

THE EFFECT OF TRUST AND SERVICE QUALITY TOWARD PATIENT SATISFACTION WITH CUSTOMER VALUE AS INTERVENING VARIABLE

Netty Laura

Management Study Program, Faculty of Economics and Business, 17 Agustus 1945 University,
Jl. Sunter Permai Raya, Tj. Priok, Jakarta Utara, DKI Jakarta 14350, Indonesia
Nettylaura919@yahoo.com

Received: 18th May 2016/ **Revised:** 23rd June 2016/ **Accepted:** 24th June 2016

How to Cite: Laura, N. (2016). The Effect of Trust and Service Quality Toward Patient Satisfaction with Customer Value as Intervening Variable. *Binus Business Review*, 7(2), 157-162.
[Http://dx.doi.org/10.21512/bbr.v7i2.1589](http://dx.doi.org/10.21512/bbr.v7i2.1589)

ABSTRACT

The research was conducted at Laboratory Installation RSPI of Prof. Dr. Sulianti Saroso (RSPI-SS). Unit of analysis was patients of Medical Check Up in Laboratory Installation of RSPI-SS which is located in Sunter, North Jakarta. The samples of this research were 93 patients from 121 populations; the research method was purposive sampling technique. The instrument of statistic analysis was through PLS 3.0 which was used to test the hypothesis. The research finds seven hypotheses as the results. They are variable of trust which affects customer satisfaction positively but does not significantly affect to customer satisfaction, variable of trust which affects customer satisfaction negatively but significantly affects the customer value, variable of service quality which affects to customer satisfaction positively and significantly, variable of service quality which affected to customer value positively and significantly, variable of customer value which affects positively and significantly to customer satisfaction, intervention of customer value on the trust to customer satisfaction which affects negatively and significantly, and intervention of customer value on service quality to customer satisfaction which affects positively but not significantly.

Keywords: trust, service quality, patient satisfaction, customer value

INTRODUCTION

Patient satisfaction is the result that wants to be reached by every company engaging in the service business, one of them is hospital. Hospitals will last if they can create good values in giving satisfaction to their customers through trust and quality service delivery. Therefore, to determine patient's satisfaction with health services in Laboratory Installation of RSPI-SS, it can be seen from the data of the Summary Report Patients' visits of Laboratory Installation based on rooms in 2012-2015 which show that the Medical Check Up (MCU) room was ranked the last compared to other installations.

Based on the report in 2012, the number of Medical Check Up (MCU) patients was 515 patients

with 9,88 %, and then in 2013, the percentage declined to 9,80 % (412 patients). In 2014 and 2015, it kept declining with 311 patients (9,77 %) and 309 patients (6,17 %) Based on the data above, it can be seen that there was a declining on the visits of patients of MCU every year compared to the number of patients visiting other rooms which were fluctuating. This shows that there was instability of trust relationship, service quality, and customer value to customer's satisfaction which led to the declining of medical check up service users in Laboratory Installation of RSPI-SS. According to the research of Afriliawan (2003), customer value is one of the marketing concepts that help services offered to be one step ahead of competitors. Good customer value is a value that can make customers satisfied which means that customers have found

goods and services that can fulfill their needs and expectations. The measurement of customer satisfaction, which is started with the realization of customer value, is the fundamental part in building customer satisfaction, as seen Table 1.

Based on the explanation, the proposition formulation which is going to be discussed in this research is as following: (1) Does trust affect positively and significantly to patient satisfaction? (2) Does trust affect positively and significantly to customer value? (3) Does quality service affect positively and significantly to patient satisfaction? (4) Does quality service affect positively and significantly to customer value? (5) Does customer value affect positively and significantly to patient satisfaction? (6) Does customer value intervention affect positively and significantly to trust of patient satisfaction? (7) Does customer value intervention affect positively and significantly to service quality of patient satisfaction?

Based on the formulation, it is determined that the objectives of this research are to find out: (1) The effect of patient trust to patient satisfaction. (2) The effect of trust to customer value. (3) The effect of service quality to patient satisfaction. (4) The effect of service quality to customer value. (5) The effect of customer value to patient satisfaction. (6) Whether customer value intervention has direct effect to trust to patient satisfaction and (7) Whether customer value intervention has a direct effect on service quality to patient satisfaction.

