THE EFFECT OF SERVICE QUALITY, CUSTOMER RELATIONSHIP MARKETING, AND BRAND IMAGE ON CUSTOMER LOYALTY AND CUSTOMER SATISFACTION AS AN INTERVENING VARIABLE

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Abstract: Nowadays, intense competition does not only occur in the economic sector, but also penetrates the education sector. There is an analysis gap between information system services, the role of customer relations, and the image of the institution that has not been recognized, has an impact on student satisfaction, as well as the alleged decline in new students based on student and family recommendations. With the consideration of service quality, strategies to build relationships with customers and improve brand image, will determine the level of student satisfaction so as to form student loyalty. This study aims to analyze the effect of Service Quality, Customer Relationship Marketing and Brand Image on Loyalty with Satisfaction as an intervening variable (case study of Academy Telkom Jakarta). This research is categorized in Explanatory Research, with the method of survey using a questionnaire. The sampling technique used is Probability Sampling for a population of 506 student, and considering 305 respondents with Stratified Random sampling method. The analysis used LISREL 8.70 for Structural Equation Modeling (SEM), with a factor loading of 0.05. The results, concluded that there is a relationship between the SERVQUAL, CRM and BRAND variables with the SATISFACTION and LOYALITY variables. Be concluded that, if service quality, customer relationship marketing and brand image are improved, the level of satisfaction will increase, followed by an increase in consumer loyalty..

Keywords: SERVQUAL, CRM, Brand Image, Satisfaction, Loyalty

INTRODUCTION

Competition in the digital era like today, especially in the education service industry, demands a separate strategy for educational institutions to provide quality and value-added educational services . By paying attention to and increasing student satisfaction as consumers can be one way to bind customers. Moreover, it is driven by the speed of access to information which makes it easier for people to experience the transfer of things around them. This opens up opportunities for consumer behavior to grow to become increasingly critical and selective in making decisions.

According to Smith (2007) entitled " *Evaluating service quality in universities: a service department perspective"* , said that there is a gap in service quality and the importance of the five *Service Quality* dimensions projected by students on the service quality of academic staff. Where Dimension *Reability* (reliability) has the most impact for customers and improve service quality achieved through *Reability* (reliability) of better service. This is reinforced by research by Djajadi (2013). The study concluded that the influence of Service Quality and Institutional Image on Customer Loyalty with Student Satisfaction as an intervening variable by relying on continuous service and the level of involvement between complaints and service improvement actions further increases Customer Loyalty.

If this is associated with efforts to build bonds with customers, in this case represented by the relationship between campus management, outsiders, parents and students. So the role of *Customer Relationship Marketing* is an important interaction in running a business. As stated by Ford (2003) in Gultom (2014), " *Relationship as the pattern of interactions and the mutual conditioning of behavior over time, between a company and a customer, a supplier or another organization"* . *This* is intended as a pattern of interaction and favorable conditions between the company and consumers, suppliers or other organizations

By considering previous research data and existing phenomena about how perceptions are formed of academic and non-academic Service Quality for students, the image of the institution in charge of Akatel and the strategy of building relationships with customers with reliability faced with student decisions as a form of building Customer Loyalty, the authors raise research with the title

> " **The influence of** *service quality* **,** *customer relationship marketing* **, and** *brand image* **towards customer loyalty with customer satisfaction** *intervening* **variables ".**

LITERATURE REVIEW
Service Quality

Service quality must start with customer needs and end with customer satisfaction and positive perceptions of service quality (Kotler & Keller, 2012). As the party who buys and consumes services, it is the customer (and not the service provider) who assesses the level of service quality of a company / agency.

Service according to Parasuraman et al (1994) in Fandy Tjiptono (2016) defines an economic activity that produces time, place, form or psychological use. Furthermore, Service Quality is the customer's perception of the excellence of a service. Only customers who judge the quality of service of a quality company or not.

