. Please rate the following statement according to Strongly Disagree (SD), Disagree (D), Neither Agree or Disagree (N), Agree (A) and Strongly Agree (SA) by putting cross (☒), circle (○) or put tick mark (✓) in the corresponding answer.

Choose 1 if you are Strongly Disagree (SD) with the statement

Choose 2 if you are Disagree (D) with the statement

Choose 3 if you are Neutral (N) with the statement

Choose 4 if you are Agree (A) with the statement

Choose 5 if you are Strongly Agree (SA) with the statement

## PART C

No.	Statement	SCALE				
		1	2	3	4	5
<b>TANGIBLE</b>						
1	The appearance of the physical facilities of the bank should be in keeping with the type of services provided					
2	Up-to-date equipment and instrument facilities of Rural Credit Bank (BPR).					
3	Rural Credit Bank's physical facilities should be visually appealing.					
4	Employees of Rural Credit Bank (BPR) are well dressed and appear neat.					
5	Rural Credit Bank (BPR) is in appropriate location.					
<b>RELIABILITY</b>						
6	Rural Credit Bank (BPR) delivers service on time.					
7	Rural Credit Bank (BPR) have ability to solve complains.					
8	Rural Credit Bank (BPR) performs right the first time.					
9	Rural Credit Bank (BPR) promises to do something by a certain time					
10	Rural Credit Bank (BPR) solves the problems of customers					

No.	Statement	Scale				
		1	2	3	4	5
<b>RESPONSIVENES</b>						
11	Employees of Rural Credit Bank (BPR) gives prompt services.					
12	Employees of Rural Credit Bank (BPR) arrange special care to special customer					
13	Employees of Rural Credit Bank (BPR) gives good response/reply when asked by customers					
14	Employees of Rural Credit Bank (BPR) are willing to help customers.					
15	Employees of Rural Credit Bank (BPR) tells exactly when the services will be performed.					
<b>ASSURANCE</b>						
16	Clients can trust employees of their Bank.					
17	Customers should feel safe in transactions with Rural Credit Bank (BPR).					
18	Employees of Rural Credit Bank (BPR) able to answer questions related to service offered.					
19	Employees of Rural Credit Bank (BPR) are polite.					
20	When customers have problems, Rural Credit Bank (BPR) should be sympathetic and reassuring.					
<b>EMPATHY</b>						
21	Employees of Rural Credit Bank (BPR) understand customer's needs					
22	Employees of Rural Credit Bank (BPR) give individual attention to customers.					
23	Employees Rural Credit Bank (BPR) treating customers with care.					
24	Employees of Rural Credit Bank (BPR) prioritize customer's needs.					
25	Rural Credit Bank (BPR) has a good operational hour					
<b>TRUST</b>						
26	Rural Credit Bank (BPR) is honest with its customers about any problems with its service.					
27	Customers can trust Rural Credit Bank.					
28	Rural Credit Bank (BPR) is concerned about the welfare of its customers.					

No.	Statement	Scale				
		1	2	3	4	5
29	Rural Credit Bank (BPR) tries to understand customers' problems when they arise					
30	Rural Credit Bank (BPR) tries to understand how its actions will affect its customers.					
<b>COMMITMENT</b>						
31	I am loyal to Rural Credit Bank (BPR).					
32	I am committed to my relationship with Rural Credit Bank (BPR). Because I like being associated with them.					
33	I feel strongly attached to Rural Credit Bank (BPR).					
34	I would like to develop a long term relationship with Rural Credit Bank (BPR).					
35	I feel a sense of belonging to Rural Credit Bank (BPR).					
<b>CUSTOMER LOYALTY</b>						
36	I would love to recommend Rural Credit Bank (BPR) to my friends and colleagues.					
37	I will do transaction with Rural Credit Bank (BPR) even if its administration and transaction cost increases					
38	When considering banks, Rural Credit Bank (BPR) will be my first choice.					
39	I consider Rural Credit Bank (BPR) as the most trustable Bank					
40	I consider myself to be loyal to Rural Credit Bank (BPR).					

**\*\*THANK YOU FOR YOUR SUPPORT\*\***

This marks the end of the questionnaire. I personally would like to say thank you very much for the valuable time you have spent to fill my questionnaire.

May Allah bless you, Amin.

## APPENDIX B Commonalities

**Communalities**

	Initial	Extraction
Tan1	1.000	.642
Tan2	1.000	.623
Tan3	1.000	.624
Tan4	1.000	.552
Tan5	1.000	.562
Rel1	1.000	.659
Rel2	1.000	.509
Rel3	1.000	.673
Rel4	1.000	.611
Rel5	1.000	.454
Res1	1.000	.717
Res2	1.000	.713
Res3	1.000	.524
Res4	1.000	.597
Res5	1.000	.509
As1	1.000	.617
As2	1.000	.719
As3	1.000	.676
As4	1.000	.537
As5	1.000	.467
Emp1	1.000	.469
Emp2	1.000	.593
Emp3	1.000	.638
Emp4	1.000	.674
Emp5	1.000	.409
Tr1	1.000	.728
Tr2	1.000	.693
Tr3	1.000	.717
Tr4	1.000	.673
Tr5	1.000	.622
Com1	1.000	.583
Com2	1.000	.645
Com3	1.000	.768
Com4	1.000	.612
Com5	1.000	.675

Extraction Method: Principal Component Analysis.

**Final Communalities**

	Initial	Extraction
Tan1	1.000	.820
Tan2	1.000	.825
Rel1	1.000	.761
Rel2	1.000	.696
Rel3	1.000	.701
Res1	1.000	.713
Res2	1.000	.782
Res3	1.000	.568
Res4	1.000	.623
As1	1.000	.699
As2	1.000	.806
As3	1.000	.706
As4	1.000	.581
Emp2	1.000	.537
Emp3	1.000	.832
Emp4	1.000	.787
Tr1	1.000	.764
Tr2	1.000	.770
Tr3	1.000	.760
Tr4	1.000	.690
Tr5	1.000	.628
Com2	1.000	.716
Com3	1.000	.784
Com4	1.000	.677
Com5	1.000	.693

Extraction Method: Principal Component Analysis.

