The Influence of Customer Relationship Management Influencing Factors on Student Loyalty using Student Satisfaction as Mediation Variable

Dewi Murtiningsih, Wendi Usino and Joko Christian Chandra

Universitas Budi Luhur, Indonesia

Abstract: The purpose of this research is to find out the influence of commitment, communication and service quality on student loyalty; to find out the influence of commitment, communication, and service quality on student satisfaction; to find out the influence of student satisfaction on student loyalty; to find out the influence of satisfaction in mediating the influence of commitment, communication and service quality on student loyalty. This research is an explanatory research. The number of sample used in this research is 76 students of Special Diploma 3. Questionnaire is used as a tool to collect data from respondent, which validity and reliability will be tested. Data is analyzed using smart PLS. Research result shows that commitment does not influence student loyalty, communication does not influence student loyalty, service quality influences student loyalty, commitment influences student satisfaction, communication influences student satisfaction, service quality influences student satisfaction, student satisfaction influences loyalty, student satisfaction fully mediates the influence of commitment on loyalty, student satisfaction fully mediates the influence of communication on loyalty, student satisfaction partly mediates the influence of service quality on loyalty.

1 INTRODUCTION

The ability of university in applying University Tri Dharma (three basic value: Education, Research and Community Service) effectively, usefully and consistently together with its other supremacies (facilities and infrastructure, accreditation, qualified teaching staff, foundation management, department, achievement, working network and others) will become the main asset to gain interest from students. Therefore, private universities will show their excellences so community can have their own point of view of the university image.

Maintaining good relationship with customer is one of the ways for company to survive in the condition and to maintain the existing customer. Therefore, company must be able to be aware of and fulfill what is wanted or what is needed by the customer quickly and accurately. This must be done so that company can get maximum sales results, loyal customers, and also new customers.

Customer Relationship Management (CRM) is one of company's strategies to maintain their customers. CRM is applied to win customer's favor by allocating all of the existing resources in the company in order to achieve customer satisfaction. Customer satisfaction plays a very important role in highly competitive industry. It is because there is a significant difference in the loyalty of customers who are just satisfied and very satisfied or pleased (Lovelock & Wright, 2007). Generally company wants the product they produce to be able to give satisfaction for the customers in order to get loyal customers which can be maintained for a long time.

According to the previous research conducted by Imasari and Nursalim (2011), the result shows that there is a significant relation between CRM variable and customer loyalty. The research points that CRM is able to create positive company image in the customer's mind. CRM strategy which is applied by company can determine the loyalty level of customers who are satisfied by the company performance.

Other previous research conducted by Victor *et al* (2015), shows that there is significant relation between CRM variable and customer satisfaction. CRM strategy which is applied by the bank is able to maintain the good relationship with its customers. The strategy is by providing satisfying service that fulfill the customer's expectation.

In the research conducted by Ersi and Samuel (2014), the result shows that customer satisfaction significantly influences customer loyalty. The researchers also explained that when satisfaction is formed, customer loyalty will follow, because the customer's expectation has been fulfilled.

Meanwhile, the result of the research conducted by Padmavathy, Balaji and Sivakumar (2012) shows that CRM significantly and positively influences consumer loyalty. The researchers explained that customer loyalty is the result of CRM which is successfully applied by company, that a good CRM effort will be able to create a strong bond between company and customer, and increase customer loyalty. This is in contrary with the research result of Smith and Chang (2010) which shows that there is no significant relation between CRM and customer satisfaction and loyalty.

2 LITERATURE REVIEW

2.1 Customer Relationship Management

Chan (2003) defined Relationship Marketing as close familiarization of every guest in order to create two-way communication by managing a mutually beneficial relationship between consumer and company. While according to Brown and Rigby, Reincheld, Dawson (Gaffar, 2007), CRM is a process to gain, maintain and develop beneficial service, and needs a clear focus on a service attribute that can generate value for customer that will lead to their loyalty. In conclusion, *customer relationship manajemen* (CRM) is not a concept or project, but a business strategy which purpose is to comprehend, anticipate and manage the needs of existing and potential customer of a organization. Robinette in Febrianingtyas (2013) explained that there are four factors which influence CRM; those are mutual benefit, commitment, truth and communication.