Based on the above understanding, it can be said that the quality of service can be measured properly through a comparison between the services offered and the perception of customer acceptance whether it is in accordance with customer expectations or not.

The main factor in determining customer satisfaction is the customer's perception of service quality, in this case the quality of service. If the services offered are in accordance with what consumers expect, then the service can be said to be good and so should be. Instruments to measure service quality such as SERVQUAL and its modifications have been used by several organizations in the service industry (George et.al, 2004 in Bindu et al., 2009: 67).

Customer Relationship Management (CRM)

Relationship Marketing is often defined as a combination of policies, processes and strategies that an organization implements into a single unit that is used in the process of interaction with customers to track customer information (Ndubisi, 2007). *Relationship Marketing* can also be interpreted as the interaction of sales strategies, marketing and service conditions that are directed at the formation of customer loyalty (Kalakota and Robinson, 2001 in Ndubisi 2007).

Relationship marketing according to Kotler and Armstrong (1996) is *the process of creating, maintaining and changing strong, value laden relationships with customers and other stockholders,* which more or less means that *relationship marketing* is the process of creating, maintaining and transferring excellence, the value content of the relationship between customers and other shareholders. So every business entity or company in dealing with customers really needs a *relationship marketing* process .

Relationship marketing is growth, development, and maintenance in the long term that creates cost-effective relationships with customers, suppliers, employees, and other colleagues that are mutually beneficial (Tandjung, 2014). *Customer Relationship Marketing* is a strategy and effort to establish relationships with customers and provide satisfying services to customers.

Customer Relationship marketing supports a company to provide optimal service to customers in *real time* through knowledge of customer needs and providing a variety of offers, services, programs and media according to their demands (Kotler, 2013: 154).

Brand Image

According to Kotler (2009: 122) states that the image of the company described a set of impressions (*impressions*), Confidence (*beliefs*) and attitudes (*attitudes*), which is in the minds of consumers to the company.

Image is a condition that arises because of understanding a reality. Understanding that comes from an incomplete information will also produce an imperfect image. The main challenge of a *public relations* practitioner is how to provide complete information to the public. Incomplete information can often be used by *competitors* to bring down certain parties. (Kasali, 2014)

According to Ruslan (2008) defines an image as *"the set of beliefs, ideas, and impressions of person holds regarding an object. People's attitudes and action toward an object are highly are highly conditioned by that object's image* . Image is a set of beliefs, ideas, one's impression of a certain object. The attitude and actions of a person towards a particular object will be largely determined by the image of the object.

Peters and Olson (1999) in Gultom (2014) defines image as follows: *"A strong image is the sum of name recognition and reputation, the result of professional and creative efforts and of professional communication with all the target groups important to the organization"*.

Based on the definition above, it can be concluded that the image of a higher education institution is not just a name, term, you a symbol or a combination of all of them but more

than that, the college brand is something that represents higher education services that are different from other higher education services.

In this era of increasingly fierce competition, Brand Image is very beneficial for universities as providers / marketers of services and its benefits for the community as users of higher education services. Brand is   another *differentiation* from the value (*value*) given to the college. Whereas for the community as users of branded higher education services, it is value differentiation, assurance and consistency of the quality of higher education services received. (Simamora, 2018).

Because a brand represents a *unique value* , it becomes a determinant for society in determining its choices for higher education. In line with this, Kotler & Keller (2013) explains that brands can add or reduce product value for consumers, help consumers interpret, process and store information about products and brands and influence consumer confidence in purchasing decisions. It is therefore important for the institution create a brand image (*brand image*) is strong.

Customer Satisfaction

Customer satisfaction is the feeling of pleasure or disappointment of someone who arises after comparing the performance (results) of the product thought to the expected performance (Kotler, 2013: 70). Meanwhile, according to Sumarwan (2008: 322), consumer satisfaction is the impact of a comparison between consumer expectations before purchase and what consumers actually get from the product purchased.

Consumers will have expectations about how the product should function (*performance expectation*), these expectations are quality standards that will be compared with the function or quality of the product that consumers actually feel.