APPENDIX C  
Raw Data  
Variable X

	T a n 1	T a n 2	T a n 3	T a n 4	T a n 5	R e l 1	R e l 2	R e l 3	R e l 4	R e l 5	R e s 1	R e s 2	R e s 3	R e s 4	R e s 5	A s 1	A s 2	A s 3	A s 4	A s 5	E m p 1	E m p 2	E m p 3	E m p 4	E m p 5	T r 1	T r 2	T r 3	T r 4	T r 5	C o m 1	C o m 2	C o m 3	C o m 4	C o m 5			
1	4	3	2	3	3	3	4	3	4	2	4	4	3	3	4	3	3	3	3	3	3	4	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4
2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2	2	4	2	4	4	4	4	4	
3	4	5	4	4	4	4	4	3	3	3	4	4	3	3	4	4	4	4	4	4	3	3	3	3	3	4	3	2	2	3	3	4	4	3	3	3	3	
4	4	5	3	4	5	2	4	4	4	2	4	4	4	4	4	4	4	4	4	3	2	2	2	2	4	2	3	2	2	1	3	3	4	4	4	2	2	
5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	
6	4	4	3	4	4	3	4	3	4	2	5	5	4	3	3	4	4	4	4	3	4	5	4	4	3	2	3	3	4	4	4	4	4	4	4	4	4	
7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
8	4	3	2	4	4	4	4	2	2	4	4	3	2	3	2	4	4	4	4	3	4	3	3	2	4	3	3	3	3	3	3	3	4	3	3	3	3	
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12	5	5	5	1	5	1	5	1	1	4	5	5	1	4	4	5	5	5	5	5	2	4	4	4	4	5	5	4	4	5	5	5	5	5	5	5	5	
13	4	4	2	4	4	2	2	2	1	1	4	4	1	4	3	4	4	4	2	3	2	2	4	4	3	3	1	1	4	4	3	4	4	3	4	4	3	
14	4	4	1	3	4	4	4	4	4	1	4	4	4	4	3	4	4	4	4	2	2	1	4	4	4	5	5	5	4	3	3	1	1	4	4	4	4	
15	1	4	2	2	4	4	4	2	4	1	4	4	4	4	2	4	4	4	2	3	4	1	4	4	4	1	1	3	4	1	1	1	1	4	4	1	1	
16	2	4	2	3	4	3	4	4	2	2	4	4	4	4	4	4	4	4	4	3	4	2	4	4	2	2	3	3	2	3	1	1	4	2	4	2	4	
17	4	4	4	2	4	3	3	2	2	2	4	4	4	4	3	4	4	4	4	4	4	2	4	4	4	4	2	3	4	2	2	2	2	4	3	2	4	
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359	4	4	3	4	5	4	4	4	4	4	5	5	5	5	5	4	4	4	4	3	5	5	5	5	3	5	5	5	5	5	4	4	4	4	4	
360	4	4	4	3	4	3	4	3	3	3	3	4	4	4	3	4	4	4	4	3	4	4	4	3	3	3	3	3	3	4	4	4	4	4	4	
361	4	4	1	4	4	4	4	1	4	4	4	2	4	4	4	4	4	4	4	4	1	4	4	4	2	4	2	4	2	1	4	4	4	4	4	
362	1	2	2	2	2	2	1	2	2	2	2	2	2	3	2	2	2	3	3	2	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	
363	2	3	3	3	3	3	3	3	2	2	3	3	2	2	2	2	2	3	3	3	3	3	3	3	4	3	3	3	3	2	3	2	3	3	2	3
364	4	4	3	4	4	4	4	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	4	4	4	4	3	4	4	3
365	1	1	1	1	3	1	2	2	1	3	3	3	3	3	3	3	3	3	3	3	3	1	2	3	3	1	2	3	2	3	1	3	3	2	1	
366	4	3	1	1	4	4	4	1	4	4	3	3	3	1	1	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3
367	3	3	1	3	3	3	3	1	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	1	2	3	3	3	
368	3	3	1	3	4	4	3	3	1	4	4	4	4	4	4	4	4	4	4	4	4	1	4	4	3	3	3	3	3	3	1	4	4	4	4	4
369	4	4	1	4	4	4	4	1	3	3	3	3	3	3	3	3	3	3	3	3	3	1	4	4	4	4	4	4	4	4	2	3	3	3	3	