It is expected that this research can give benefits as following: (1) For knowledge: It is expected that the result of this research can contribute to the concept and knowledge between theory and problems in the field which are related to trust, service quality, customer value, and patient satisfaction. (2) For companies: It is expected that the result of this research can be used as consideration in preparing marketing plans and strategies in the Laboratory Installation of Infectious Diseases of Prof. Dr. Sulianti Saroso Hospital. (3) For readers: It is expected that the result of this research can be used as literature for college students and as reference materials and information.

Marketing is known as the core of business. The understanding of marketing according to Kotler

and Kevin (2009) is a managerial and social process in which individual and group get what they want and need by creating, offering, and exchanging products with other parties. Grand Theory in this research is Attribution Theory which identifies the process that is done by someone in determining the cause of his behavior or others, or certain objects. According to Lupiyoadi (2014), the attribution that is done by someone will affect the satisfaction of his after purchase toward the purchased products/services because the attribution strengthens or weakens customer satisfaction. According to Hasan (2014), attribution has great effect to satisfaction or dissatisfaction of customers if customers' involvement, experience, and knowledge of products or services are relatively high. Therefore, the factors of trust, service quality, and customer value have some influences toward patient satisfaction. According to Lupiyoadi (2014), attribution is estimating what causes other people have a certain behavior. Attribution theory, according to Kuzuhara and Zachary (2005), explains the process of perception in which someone gives an opinion or attribution about the cause of others' behaviors that consists of two types. (1) Internal Attribution: internal attribution happens when someone perceives that the cause of other's behavior is a situation that is related to some aspects of that person like his personality, expertise, ability, motivation, intelligence, and others. (2) External Attribution: external attribution happens when someone perceives that the cause of other's behavior is related to some things like misfortune, time, unexpected things, and others. According to Assauri (2013), a marketing mix is a group or set of marketing tools such as product, price, place and promotion used by the company to deliver value to its customers to achieve patient satisfaction. The marketing mix in the activities of health services one of which is the quality of service. According to Tjiptono (2006), quality of service is a dynamic condition related to products, services, people, processes and environments that meet or exceed customer expectations. Based on the description of this study is to determine how much influence the trust and quality of service to patients' satisfaction with customer value as a variable intervening.

Table 1 Summary Report Patients' visits of Laboratory Installation of RSPI Prof. Dr. Sulianti Saroso in 2012-2015

Room	2012		2013		2014		2015	
	ΣPeople	%	ΣPeople	%	ΣPeople	%	ΣPeople	%
IRJ (InstallationOutpatient)	2258	43,81%	1745	41,53%	1164	29,62%	2245	44,79%
IRNA (Inpatient)	1302	26,15%	941	24,82%	714	21,74%	1360	27,13%
IGD (Emergency departments)	1042	20,16%	1002	23,85%	917	27,91%	1098	21,91%
MCU (Medical Check Up)	515	9,88%	412	9,80%	311	9,77%	309	6,17%
Total	5154	100 %	4202	100 %	3285	100 %	5012	100 %

Source: Report of Laboratory Installation in 2015

According to Nirwana (2012), the customer's trust is the perception of the reliability of a consumer standpoint which is based on experience as well as the sequence of transactions or interactions were characterized by the fulfillment of expectations of the performance of the product/service that is satisfaction oriented. Additionally, Winahyuningsih (2012) concluded that trust and significant positive effect on patient satisfaction.

According to Khasanah (2015), customer's point is the basic reference in increasing trust level because by applying consumer's point factors, service provider company can identify customer's need and desire which must be fulfilled to bring out strong trust. Based on previous research done by Soegoto (2009), it is concluded that trust brings positive and significant effect to customer's point.

According to Tjiptono (2006), service quality is a dynamic condition that is related to product, service, human, process, and environment which fulfill or exceed customer's expectation. According to previous research carried out by Lubis and Martin (2009), service quality has positive and significant effect to customer satisfaction.

According to Mardikawati and Farida (2013), service quality is a special quality expected to affect customer satisfaction level because if the service received can live up to the expectation, then the service quality is perceived as good and satisfactory.