The product function that is actually felt by the customer is actually the customer's perception of the quality of the product. In evaluating the quality of a product or service, consumers will assess various attributes (dimensions of service quality and dimensions of product quality).

Customer Loyalty

Loyalty is the formation of attitudes and behavior patterns of a consumer towards the purchase and use of products as a result of their previous experiences (Griffin, 2009: 75). Satisfaction felt by customers has behavioral consequences in the form of *complaints* and customer loyalty, so that if the organization or company can pay attention to all things that can shape customer satisfaction, the satisfaction felt by the customer as a whole will be formed.

Where overall satisfaction is defined as an affective statement about emotional reactions to the experience of a product or service that is influenced by customer satisfaction with the product and by the information used to select the product. Customer or customer satisfaction is a basic life of every company, so customer satisfaction is an important element in improving marketing performance in a company or organization.

Oliver as quoted by Kotler and Keller (2013: 138) defines loyalty as a deeply held commitment to buy or support back preferred products or services in the future even though

the influence of the situation and marketing efforts has the potential to cause customers to switch.

According to Botheyang, quoted from Vannesa (2012: 71) provides a definition of customer loyalty as customers who are satisfied with the company's products or services and they become enthusiastic *word of mouth advertisers* , loyalty is not only to products and service companies, but also the entire product portfolio and company. service as part of the lifespan of brand loyalty forever. A loyal customer is a consumer who always buys back from the same provider or service provider and maintains a positive attitude towards the service provider in the future (Griffin, 2009; 4) .
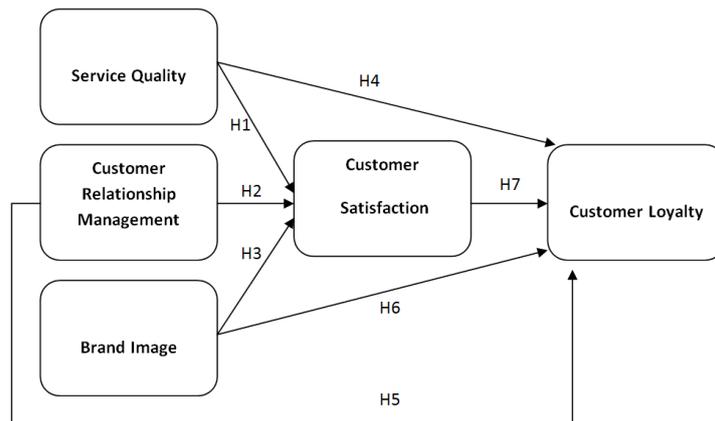

Figure 1. Conceptual Framework

H1: Service Quality has an effect on customer satisfaction
H2: Customer Relationship Management affects customer satisfaction
H3: Brand Image has an effect on customer satisfaction
H4: Service Quality affects customer loyalty
H5: Customer Relationship Management affects customer loyalty
H6: Brand Image affects customer loyalty
H7: Customer Satisfaction affects customer loyalty

RESEARCH METHODS

This research is categorized as *Explanatory* or *Confirmatory Research,* namely research that highlights the causal relationship between variables using a framework of thought first, then formulated through hypothesis testing. The approach used is a survey approach using a questionnaire conducted in the odd 2017/2018 academic year for students of the Telkom Jakarta Academy.

The paradigm that underlies the research is in the form of a path paradigm, with a statistical   opportunity   analysis   technique   called *Structural   Equation Modeling* (SEM). According to Heir *et al* (2008: 67) using SEM allows the analysis of a series of relationships simultaneously so as to provide statistical efficiency.

The population in this study were all active students of the Telkom Jakarta Academy for the 2017/2018 academic year as many as 506 people. Consists of active odd semester students, because the Telkom Jakarta Academy only opens admissions every odd semester. So that the 3 batches in question have represented all active students.