APPENDIX D  
Raw Data  
Variable Y, Average X and Y

	CL1	CL2	CL2	CL3	CL4	AvrgTan	AvrgRel	AvrgRes	AvrgAs	AvrrgEmp	AvrgTr	AvrgCom	AvrgCL
1	3	4	3	4	3	3.5	3.33	3.5	3	3.67	3.4	3.5	3.4
2	4	2	2	4	4	4	4	4	4	4	2.4	4	3.2
3	3	3	3	3	3	4.5	3.67	3.5	4	3	2.8	3.5	3
4	2	3	2	2	2	4.5	3.33	4	4	2	2	3.25	2.2
5	4	4	4	4	4	4	4	4	4	3	4	4	4
6	4	4	4	4	4	4	3.33	4.25	4	4.33	3.2	4	4
7	4	4	4	4	4	4	4	4	4	4	4	4	4
8	4	4	4	4	4	3.5	3.33	3	4	2.67	3	3.25	4
9	4	5	4	4	4	4.5	4	4	4	4	4	4	4.2
10	4	4	4	4	4	4	4	4	4	4	3.8	4	4
11	4	4	2	2	3	4	4	3.75	4	3.67	3.4	3.75	3
12	5	4	4	4	4	5	2.33	3.75	5	4	4.6	5	4.2
13	2	1	2	4	2	4	2	3.25	3.5	3.33	2.6	3.75	2.2
14	2	2	2	4	4	4	4	4	4	3	4.4	2.5	2.8
15	4	2	2	4	2	2.5	3.33	4	3.5	3	2	1.75	2.8
16	4	2	2	4	2	3	3.67	4	4	3.33	2.6	2.75	2.8
17	4	2	2	4	4	4	2.67	4	4	3.33	3	2.75	3.2
18	2	2	2	2	4	4	4	3.5	4	2.67	3.2	3.5	2.4
19	4	2	4	4	4	5	3.67	3.75	3.75	4	4	4	3.6
20	4	2	2	2	4	4	2	4	4	4	4	3.5	2.8
21	4	2	2	2	4	4	2	4	3.5	4	4	3.5	2.8
22	4	2	2	2	3	4	3.33	4	4	3.33	3.6	4	2.6
23	4	4	4	4	3	4	4.67	3.75	3.75	3.33	3	3.5	3.8
24	3	3	3	3	3	5	4	4	3.75	4.33	3	3	3
25	4	4	4	4	4	4	2.67	4	3	4	3.6	3.5	4
26	3	3	3	3	3	4	3.67	3.5	3.25	3.33	2.4	3.25	3
27	5	5	5	5	5	5	4	4.5	5	5	5	5	5
28	4	3	4	3	4	4	4	4	3.5	3.67	4.8	4	3.6
29	3	3	3	3	3	3	3	3	3	3	3	3	3
30	1	1	1	1	1	1	1	1	1	1	1	1	1
31	4	4	4	4	4	4	3.67	4	3.5	4	4	4	4
32	4	4	4	4	4	4	4	4	4	4	4	4	4

33	4	4	4	3	4	4	4	4	4	4	4	3.75	3.8
34	2	3	2	3	2	4	2.67	3.25	3	2.67	2.6	2.5	2.4
35	3	3	3	2	3	3	2	3	3	3	3.4	3	2.8
36	4	2	2	2	2	4	2	4	4	4	4	3.5	2.4
37	2	2	2	2	2	2.5	3.67	3.5	2.5	2	2	1.5	2
38	3	2	2	3	3	1	3.33	4	4	4	2.4	3.25	2.6
39	3	2	2	3	3	1	3.33	4	4	5	2.2	3.25	2.6
40	2	2	2	2	2	4.5	4	4	4	3.33	2.8	2.75	2
41	3	2	2	2	3	3.5	3	4	3.75	2	2.8	3.25	2.4
42	4	4	4	4	4	4	4	4	4	4	4	4	4
43	4	4	4	4	4	4.5	4	4	4	3	3	3.25	4
44	3	2	2	2	3	4	4	3	4	3	2.2	3.25	2.4
45	3	2	2	2	3	5	5	5	4.25	5	4.6	3.25	2.4
46	5	3	3	3	5	5	4	4	4.25	3	4.4	4.5	3.8
47	5	3	3	3	5	5	5	3.75	5	3	4.4	4.5	3.8
48	5	5	5	4	4	4.5	3.33	3.5	3.75	4.67	3.8	4	4.6
49	3	3	3	3	3	3.5	3	3.75	3.25	3.67	3	3	3
50	3	3	3	3	3	3.5	4	3.25	3.75	3	3.4	3.25	3
51	4	3	2	3	4	4	2.67	3.25	3.25	2.67	3	4	3.2
52	2	2	3	2	2	4	3.33	3.75	3.75	3.33	2.6	2	2.2
53	3	3	3	3	2	3	3	2.75	2.5	3	3.2	2.75	2.8
54	3	3	3	5	3	4	4	3.5	3.25	3	3.4	3.25	3.4
55	3	3	4	3	3	3.5	3	2.75	1.5	3.33	3.2	3.75	3.2
56	3	3	4	3	4	4	3	2.5	4	3	3.6	3.5	3.4
57	3	3	3	3	3	3.5	4	4	3	3	3	3	3
58	2	3	3	3	3	4	3	3.5	3.5	2.67	3	3.25	2.8
59	2	3	2	3	2	4	4	4	4	4	3.2	2.5	2.4
60	1	1	4	4	1	2	2.67	2	2.75	1.67	1	1.5	2.2
61	3	3	3	3	3	3.5	3	2.5	4	2.67	2	2.5	3
62	5	2	2	1	3	4	2	3.75	1.75	1.33	2	1.25	2.6
63	1	1	1	1	1	3	2.33	4	4	1.33	1	2.75	1
64	4	4	3	3	3	3.5	1	1.75	2.75	3	2.8	3.25	3.4
65	3	3	3	3	4	3.5	3.67	3.5	3	3.67	2.6	3.25	3.2