According to Rangkuti (2006), customer's point is defined as a comprehensive assessment of the benefit of a product which is based on customer's perception on what has been received by the customer and what has been given by the product. The buyer's perception of value expresses the comparison between quality and benefit that they get from the product with the sacrifice that they feel when paying the cost of the product. According to Sumarwan *et al.* (2010), customer's point can be formed by several factors which are: (1) The life cycle cost and points creation for superior economic value, the customer must get economic benefit above the customer's life cycle. There are six main sources of life cycle cost that create value which is paid price, user cost, maintenance cost, possession cost, and disposal cost. (2) Performance cost and points creation. Although economic value provides solid base to create customer's value based on cost, but there are aspects of product performance which are more difficult to calculate the total cost of purchase. First, perceived benefit and creation of value. Relative value of performance cost and economic value sets the best standard of customer's value. The customer's perception of service quality, brand reputation, and other costs besides the price affects the customer's value. After the perception of benefit and cost are identified, then the margin is the perceived customer's value; Second, customer benefit. Before able to decide a comprehensive customer value that is created, the perceived costs of purchase must be determined. The competitive power of a company is related to the service which is perceived higher than

the competitor which will increase the perceived total cost of purchase. If the perception of the total cost of purchase and the total benefit have been achieved, then the company can evaluate the level of value created for the customers. Third, emotional benefit and creation of value. Every human has physical and psychological needs such as warm relationship, affiliation, status, recognition, respect, happiness, spirit, and self-fulfillment. Psychological need can be fulfilled by buying product that offers a string of emotional benefit which is consistent with that need because many products have personality with psychological meaning. According to research by Mardikawati (2013), it is concluded that customer's value has a positive and significant effect on customer satisfaction.

According to Abdullah and Tantri (2012), the customer estimates the service offer from the service provider based on the highest value, the customer will always want to maximize the value, but there are several obstacles which are the searching cost and knowledge and limited income. Khasanah (2015) concludes that customer's value has a positive and significant effect on customer satisfaction.

According to Arief (2007), all activities that are carried out by the company will end on the score given by customer on the customer satisfaction. The main factor that determines the customer satisfaction is the customer's value on the service quality. Based on previous research by Ratnasari (2015), it is concluded that customer's value intervention on service quality toward the customer satisfaction has a positive and significant effect.

The relation of customer value, customer satisfaction, trust, and service quality that becomes a model of research can be seen in Figure 1.

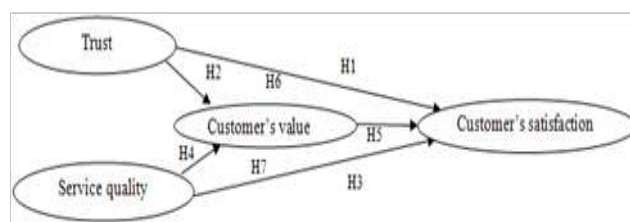


Figure 1 Conceptual Modul of Customer's Satisfaction in RSPI-SS

METHODS

The population for this research is MCU patients who undergo the examination at RSPI-SS Laboratorium. Based on the lab. monthly report, it is known that the number of MCU patients who have their examination during September – November 2015 are 121 patients. The size of the sample for this research is determined using the Slovin formula (Apollo, 2011) as follows:

$$n = \frac{N}{1 + N (\epsilon^2)} \quad (1)$$

Explanation :

n = size of the sample

N = number of population

e = Estimated deviation of 5%

In determining the number of samples that will be chosen, the writer use research concession of 5% (Sugiyono, 2013) because it is not possible to get the perfect 100% result in every research, the bigger the mistake level is, the smaller the sample size is.

$$n = \frac{121}{1+121(0.05^2)}$$

$$n = \frac{121}{1302}$$

$$n = 93$$

93 respondents are chosen from the population as the sample. A particular criterion of the sample determined by the researcher is MCU patients who do examination at RSPI-SS Laboratorium; that is why the number of the sample is 93 patients. Meanwhile, the proportion sample technique used is the purposive sampling and the data processing method used is the Structural Equation Model (SEM) based on variant with Partial Least Square (PLS) alternative through secondary order approach using version 3.0 of SmartPLS software.

This discussion includes one restricted variable which is Customer satisfaction (Y), two free variables Which are Trust (X1) and Service Quality (X2), and one intervening variable which is customer's value (Z), as seen in Table 2.

Table 2 Operational Variable

No	Variables	Indicator
1.	Customer Satisfaction (Y)	1. Confirmation of expectation 2. Repeat purchase interest 3. Willingness to recommend 4. Customer dissatisfaction
2	Customer's value (Z)	1. Recycle cost 2. Performance cost 3. Customer benefit 4. Emotional benefit
3	Trust (X1)	1. Judgment on company's competency 2. Judgment on company's fairness and honesty
4.	Service Quality (X2)	1. Physical evidence 2. reliability 3. response 4. warranty 5. Empathy

Source: Processed Data, 2016

RESULTS AND DISCUSSIONS

Based on this research's variable operation, a research model is constructed, which is later run using PLS- algorithm to test the model's suitability, as seen to Figure 2.