In this sampling technique, the writer uses *Probability Sampling*. According to Sugiyono (2014), *Probability Sampling* allows members of the population to get the same opportunity to be selected as a sample. Strengthened by the consideration that individual data from the population has been obtained, the sampling method used is Stratified Random Sampling.

Based on the data analysis method to be used, namely the *Structural Equation Model* (SEM), an ideal and representative sample size is needed. According to (Hair in Ferdinand, 2011). recommend a ratio of sample size to number of parameters of 5: 1. This means that if the model contains 30 parameters, the minimum sample size required is 150 samples. And in this study, the number of samples used was 5 times the number of research indicators, amounting to 61 statements, so that the desired sample size was 305 respondents.

RESULIT AND DISCUSSION
Validity and Reliability test

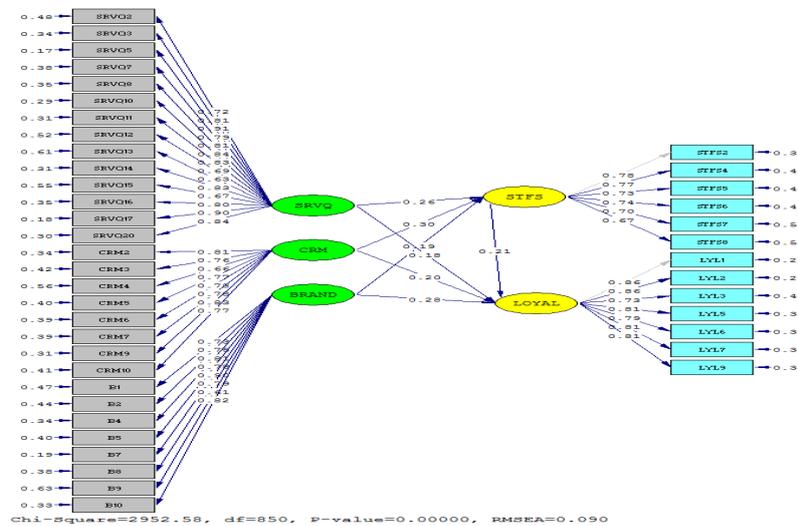**Figure 2. Standardized Coefficient Estimation Results**

Based on the figure above, all indicators have a loading factor value (λ) greater than 0.5, so it can be concluded that all indicators are valid. The SRVQ dimension has a CR value> 0.7 and a VE value> 0.5, with a p-value of 0.0000.

So it can be concluded that the model is not yet fit because it has a p-value lower than 0.05. Based on the picture above, all indicators have a loading factor value (λ) greater than 0.5 so it can be concluded that all indicators are valid. The BRAND dimension has a CR value> 0.7 and a VE value> 0.5, with a p-value of 0.0000. So it can be concluded that the model is not yet fit because it has a p-value lower than 0.05.

Based on the table above, all indicators have a loading factor value (λ) greater than 0.5, so it can be concluded that all indicators are valid. The CRM dimension has a CR value> 0.7 and a VE value> 0.5, with a p-value of 0.0000. So it can be concluded that the model is not yet fit because it has a p-value lower than 0.05

Based on the table above, all STFS indicators after dropping or adjustments have a loading factor value (λ) greater than 0.5, so it can be concluded that all indicators are

valid. So that information is obtained from the table above that the STFS dimension has a CR value> 0.7 and a VE value> 0.5, with a p-value of 0.07930.

So it can be concluded that the model is fit because it has a CR value> 0.7 and a VE value> 0.5 and the p-value is greater than 0.05.

Based on the table above, all indicators have a loading factor value (λ) greater than 0.5, so it can be concluded that all indicators are valid.

The SRVQ dimension has a CR value> 0.7 and a VE value> 0.5, with a p-value of 0.0000. So it can be concluded that the model is fit because it has a p-value greater than 0.05.