66	2	3	3	3	3	4	1.33	3.25	3.75	3.67	2.6	1.5	2.8
67	3	4	4	4	4	4	3.33	4.75	3.75	4.33	3.6	4	3.8
68	4	4	4	4	4	3	3	4.5	3.75	4	2.8	4	4
69	5	4	4	3	4	3	4	4	2.75	4.33	3.4	3	4
70	4	4	2	2	3	4	3.33	4	4	3.67	3.6	3.75	3
71	4	4	4	4	5	4.5	4.33	4.5	4.5	4	4.4	4.25	4.2
72	4	2	2	5	2	3.5	3.33	3.25	2.75	3.33	2.2	2.75	3
73	4	4	4	4	4	4	4	4	4	4	3.6	4	4
74	4	4	4	4	5	4	5	4	4.5	4.33	4.2	4	4.2
75	3	3	3	3	4	4	4	4	4	4	3.4	3	3.2
76	4	4	3	4	3	4	4	4	3.5	3.67	3	4	3.6
77	4	3	3	3	3	4	4	3.75	3.25	4	3.4	3.25	3.2
78	5	4	4	3	4	3.5	3.67	4	4.5	3	4.4	4.75	4
79	5	4	4	3	4	3.5	3.67	4	4.5	3	4.2	4.5	4
80	5	4	4	3	4	3.5	4	4	4.25	3	4	4.25	4
81	5	5	5	5	5	4	4.33	4.5	4	4	4	4	5
82	2	3	4	4	2	4	2.33	3.25	3.5	2	3.2	3.75	3
83	5	5	3	4	4	5	4.33	4.5	4.25	4.67	4.8	5	4.2
84	4	2	2	2	1	3	4.33	4.75	4	4.33	1.4	3.5	2.2
85	2	2	2	2	2	3	2.33	3.25	3	3	3	3	2
86	3	3	3	4	4	3.5	4.33	5	5	5	4	4	3.4
87	4	4	4	4	4	4	4	3.25	3.25	3	3.2	4	4
88	4	2	2	2	2	3.5	3.67	3.5	3.75	1.67	2.6	3	2.4
89	4	3	2	2	3	4	3.67	4.75	4	4	4	4	2.8
90	4	3	3	3	4	5	3.33	4.25	4.75	4	5	4	3.4
91	2	2	3	2	2	3	3	3.25	3	2	1.4	3	2.2
92	5	3	5	5	5	4.5	4.33	4.5	4.5	5	2.8	5	4.6
93	3	4	3	3	4	4.5	4	4	4	4	4	4	3.4
94	4	4	3	4	4	5	3.67	4.5	4	4.67	4.2	4.75	3.8
95	4	3	2	4	4	4	3	2.75	4.25	2.67	3.4	4	3.4
96	4	4	4	2	2	1.5	3.33	4.5	2.75	3.33	1	2.75	3.2
97	4	3	5	4	3	3	3.33	3.25	3.75	4	1.2	3.75	3.8
98	5	4	2	2	2	4	2.67	3	4	3	1.4	3.75	3

99	4	2	4	3	2	3.5	2.33	2.75	3.5	1.33	1.2	2.75	3
100	2	1	1	1	1	2	2.33	1.75	3	1	1.4	2.5	1.2
101	4	4	3	2	2	4	3.33	2.75	4	2	4	4	3
102	4	4	2	2	2	4	4	4.75	4	2.33	2.6	3.25	2.8
103	3	4	2	4	3	3	2.67	2.25	3.75	1.33	2.4	3.25	3.2
104	4	3	2	2	4	3	3	4.25	4	3.67	3.8	3.25	3
105	5	4	4	4	4	4	4	4	4.25	4	4	4	4.2
106	4	4	4	4	3	4	4	4	4	3.67	3.8	3.75	3.8
107	4	4	5	4	4	4	4.33	4.75	4.25	3.67	4	4.25	4.2
108	5	4	4	4	5	4.5	4	5	5	4	2	4.25	4.4
109	5	3	3	4	4	4	3.33	3.5	2.75	3.33	3.6	3.25	3.8
110	4	3	3	3	4	3.5	4.33	4.25	3.75	4	3.8	3.75	3.4
111	4	2	4	4	2	1.5	3.33	3.5	3.5	2.33	1	2.5	3.2
112	4	2	2	2	2	4	3	4.5	4.75	4	2.2	2.5	2.4
113	5	3	4	4	3	3	3.33	2.25	3.5	3	3	3.75	3.8
114	4	4	3	4	4	3.5	4	3.5	3.5	4	3.8	3.5	3.8
115	4	4	4	4	4	3.5	3	4.25	3.75	4.33	3.8	3.75	4
116	3	4	2	2	4	3.5	2.67	2	3.25	3.33	3.4	4	3
117	4	4	4	3	5	5	3.67	4.25	4	4	4.4	5	4
118	4	3	4	4	4	4	3.67	3.5	3.5	4	3.6	3.75	3.8
119	4	3	3	2	5	4	4.33	4.25	3	4.33	3.2	4.25	3.4
120	3	2	3	3	5	4	4	3.75	3	3.67	3	3.75	3.2
121	4	4	4	4	4	4	4	4	4	4	3.6	4	4
122	4	3	3	3	4	4.5	4	4.25	4.25	4	3.6	5	3.4
123	3	1	1	3	1	3	2.67	2.75	2.25	1	1.4	2	1.8
124	4	5	4	5	4	5	4.67	4.25	4.5	4.33	4.6	4.75	4.4
125	5	4	4	4	4	4.5	4	4.75	3.5	5	3.6	4.25	4.2
126	4	4	4	4	4	4.5	4	4.25	3.5	4.67	3.4	4.25	4
127	3	3	2	2	2	4	3	4	3.75	3	2	2.5	2.4
128	4	4	3	3	4	5	2	5	4	2.67	3.8	4.5	3.6
129	5	4	5	5	3	4.5	4.67	4.75	4.5	4.67	3.2	3.25	4.4
130	3	4	4	3	4	4	4	4	3.5	3	3	3.5	3.6
131	5	2	4	4	2	4	3.33	4	3.75	3	4	3.75	3.4