2.2 Customer Satisfaction

Consumer satisfaction is an important role in marketing concept and consumer research. It has been a public opinion that if consumer is satisfied of a certain product or brand, they tend to keep buying and using it, and also telling other people of their enjoyable experience in using the product. If they are not satisfied, they tend to shift to other place, and even tell other consumers (Olson and Peter, 2000). Satisfaction is someone's happiness or disappointment which occurs because they compare perceived performance (of a product or result) with their expectation (Kotler and Keller, 2009). Customer's review of product performance depends on many factors, especially the nature of customer loyalty of a brand which often create a more enjoyable perception of a product from brand that they already consider positive.

2.3 Customer Loyalty

Customer loyalty is a manifestation and continuation of customer satisfaction in using facility or service provide by a company, to be their regular customers. Therefore, the core component to keep the life sustainability of a company for a long time is customer loyalty (Aaydin and Ozer, 2005). Griffin (2005) states that a loyal customer characteristics are: repeating purchase regularly, buying between lines product and service, showing invulnerability of competitor promotion, giving recommendation to others. Aydin and Ozer (2004) state that the key for a long term company life sustainability is customer loyalty. Kotler (1997) states that customer loyalty is formed by customer's positive review. While Neal (1998) states that factors which can create customer's choice and loyalty is value. Thus, from those two researchers statements above, it can be concluded that company which pays attention on value expected by customer will gain their loyalty in return.

3 METHODOLOGY

This research is an explanatory research. Sample of this research is 76 students of Special Diploma 3 Budi Luhur University Jakarta, academic year 2016/2017 and 2017/2018. Questionnaire is used in data and information collection process. To measure each item of the surveys we used a Likert scale of 5 points. Data collection techniques use questionnaire that has been tested for validity and reliability. The data analysis technique used to answer hypothesis is *Smart PLS*.
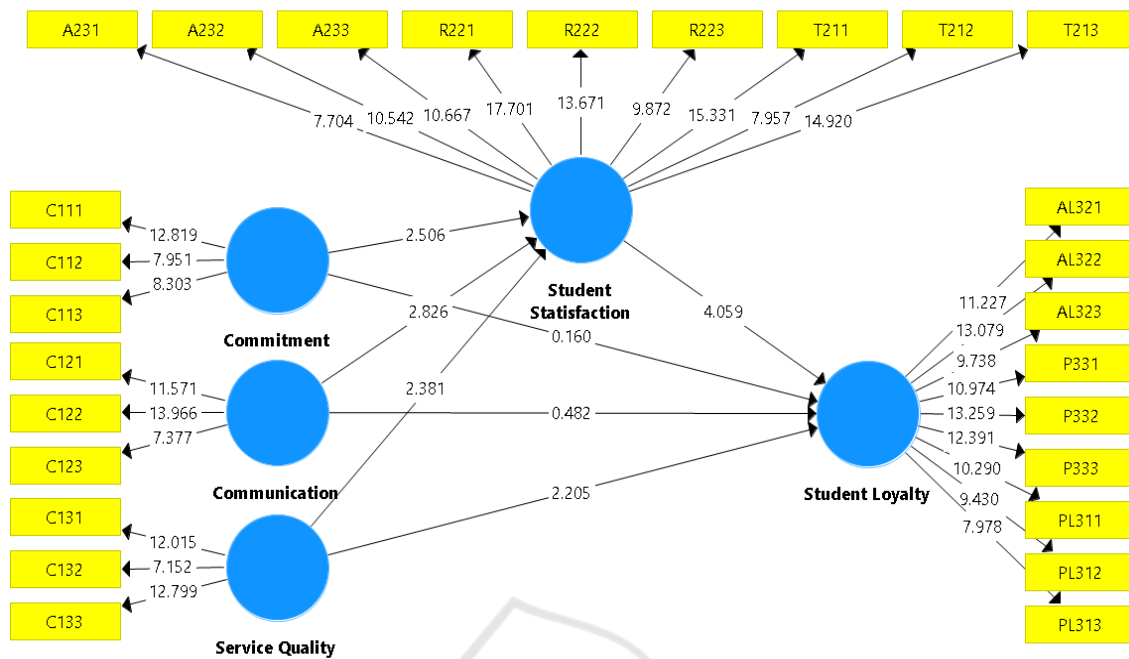
Picture 4.2: Result of PLS *Algorithm Bootstrapp Structural Model Output*.