Based on analysis, the result shows that the effect of trust on patient satisfaction has T statistic score = 0,118 > 1,96 and P Value = 0,906 < 0,05. It can be seen that the original sample is 0,004. It shows that trust has a positive effect but not significant on patient satisfaction, and the result does not agree with the research by Winahyuningsih (2012) and Molden *et al.* (2014) which state that satisfaction has a positive and significant effect on customer's trust. Customers will gain trust from the service company based on their experience when using the service whether it can fulfill or exceed their expectation. With the fulfillment of patients' expectation, it will give the benefit for the patients themselves and can be a positive contribution to the company because the fulfillment of patients' satisfaction will affect on the increase of the demand for the service offered by the company. The first hypothesis (H1) in this research is rejected. It is because the patient's trust is based on conviction so it cannot affect the satisfaction because the patient's satisfaction can only be felt of the patient/customer have used and experienced the service.

Based on analysis result that the effect of trust on customer value has T statistic score = 2,058 > 1,96 and P Value = 0,040 < 0,05. Seen from original sample is -0,21 8 negative. It shows that trust has a negative and significant effect on patient's value. It proves that the second hypothesis (H2) is rejected because the lower the trust level that the patient has toward the RSPI-SS laboratories, the higher the customer's value that must be set by the company as the standard for improving the satisfaction level.

Based on the result of analyses that influence the quality of service to the satisfaction of the patients had the result of the T-Statistic = 2,029 > 1,96 and P Value = 0,0043 < 0,05, judging from the original positive sample which is 0,282. This shows that the service quality has a positive and significant impact on patient satisfaction. Moreover, the results of this study are according to the research from Nurbaity and Lopez (2009). This proves that the third hypothesis (H3) is acceptable because the higher the level of quality of services provided by the laboratory installations RSPI - SS to the patients, the higher the level of satisfaction received because the patient's needs and desires can be fulfilled.

Based on the analysis results that the quality of service to customer value has a value of T Statistics = 10,308 > 1,96 and P Value = 0,000 < 0,05, judging from the original sample of 1,135. This shows that service quality has a positive and significant impact on customer value. This is consistent with the Frened and Abadi's research (2015) service quality has a positive

and significant effect on customer value. It proves that the fourth hypothesis (H4) is received. This is because the higher the level of quality of services provided by the Laboratory Installation RSPI-SS to the patient, the higher the customer value for what is expected by the patient in accordance with the benefits derived from such services.

Based on the results of analysis of the influence of customer value to the client's satisfaction has the results of the T Statistics = 5,124 > 1,96 and P Value = 0,000 < 0,05. Judging from the original sample of 0,681, this shows that the value of the customer has a positive influence and significant impact on patient's satisfaction and the results of this study according to research from Mardikawati (2013). This proves that the fifth hypothesis (H5) is received. This is because the costs of patients MCU for a medical examination in the Laboratory Installation RSPI-SS is not as big as the MCU medical examination at a private hospital because the public hospital services are not only based on financial gain but also for the public health service. Therefore some materials needed for the equipment (reagent) for examination in the laboratory installation RSPI-SS are subsidized by the government so that the costs are not greater with perceived benefits. Considering the cost factor is a part of the customer value of the service company.

Based on the results of analysis, it shows that trust influence the patient's satisfaction through the customer value possessed by the results of T Statistics = 2,147 > 1,96 and P Value = 0,032 < 0,05. Judging

from the original value which is -0,180, this means that the trust has a negative impact and significant with patient's satisfaction through customer value and the results of this study according to the research from Ratnasari (2015). This proves that the sixth hypothesis (H6) is rejected because of the trust based on customer value will consider the health risks taken before performing the examination one of which is the radiation risks, levels of nosocomial infections are usually found in hospitals, so if the patient believes that it is getting smaller then the greater level of patient satisfaction because patients only think about and expect the services from the result of a medical examination in the MCU.