132	5	2	5	5	2	4.5	5	5	4.75	5	4	5	3.8
133	4	2	4	4	2	4.5	4.33	4.75	4	4.33	3.4	4	3.2
134	5	4	3	3	3	3.5	3.67	3.75	3.25	3.33	3.4	4	3.6
135	5	4	4	4	5	5	3.33	4.75	4	3	4.6	4.75	4.4
136	5	4	4	4	5	4	4.67	4.25	3.75	4	4.6	4.75	4.4
137	5	2	4	4	2	5	4	4.25	4.5	4.33	4.6	3.75	3.4
138	4	4	4	4	4	5	4.33	4.75	4	4	4.2	4.5	4
139	4	2	3	4	4	4	3.33	4	3.25	3	3.8	4	3.4
140	4	4	4	3	4	5	5	4.5	4	4	3.4	4.25	3.8
141	5	4	4	3	4	5	4.33	4.5	3	4	4.2	4	4
142	3	4	3	5	5	5	3.33	4.75	3.5	4.67	4.4	4.5	4
143	5	3	3	4	5	4.5	3.33	3.75	4	4.33	4.4	4	4
144	2	2	2	4	2	1	2	4.5	3.25	4.67	3.6	1	2.4
145	4	3	2	3	4	4.5	3.67	3	2.75	4	1.8	4	3.2
146	4	4	4	4	4	2.5	2	2	4	2.67	3	2.25	4
147	3	4	4	5	3	5	3.33	3.25	4	3.67	3.6	3.75	3.8
148	4	4	4	4	4	5	3	3	3.75	3.33	3.2	3.25	4
149	3	2	2	3	2	2.5	3.67	3	3	3	1.4	2.5	2.4
150	4	2	3	3	3	4	3	3.75	4.25	4	3.6	3.5	3
151	4	2	3	3	3	4.5	3.67	3.5	4	3	3.4	4.5	3
152	4	2	4	4	4	3	3	3.25	3.75	4	3.2	4	3.6
153	4	3	3	4	3	4	4	4	2.5	4	3.6	3	3.4
154	4	1	4	4	1	3	2.33	3.5	4	3	4	4	2.8
155	4	2	4	4	2	4	1	3.5	4	3	2	4	3.2
156	4	3	5	5	3	4	3.33	4	4	3	3.2	3.75	4
157	4	3	4	4	4	4	4	3.75	2.25	3.67	3	3	3.8
158	4	2	4	3	2	3.5	3.33	3.25	3.75	3.33	2.6	4	3
159	4	1	4	4	4	4	3	4.75	4.25	3.67	3.2	4	3.4
160	3	3	3	4	4	3.5	3.67	3.5	3.25	3.67	2.2	4	3.4
161	3	2	3	5	2	3.5	3	3.25	3	2.67	3.2	3.5	3
162	4	4	4	4	3	4	4	3.75	4	3.67	3.4	3.5	3.8
163	4	3	3	4	4	3	3.33	3.25	4	3	3	3.25	3.6
164	4	2	2	4	4	4	2.67	4.25	4	4	3.4	4	3.2

165	5	4	4	4	5	4.5	4.67	5	5	5	4.6	5	4.4
166	2	1	1	3	1	3	4.33	4.5	4	3	1.6	3.25	1.6
167	4	4	3	4	4	4.5	3.33	4.5	3.25	4.67	3.8	4	3.8
168	4	4	2	4	3	3.5	3.67	3.75	4	3	2.8	3.75	3.4
169	5	4	4	4	4	3	4.33	4	4	3.33	4	4	4.2
170	2	1	4	2	3	4	4.33	4.5	4	4	2.4	2	2.4
171	4	3	4	4	4	3.5	3.67	3.75	4	4	3.8	3.75	3.8
172	2	3	4	4	4	4.5	4	4.75	4	4	4	4	3.4
173	5	4	4	3	3	4	4.67	5	3.5	4.33	3.2	4	3.8
174	5	5	4	4	3	4	4.67	5	5	3.67	2.8	3.75	4.2
175	4	3	1	2	3	4	2.33	3.75	3	2.33	3	3.5	2.6
176	5	4	2	4	2	4.5	4	3.75	4.75	1	1.8	4	3.4
177	4	1	1	1	1	3.5	3	1.5	2.75	1	1.4	2	1.6
178	3	3	3	3	4	2.5	3.33	4	3.5	2.67	3.8	3	3.2
179	4	2	1	2	1	1.5	3.33	3.25	3.25	3.33	2	2.5	2
180	4	3	3	4	4	4	3.67	4	4	4	3.6	3.25	3.6
181	2	2	3	2	2	3	3	4	3	1.67	3	2	2.2
182	2	2	2	5	3	4	3.33	5	4	1	2.6	4	2.8
183	4	3	3	4	3	3.5	4	3	3.25	2.67	3	3.25	3.4
184	4	4	4	4	4	3.5	3.67	3.5	4	4	4	4	4
185	3	2	2	3	3	3.5	3	4.25	3	3.33	3	2.5	2.6
186	4	2	2	3	4	3.5	3.33	5	4.25	5	3.4	3	3
187	4	4	2	3	3	4	3	3	4	3	3	3	3.2
188	4	2	2	4	2	4	3	4	3.5	4	2.4	3.25	2.8
189	2	3	4	3	2	4	2	3.75	3.5	3.67	3	3.5	2.8
190	3	2	2	2	4	4	4	4.5	4	4	3.6	4	2.6
191	2	1	2	2	2	3	3	3.25	2.25	1	2.8	2	1.8
192	4	2	4	5	4	4	4	4.5	4	3.67	4.4	4	3.8
193	5	2	4	4	4	4	4.33	4	4.5	4.33	4	4	3.8
194	5	3	3	4	3	4	2.67	3.5	2.5	3	3.4	3.5	3.6
195	4	3	2	3	3	4	3.33	4.5	3.5	3.33	3.2	3.75	3
196	4	2	3	3	4	4	3.67	4	4	3.67	4	4	3.2
197	2	3	2	5	3	3.5	3.67	3.5	3.25	2.33	3.4	2.75	3