Structural Model Fit Test

The following is an estimation of the overwall model based on the standardized coefficient and t-statistical value.
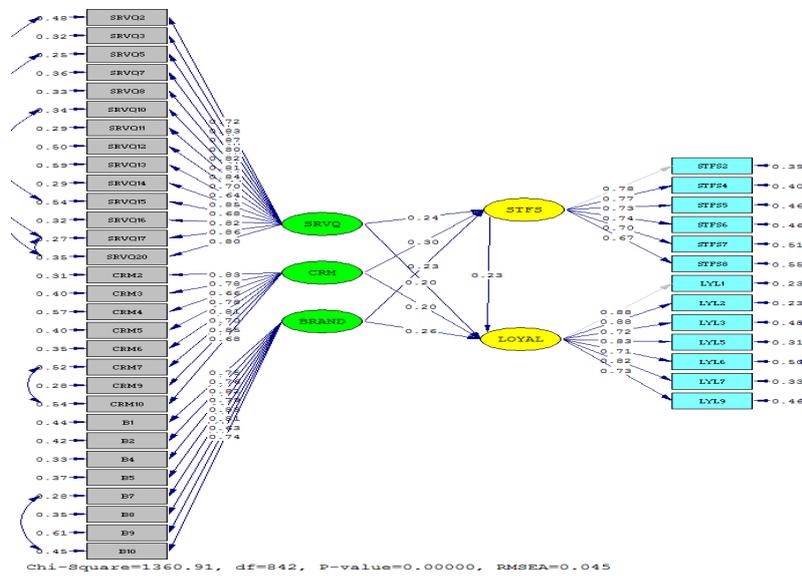

Chi-Square=1360.91, df=842, P-value=0.00000, RMSEA=0.045

Figure 3. Standardized Coefficient Estimation Result

Chi-Square=1360.91, df=842, P-value=0.00000, RMSEA=0.045
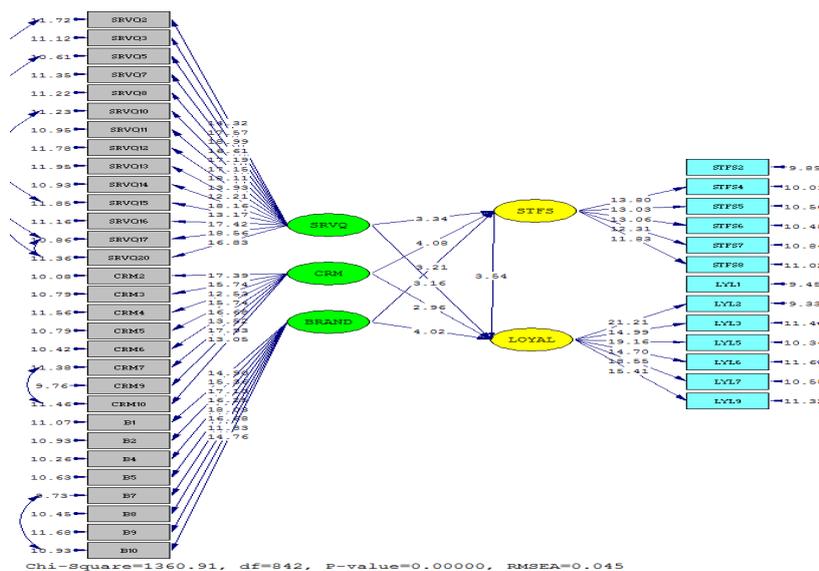
Figure 4. Estimated t-value

Table 1. Fit Indices Model

Goodness of fit index	Cut-off value	Result	Conclusion
AGFI	$\geq 0,9$	0,81	Marjinal Fit
CFI	$> 0,90$	0,99	Good Fit
GFI	$> 0,90$	0,83	Marjinal Fit
IFI	$> 0,90$	0,99	Good Fit
NFI	$> 0,90$	0,97	Good Fit
Probability	$\geq 0,05$	0,0000	Bad Fit
RMSEA	$< 0,08$	0,045	Good Fit