Based on the results of service quality influence analysis to the client's satisfaction through customer value possessed the results of T Statistics = 1,707 > 1,96 and P Value = 0,088 < 0,05. Judging from the original sample of 2,26, this means that service quality has a positive effect and not significant with patient's satisfaction through customer value and the result of this study are not in accordance with the research of Khasanah (2015). This proves that the seventh hypothesis (H7) is rejected because of the main basis of the achievement of good quality services and safe for health and safety of the patients, medical personnel and the hospital environment that is based on the implementation of Hospital Standard Operating Procedures (SOPs), RSPI- SS President Director Policy, Regulation of the Minister of Health that is both official and written for the common interest centered on patient's satisfaction.

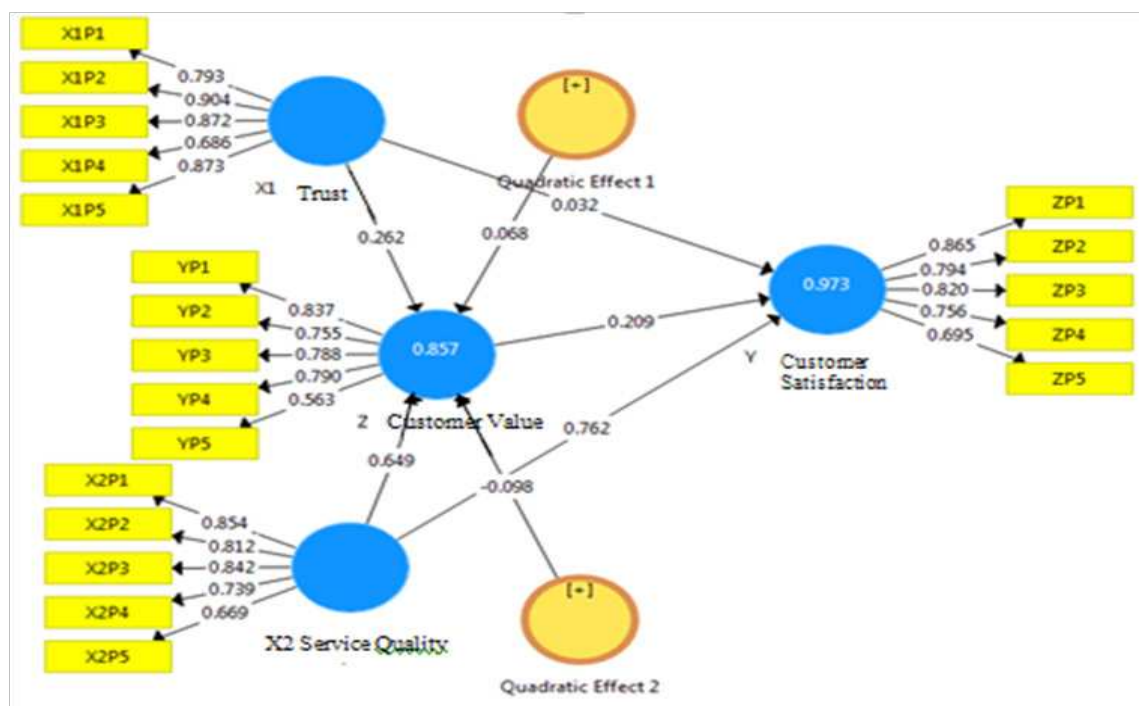


Figure 2 Research Model
Source: Processed Data Using PLS, 2016

CONCLUSIONS

There are three hypothesis that are accepted, namely the third hypothesis (H3) that states that service quality positively effects and significant with the patient's satisfaction, the fourth hypothesis (H4) which states that service quality positively effects and significant with the customer value, and the fifth hypothesis (H5) states that the customer value positively effects and significant with the patient's satisfaction. In the meantime, there is four hypothesis that are rejected, which is the first hypothesis (H1) that the trust positively but not significantly affects the customer's satisfaction. The second hypothesis (H2) states that the trust negatively effects and significant with the customer's value. The sixth hypothesis (H6) states that customer's value intervention on trust negatively effects and significant with the patient's satisfaction and finally, seventh hypothesis (H7) states that customer's value intervention on trust positively effects and not significant with the patient's satisfaction.

Limitations of the study in this research are: (1) Due to time constraints and knowledge of the researcher about marketing on patient's satisfaction. The study consists of only three variables: trust, service quality, and customer's value, even though there is many other factors that influence patient's satisfaction. (2) Location of the study is only performed on patients of RSPI-SS Laboratorium, therefore researchers could not get a broader picture.