198	2	2	2	2	3	4	3.33	3.75	4	1	3.4	3.5	2.2
199	4	2	4	4	4	4	5	4	4	4	4	4	3.6
200	4	3	2	2	2	4	3.67	4	3.75	4	3.2	3.75	2.6
201	4	2	4	2	2	2.5	3.33	3.75	4	3.33	2.4	2.75	2.8
202	3	2	3	3	3	4	3	3.25	3.25	4	2.8	3	2.8
203	5	2	2	2	2	4.5	3.67	4.25	4.5	2.67	3.6	4	2.6
204	3	2	3	4	2	4	3	3.25	3	1	2	2.75	2.8
205	4	2	4	4	4	4	3.67	4	4	3.33	3.2	4	3.6
206	4	4	4	4	3	3.5	3.33	3.75	3.25	2	1	3	3.8
207	4	3	4	4	3	3.5	3.33	4.25	4	4	3.4	4.25	3.6
208	3	3	3	3	3	3.5	3	3.5	3	3	2.8	3.25	3
209	4	2	2	2	3	4	3	5	4	3.33	2.4	3.5	2.6
210	5	3	4	5	4	4	2.33	3.75	4.5	3	4.2	4.25	4.2
211	2	2	4	5	3	4.5	4	3	3.5	3.67	3.2	4	3.2
212	4	4	3	4	3	4	4	3.5	4	3.67	3.2	3.25	3.6
213	4	3	3	3	4	4	3.67	4	4	4	4	3.5	3.4
214	4	4	4	4	4	3	4.33	4.25	4.5	4.67	4	4.75	4
215	4	4	4	4	4	5	5	5	5	4.33	4	4	4
216	4	4	4	4	4	4	4	4.25	4	4	4	4	4
217	4	3	3	4	3	4	3.67	3.75	4	3	3.2	4	3.4
218	3	2	2	2	1	3	3.33	4	2.75	3	1.4	3.25	2
219	5	4	2	3	3	4	4	3.75	2.75	3.67	3.2	3.75	3.4
220	2	3	1	1	3	3.5	3.67	5	4.25	1.33	3	1.5	2
221	5	3	3	3	4	4	4	4.5	4.5	4.33	4.4	4	3.6
222	4	3	4	4	3	4	3.67	3.75	3.5	3	3.2	3	3.6
223	4	3	2	4	3	4	2.33	2.5	4	2	3	4	3.2
224	4	2	1	5	1	3	3.67	3.5	3.75	3	1.8	2.75	2.6
225	3	3	3	3	3	4	3	3.75	3	1	3	3	3
226	5	2	2	4	3	4	3	3.75	4.5	3	2	4	3.2
227	2	3	2	2	2	3.5	3.67	3	3	2.67	2.8	3.5	2.2
228	5	3	3	4	3	4	3.33	4.25	4.25	4.67	2.6	3.25	3.6
229	5	4	4	4	5	5	4.67	5	5	5	4.8	5	4.4
230	4	4	4	4	4	4	4	4	4	4	3	4	4

231	4	4	4	4	4	3.5	4	4	4	4	4	4	4
232	5	4	4	4	4	4	4	4.5	5	4	4.2	4	4.2
233	4	3	4	4	4	4	3.67	4	4	4	4	4	3.8
234	4	2	3	3	3	3.5	2.67	3.75	4	3.33	3.2	3.5	3
235	4	4	3	4	4	4	3.33	4	4	4	3	4	3.8
236	3	3	3	3	3	3.5	3.67	3.25	4	3.67	3.2	4	3
237	4	3	2	4	3	4	4	4.25	4	4	3.6	4	3.2
238	4	4	3	4	4	3.5	3.67	4	3.75	4	3.8	3.75	3.8
239	4	3	3	4	2	2.5	2.33	4.25	3.5	4	2.2	3.5	3.2
240	5	3	2	4	3	3.5	4	4.5	3	3	3	3	3.4
241	3	2	2	2	1	3	3	3.5	3	1.67	1.8	2.25	2
242	4	4	4	3	5	4	4.33	4.5	4	4	4	4	4
243	4	3	3	4	3	4	4.67	4.5	4.75	4	3.6	3.75	3.4
244	3	2	1	2	2	3.5	3.67	4.5	3.75	3.67	3.4	3.5	2
245	3	2	1	1	1	2.5	2.67	3	3	1.67	1.2	2.25	1.6
246	5	4	4	2	2	2.5	3.67	4.25	4	3	1.6	3.75	3.4
247	4	4	4	3	3	4	4.33	4	4	2	3.4	3.25	3.6
248	4	4	4	3	4	4	3.67	4	4	4	3	3.75	3.8
249	1	4	4	2	2	4.5	3.67	4.25	4	3.33	2.2	4.25	2.6
250	4	1	4	4	1	4	1	3.5	4	3	1	3.25	2.8
251	1	2	4	4	4	4	3	3.25	3.75	3.33	2.8	4	3
252	5	1	5	5	5	5	4.33	5	5	3.67	5	5	4.2
253	3	2	4	4	3	4	4	3.75	4	3	3.8	4	3.2
254	1	1	3	1	1	4	1	5	4	2	2.8	4.25	1.4
255	5	2	4	2	4	2	3.67	3.25	4	3	3.8	3.5	3.4
256	2	2	4	2	3	4	2.67	3.25	4	3.33	3.8	3.75	2.6
257	2	2	2	2	2	5	1	4	5	2.33	3.4	4.75	2
258	5	3	3	3	3	4	3	4.25	4.5	2.33	3	3.75	3.4
259	4	3	3	3	3	4	3	4	4	3.67	3	4	3.2
260	4	3	2	3	4	4.5	3.67	4	3.75	5	4	4	3.2
261	4	2	2	4	4	4	4	4	4	4	3	3.5	3.2
262	5	4	5	4	4	4	4	5	4.25	5	4.6	4.25	4.4
263	4	4	4	4	4	4	4	5	5	3	4	4	4