Based on the above table after modification, 2 criteria indicates a Marginal fit that is AGFI and GFI, while the 4 criteria showed Good fit and 1 the criteria indicate. Based on the above table after the modification, two criteria menunjukka n Marginal fit is AGFI and GFI, while four criteria show Good fit and 1 Bad fit that criteria showing Probability. So that based on the picture above, the structural equation for the model is obtained as follows:

$$STFS = 0.24*SRVQ + 0.30*CRM + 0.23*BRAND, \quad Errorvar.= 0.58 \; , \; \mathbf{R^2 = 0.42}$$
$$\qquad (0.072) \qquad (0.073) \qquad (0.071) \qquad (0.079)$$
$$\qquad 3.34 \qquad\quad 4.08 \qquad\quad 3.21 \qquad\quad 7.30$$
$$LYL = 0.23*STFS + 0.20*SRVQ + 0.20*CRM + 0.26*BRAND, \; Errorvar.= 0.47 \; ,$$
$$\mathbf{R^2 = 0.53}$$
$$(0.065) \qquad (0.064) \qquad (0.066) \qquad (0.064) \qquad (0.053)$$
$$3.54 \qquad\quad 3.16 \qquad\quad 2.96 \qquad\quad 4.02 \qquad\quad 8.79$$

Based on the above equation, several interpretations can be obtained which can be translated as follows:

1. The SRVQ variable path coefficient on STFS is 0.24. The direction is positive, meaning that if the SRVQ increases by 1 unit, STFS will increase by 0.24, and vice versa.
2. The path coefficient of the CRM variable to STFS is 0.30, the direction is positive, meaning that if CRM increases by 1 unit, STFS will increase by 0.30, and vice versa.
3. The path coefficient of the BRAND variable to STFS is 0.23, the direction is positive, meaning that if BRAND increases by 1 unit, STFS will increase by 0.23, and vice versa.
4. The path coefficient of the STFS variable to LOYAL is 0.23, the direction is positive, meaning that if STFS increases by 1 unit, LOYAL will increase by 0.23, and vice versa.
5. The path coefficient of the SRVQ variable to LOYAL is 0.20, the direction is positive, meaning that if SRVQ increases by 1 unit, LOYAL will increase by 0.20 and vice versa.

6. The path coefficient of the CRM variable to LOYAL is 0.20, the direction is positive, meaning that if CRM increases by 1 unit, LOYAL will increase by 0.20 and vice versa.
7. The el- BRAND variable path coefficient to LOYAL is 0.064, the direction is positive, meaning that if BRAND increases by 1 unit, LOYAL will increase by 0.064 and vice versa .

Prediction Test Model R²

From the estimation of the regression equation at the LISREL output, the error variance and R² values of each path model can be immediately generated . And the interpretation of this equation is::

$STFS = 0.24*SRVQ + 0.30*CRM + 0.23*BRAND$,   Errorvar.$= 0.58$, $\mathbf{R^2 = 0.42}$

For the first regression equation that places the Customer Satisfaction variable as the dependent variable, it is known that the value of $\mathbf{R^2 = 0.42,}$ **which** means that 42% of the variation for the Customer Satisfaction variable (STFS) as the dependent variable can be explained by the Service Quality (SRVQ) *variable* , *Customer Relationship Marketing* and also Brand Image, and 58% variation from other variables.

$LYL = 0.23*STFS + 0.20*SRVQ + 0.20*CRM + 0.26*BRAND$, Errorvar.$= 0.47$,

$\mathbf{R^2 = 0.53}$

Whereas for the second regression equation that places the Customer Loyalty variable as the dependent variable with a determinant coefficient value of $\mathbf{R^2 = 0.53,}$ it means that 53% of the variation for the Customer Loyalty variable can be explained by the Customer Satisfaction, Service Quality, Customer Relationship Marketing and Institutional Brand Image variables. , with another 47% variation from unexplained or other variables.