Based on the research that has been done, some suggestions are proposed such as creating a pleasant experience to improve the level of patient's satisfaction. It is also suggested for the hospital to improve the services to be systematic and intra-personal to create hospitality and a feeling of safety to the patient during the examination, thereby increasing customer's satisfaction. Also, the hospital still needs to improve the performance of services such as employees' ability in solving problems faced by patients, as well as increased speed and accuracy in providing services to create a pleasant experience for patients. It is expected for the researcher in the future to find the wider scope of the population so that the quality of the research will be better, and can enhance the results of this study.

REFERENCES

- Abdullah, T., & Tantri, F. (2012). *Manajemen Pemasaran*. Jakarta: PT. Raja Grafindo Persada.
- Afriliawan, D. (2003). Pengaruh Nilai Pelanggan terhadap Kepuasan Pasien VIP pada RSUD Anutapura Palu. *E-Jurnal Katalogis*, 1(2), 100–110.
- Arief. (2007). *Pemasaran Jasa dan Kualitas Pelayanan*. Malang: Bayumedia.
- Assauri. (2013). *Strategic Management*. Jakarta: PT Raja Grafindo Persada.
- Apollo, D. (2011). *Pencarian ilmu melalui pendekatan ontologi, epistimologi dan aksiologi*. Jakarta: Mitra Wacana Media.
- Elrado H, M., Kumadji, S., & Yulianto, E. (2014). Pengaruh kualitas pelayanan terhadap kepuasan, kepercayaan dan loyalitas (Survei pada Pelanggan yang Menginap di Jambuluwuk Batu Resort Kota Batu). *Jurnal Administrasi Bisnis*, 15(2), 1–9.
- Hasan, A. (2014). *Marketing dan Kasus – Kasus Pilihan* (1st ed.). Yogyakarta: CAPS.
- Khasanah, I. (2015). *Pengaruh nilai pelanggan, experiential marketing dan rasa kepercayaan terhadap kepuasan pelanggan Hotel Pondok Tinggal Magelang*, 12(1), 11–27.
- Kotler, & Kevin. (2009). *Manajemen Pemasaran* (13th ed.). Jakarta: Erlangga.
- Kuzuhara, & Zachary. (2005). *Organizational Behavior: Integrated Models and Application*. USA: Mishawaka.
- Lubis, A. N., & Martin. (2009). Pengaruh harga dan kualitas pelayanan terhadap kepuasan pasien rawat inap di RSUD Deli Medan. *Jurnal Manajemen Bisnis*, 2(1), 21–24.
- Lupiyoadi, & Hamdani. (2014). *Manajemen Pemasaran Jasa* (3rd ed.). Jakarta: Salemba Empat.
- Mardikawati, W., & Farida, N. (2013). Pengaruh nilai pelanggan dan kualitas layanan terhadap loyalitas pelanggan, melalui kepuasan pelanggan sebagai variabel intervening. *Jurnal Administrasi Bisnis*, 2(1), 64–75.
- Nirwana. (2012). *Pemasaran Jasa*. Malang: Alfa Pustaka.
- Rangkuti, F. (2006). *Measuring Customer Satisfaction* (2nd ed.). Jakarta: PT Gramedia Pustaka Utama.
- Rasheed, F. A., & Abadi, M. F. (2015). Impact of Service Quality, Trust and Perceived Value on Customer Loyalty in Malaysia Services Industries. *Economic Jurnal Malaysia University*, 1(1).
- Ratnasari, S. (2015). Pengaruh kualitas layanan dan nilai pelanggan terhadap kepuasan serta dampaknya pada kepercayaan pelanggan, mitra intertrans forwarding cabang palu. *e-Jurnal Katalogis*, 3(1), 116–120.
- Soegoto. (2009). Pengaruh nilai pelanggan dan kepercayaan terhadap kepuasan nasabah di Bank Rakyat Indonesia (BRI). *Jurnal Ekonomi Bisnis*, 1(1).
- Sugiyono. (2013). *Metode Penelitian Pendidikan*. Bandung: Alfabeta.
- Tjiptono, F. (2006). *Manajemen Jasa*. Yogyakarta: Andi Offset.
- Winahyuningsih, P. (2012). Pengaruh kepercayaan dan kualitas pelayanan terhadap kepuasan konsumen pada hotel gripta kudu. *Jurnal Manajemen Pemasaran*, 7(1), 1–17.