264	5	4	3	3	3	4	3.67	3.5	4	3.33	3.4	4	3.6
265	3	3	4	4	3	3.5	3.33	3.25	3.25	3.67	3.2	3.5	3.4
266	5	4	3	4	4	4.5	4	5	5	5	4.4	4	4
267	4	4	4	4	4	4	4	4	4	4	4	4	4
268	5	5	2	4	4	4	4.33	4.75	4.25	5	4	5	4
269	2	2	2	2	3	4	2.67	4.25	4	3	3.6	4	2.2
270	2	2	2	2	3	3.5	3.33	3.75	4	2	3.4	3.25	2.2
271	2	2	2	3	3	4	2.67	3.75	3.75	2	3.6	3.5	2.4
272	5	3	2	2	3	4	3.33	3.75	3.25	4.33	3.2	2.5	3
273	3	1	1	3	1	2	3	4.75	3	3.67	1.4	1	1.8
274	4	3	4	4	4	4	4	4.5	4	4	4.2	3.5	3.8
275	3	3	3	3	2	3.5	3.67	3	3.25	3.33	2.8	2.25	2.8
276	2	2	2	4	3	4	3.67	4	3.5	1.33	2.8	3.25	2.6
277	4	3	1	2	3	4	3.33	3.25	3.75	3	3.2	3	2.6
278	4	3	2	4	3	4	3.67	2.5	4	3.67	3	3.25	3.2
279	3	2	1	2	2	4	2.67	3.25	4	1.67	3.2	3.5	2
280	3	3	4	4	3	4.5	3	3.5	3.5	3.67	3	3.75	3.4
281	5	3	4	3	4	3.5	3.67	4.25	3.75	4	3.6	3.75	3.8
282	2	2	1	1	1	3	2.33	2.25	3	2.33	2.4	2.75	1.4
283	4	4	3	3	3	4	4.33	4	4	4	3.2	3.5	3.4
284	5	3	4	3	3	3.5	3.33	4	4.25	4.33	3.6	4.25	3.6
285	4	5	4	5	3	4	3	4	2	2	3.2	3.75	4.2
286	4	2	4	4	4	4	4	4.75	4.5	4.67	4.4	4	3.6
287	5	3	3	4	4	4.5	3.33	4.5	4	3	3.4	3.75	3.8
288	4	4	4	4	4	4	3.67	4	4.5	4	4.4	4.25	4
289	5	5	4	4	4	4.5	4.33	4.25	4.25	4	4	4	4.4
290	4	3	5	4	4	4	4	4	4	4	3	4	4
291	5	4	4	4	4	4	4	4.25	4	4.33	4	4.25	4.2
292	2	2	2	2	2	4	4	3.75	3.75	2.33	1	2.5	2
293	3	3	2	2	2	4	4	3.75	3.25	2.67	3	3	2.4
294	4	4	4	4	4	4	4	4	4	4	4	4	4
295	5	4	4	4	4	4	4.33	4.25	4.25	4	4.6	4.5	4.2
296	4	4	4	4	4	4.5	4.33	4.25	4.25	4	4	4	4

297	4	4	5	4	5	4	3.67	4.25	4	4.67	4.4	4.5	4.4
298	4	4	4	4	4	4	3.67	4	3.5	3.67	3.4	3.75	4
299	4	3	4	4	5	4	4	4.75	3.75	4	3.8	4	4
300	3	2	3	4	3	4	2.33	3.5	3.25	3	2.2	3.25	3
301	4	3	4	4	4	4	4	4	3.75	4	3.8	4	3.8
302	3	3	3	3	3	3	4	4	3.5	3	3	3	3
303	3	2	4	4	2	5	4.33	4	4.25	4	4.2	3	3
304	4	4	4	4	4	4	5	4	4	5	4	4	4
305	4	4	3	4	3	4.5	3.33	3	3	3.67	3.6	3	3.6
306	4	3	4	4	3	4	3.33	4	4	3.33	3.2	3.5	3.6
307	1	1	4	4	1	4	1	4	4	3	2.2	2.75	2.2
308	3	3	4	4	4	3	3.67	3.75	4	3	3	3	3.6
309	3	3	3	4	4	4	3.33	3.5	3.75	3	3	2.75	3.4
310	4	3	2	2	3	4	3.67	3.75	4	3.33	3.6	4	2.8
311	3	2	4	4	2	3	3	4	4	2	3	3	3
312	4	2	4	4	2	3.5	1.33	4	3.75	4	3	3.75	3.2
313	5	2	2	2	2	4	3.67	4	4	4	3.2	3	2.6
314	4	3	4	4	3	4	3.67	4.25	5	5	3.6	4.25	3.6
315	4	4	4	4	4	4	4	3.5	3.25	4	4	4	4
316	4	2	3	4	4	4	3.33	3.5	4	3.67	3.8	3.75	3.4
317	5	3	3	4	4	4	3.33	4.5	4.25	5	3.8	3.75	3.8
318	4	4	3	4	4	3.5	4	4	3	4	4	4	3.8
319	3	4	3	4	3	4.5	3.33	4.5	5	4.33	3.2	5	3.4
320	4	2	2	2	2	3	3.67	3.25	3	3.33	2.4	2	2.4
321	2	2	1	2	4	3.5	3	4.25	3	2.67	3	3	2.2
322	5	2	1	5	2	4	3.33	3.5	4.5	4	3.4	3.25	3
323	2	2	4	4	3	1	2.67	3.25	4	3.67	4.2	3	3
324	5	3	3	3	3	3.5	3.33	5	3	4	3.2	4	3.4
325	2	2	3	4	2	3	3.33	4	4	3.33	2.6	3	2.6
326	5	4	4	3	3	4	4.33	4.25	4.5	3.33	3.4	4.5	3.8
327	5	3	2	2	3	4	3.33	3.75	3.75	4.33	3.2	3	3
328	4	2	4	4	2	4	4	4	4	3.33	3.8	4	3.2
329	4	4	4	4	4	4	3	3.75	3.25	4	3.4	4	4