Hypotesis Test

The next step is to do a partial test. This is done to test whether each independent variable has a significant effect on the dependent variable, then the hypothesis is tested as follows:

The hypothesis for each test is as follows:

Ho : the independent variable does not have a significant positive effect on the dependent variable
Ha : the independent variable has a significant positive effect on the dependent variable

Test criteria:

- Accept Ha if t count ≥ 1.96 0
- Accept Ho if t <1.96 0.

The following is a hypothesis test for each variable:

1. In the SRVQ relationship with STFS, the t value of the SRVQ variable is 3.34. Because the calculated t value is greater than 1.96, then Ha is accepted, meaning that SRVQ has a significant effect on STFS.

2. In the relationship between CRM and STFS, the t value of the CRM variable is 4.08. Because the t value is greater than 1.96, then Ha is accepted, meaning that CRM has a significant effect on STFS.
3. In the relationship between B RAND and STFS, the t value of the BRAND variable is 3.21 because the t value is greater than 1.96, then Ha is accepted, meaning that BRAND has a significant effect on STFS.
4. In the SRVQ relationship with LOYAL, the t value of the SRVQ variable is 3.16. Because the t value is greater than 1.96, then Ha is accepted, meaning that SRVQ has a significant effect on LOYAL.
5. In the relationship between CRM and LOYAL, the t value of the CRM variable is 2.96. Because the t value is greater than 1.96, Ha is accepted, meaning that CRM has a significant effect on LOYAL.
6. In the relationship between BRAND and LOYAL, the t value of the BRAND variable is 8.79. Because the calculated t value is greater than 1.96, then Ha is accepted, meaning that BRAND has a significant effect on LOYAL.
7. In the relationship between STFS and LOYAL, the t value of the STFS variable is 3.54. Because the t value is greater than 1.96, then Ha is accepted, meaning that STFS has a significant effect on LOYAL

After knowing the results of the above measurements, it can be strengthened by previous research, namely:

The Loyalty Model of Private University Student (Leonard, 2014) which concludes that there is a significant influence between Service Quality and Higher Education Brand Image on Customer Satisfaction and Loyalty.

Influence of customer relationship marketing, service quality and corporate image of customer retention Graha Candi golf semarang (with satisfaction as an intervening variable) (Anggraini, 2016) which states that the three variables include CRM, Service Quality and Company Image have a significant effect on repurchase as part from customer loyalty through customer satisfaction.

CONCLUSION AND SUGESTION

Based on the results of the research that has been done, it can be concluded the following:

1. The results of the study found that Service Quality has a positive and significant effect on Customer Satisfaction
2. The results of the study found that *Customer Relationship Marketing* has a positive and significant effect on Customer Satisfaction
3. The research results found that *Brand Image* has a positive and significant effect on Customer Satisfaction
4. The results of the study found that *Service Quality* has a positive and significant effect on Customer Loyalty
5. The results of the study found that *Customer Relationship Marketing* has a positive and significant effect on Customer Loyalty
6. The results of the study found that *Brand Image* has a positive and significant effect on Customer Loyalty
7. The results of the study found that customer satisfaction has a positive and significant effect on customer loyalty.

Based on the research results and conclusions, the suggestions that the author can convey to the Telkom Jakarta Academy are as follows:

1. The Sisfo sector through the academic field can begin to map complaints about services and student information systems quickly and accurately, as well as with friendly and polite services.
2. Infrastructure improvements related to digitizing business processes must be faster and more precise, considering that the area of expertise of the Telkom Jakarta Academy is ICT, so it seems the opposite if the main complaints from students are still about information systems and internet networks around the campus.
3. The level of customer satisfaction towards lecturers and TPA received a low enough appreciation so that evaluation and quality improvement are needed. Thus, it is hoped that it will be able to grow the level of satisfaction and create harmonious collaboration between the academic community.
4. The determination of the increase in the cost of education will increase the risk of turning away for students so that it needs to be considered again in determining the cost of tuition and it is necessary to study the threshold of the economic capacity of students and their surrounding competitors.

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