330	5	4	3	4	4	4	3.33	4.5	3.5	2.33	3.6	4.25	4
331	5	5	5	5	5	5	4.33	5	4	5	4.8	5	5
332	3	2	4	4	2	3	2.67	4	3.5	3.67	2	3	3
333	4	5	4	3	4	4	3	4.5	4	3.67	3.2	4	4
334	4	4	4	3	3	4	4	3.5	4	4	3.2	3.5	3.6
335	3	3	3	5	3	4	3	3.75	5	4	3.8	3.5	3.4
336	5	3	2	3	4	5	3.67	5	5	4.33	3.6	4	3.4
337	5	4	4	4	5	4	4	5	4.25	5	4	4.5	4.4
338	4	1	1	1	1	3	3	2.75	3	2.33	1.4	3	1.6
339	4	3	3	4	3	3	3.67	4.5	4	3.67	2.2	3	3.4
340	4	4	4	4	3	5	2.33	3.25	4.5	4	4	4.75	3.8
341	3	3	3	3	3	4	3.33	3	3.5	3	3	3.5	3
342	4	3	4	4	3	2	3.33	3.5	3	3.33	3.2	3.25	3.6
343	4	3	3	4	3	3.5	3.67	3.75	3.75	3.33	3.4	3.5	3.4
344	4	3	3	3	3	3.5	4	4.5	4	4	3	3.75	3.2
345	2	2	3	4	4	4	3	3.75	4	4	3.6	3.75	3
346	4	4	4	4	4	4	4	4	4	4	3.4	3.5	4
347	4	3	3	3	4	4	4	4	4	3.33	3.4	3.5	3.4
348	4	3	3	3	3	4	4	4.75	4	3.67	3.2	3.5	3.2
349	4	4	4	4	4	4	4	4	4	3	3.4	4	4
350	4	3	4	4	4	4.5	5	4	4	4	3	4	3.8
351	3	3	3	3	3	4	3.33	4	4.25	2.67	3.2	3	3
352	1	1	1	1	1	3	2	1.5	3	2.33	1	1	1
353	3	3	4	4	3	4	3.67	4.5	3.5	1	3	3.5	3.4
354	2	1	1	1	1	4	3.67	2.75	1	1	2	1	1.2
355	4	3	3	3	3	4	3.67	4	3.75	3.33	3	3.5	3.2
356	4	3	3	3	3	4	3	4	4	3.33	3	3.5	3.2
357	4	4	4	4	4	4	4	4	4	4	4	4	4
358	4	2	4	3	3	3	4	3.25	3.5	2.33	2.6	2.5	3.2
359	4	4	4	3	4	4	4	5	4	5	5	4	3.8
360	4	3	3	3	3	4	3.33	3.75	4	3.67	3.4	4	3.2
361	3	1	4	4	2	4	4	3.5	4	3	2.8	4	2.8
362	2	2	2	3	1	1.5	1.67	2.25	2.75	3	3	3	2

363	3	2	2	2	2	2.5	3	2.5	2.5	3.33	2.8	2.75	2.2
364	3	3	4	4	4	4	4	4	4	4	4.2	3.5	3.6
365	2	2	3	4	2	1	1.67	3	3	2	2.2	2.25	2.6
366	3	3	3	3	3	3.5	4	3.25	2.25	4	4	3	3
367	2	2	4	4	2	3	3	4	4	4	3	2.75	2.8
368	4	2	3	3	3	3	3.33	4	4	3	3	4	3
369	3	2	3	2	2	4	4	3	3	3	4	3	2.4
370	3	2	2	4	2	1	1	2.75	2.25	2	2	3	2.6
371	3	2	4	4	3	3.5	3.67	4	4	3.33	3.6	3.75	3.2
372	4	3	4	4	3	4	3.67	3.75	3.75	3	4	4	3.6
373	4	2	4	4	4	4	4	4	4	4	4	4	3.6
374	3	3	4	4	4	4	4	4	4	4	3.6	3.75	3.6
375	3	3	2	2	2	1.5	1.67	2.25	1.75	2.33	2.8	3	2.4
376	3	2	3	3	3	3	2.67	2.25	2.75	2.33	4	3	2.8
377	3	3	4	4	3	3	3.33	2.75	2.25	2	2.8	3	3.4
378	4	4	4	4	3	4	5	4	4	3	2.6	3.25	3.8
379	4	2	4	4	3	3	3	2.75	3.5	3	3.4	3.75	3.4
380	4	3	3	3	4	4	4	4.25	4.5	3	3	4	3.4
381	4	3	5	4	5	4	3.33	5	5	4.33	3.8	4.25	4.2
382	4	2	5	4	4	3.5	3.33	4	4	4.33	3	4	3.8
383	4	4	4	4	4	5	4.33	4	4.25	3.67	4.2	4	4
384	4	4	3	3	4	4.5	3.67	4.5	4	3.67	4	3.5	3.6
385	5	3	5	5	5	5	5	5	5	4	5	5	4.6
386	5	5	1	2	3	4.5	3.33	3.75	4.5	3.67	3.8	4.25	3.2
387	4	5	2	2	3	4	3.67	3.75	4.5	3.67	3.6	4.25	3.2
388	4	1	4	3	3	4	4	5	4.75	3.67	4.2	4	3
389	4	3	4	4	3	5	5	4	4	3.67	4	4	3.6
390	4	2	4	4	3	4	2.67	4	3.5	4.67	4	4.25	3.4
391	4	4	4	4	4	4	3.67	4.75	4.75	4.33	4.4	4.25	4
392	3	3	4	3	3	2.5	2.33	4	4	4	2.6	2.75	3.2
393	5	2	4	3	4	4	4	5	5	4	4	4	3.6
394	4	2	3	3	3	3	2.33	3	2.75	4	3.8	4	3
395	4	2	3	3	3	4	3.67	4	3.5	4	3.6	4	3



396	2	1	4	3	1	3	2.67	2.5	3	2	1.4	2.5	2.2
397	5	5	1	3	3	4.5	4	3.75	4.5	3.33	3.8	4.25	3.4
398	4	2	4	3	3	4	4.33	4	4.75	4.33	3.2	3.25	3.2
399	4	2	4	3	4	4	5	4	4	4.33	3.8	3.5	3.4
400	4	2	3	3	4	4	4	4	3	4	3	2.75	3.2