Table 4.1 *Path Coefficients (t-Value) Direct*.

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Remarks
Commitment -> Student Loyalty	0.019	0.040	0.119	0.160	0.874	Insignificant
Commitment -> Student Statisfaction	0.247	0.233	0.099	2.506	0.014	Insignificant
Communication -> Student Loyalty	0.070	0.098	0.145	0.482	0.631	Significant
Communication -> Student Statisfaction	0.332	0.322	0.118	2.826	0.006	Significant
Service Quality -> Student Loyalty	0.232	0.229	0.105	2.205	0.031	Significant
Service Quality -> Student Statisfaction	0.285	0.316	0.120	2.381	0.020	Significant
Student Statisfaction -> Student Loyalty	0.533	0.508	0.131	4.059	0.000	Significant

Source : Processed Data 2019

4 RESULT AND DISCUSSION

The structural model of this research can be seen on Picture 4.1 above.

To measure the significance of prediction model in structural model testing, it can be seen from the t-statistic value between independent and dependent variable in Path Coefficient table 4.1 on PLS Output.

In PLS, the statistically test of each hypothesized relation is done in simulation. In this case, by using bootstrap method on the sample. The bootstrap test is also intended to minimize research data abnormality problem. The bootstrapping test result of PLS analysis as follows:

Commitment Influences Loyalty
Hypothesis 1a test result shows that the relation of commitment variable and loyalty indicates 0.874 path coefficient value with t value 0.160. This value is smaller than t table (1.960). The result means that commitment does not positively and significantly influence loyalty, which mean it does not correspond

with hypothesis 1a that states commitment influences loyalty. Therefore, hypothesis 1a is rejected. This research is not corresponding with the research conducted by Guenzi and Pelloni (2004), and Supar and Suasana (2017) which state that customer relationship management influences loyalty.

Communication Influences Loyalty

Hypothesis 1b test result shows that the relation of communication variable and loyalty indicates 0.631 path coefficient value with t value 0.482. This value is smaller than t table (1.960). It means that communication does not positively and significantly influences loyalty, which mean it does not correspond with hypothesis 1b that states communication influences loyalty. Therefore, hypothesis 1b is rejected. This research is not corresponding with the research conducted by Guenzi and Pelloni (2004), and Supar and Suasana (2017) which state that customer relationship management influences loyalty, and also Chan's (2003) which states that close familiarization of every guest creates two-way communication by managing a mutually beneficial relation between consumer and company.

Service Quality Influences Loyalty

Hypothesis 1c test result shows that the relation of service quality variable indicates 0.031 path coefficient variable with t value 2.205. This value is bigger than t table (1.960). It means that service quality positively and significantly influences loyalty, which mean it corresponds with hypothesis 1c. Therefore, hypothesis 1c is accepted. This research is in line with the research conducted by Guenzi and Pelloni (2004), and Supar and Suasana (2017) which state that customer relationship management influences loyalty, and also Lupiyoadi's (2013) which states that the important factor of customer relationship management application is service quality that can be seen from customer satisfaction achievement; service quality of a company is the privilege given by company to the customer to fulfill their needs and wishes.

Commitment Influences Satisfaction

Hypothesis 2a test result shows that the relation of commitment variable and satisfaction indicates 0.014 path coefficient value with t value 2.506. This value is bigger than t table (1.960). It means that commitment positively and significantly influences satisfaction, which mean it corresponds with hypothesis 2a that states commitment influences satisfaction. Therefore, hypothesis 2a is accepted. This research is in line with the research conducted by Victor et al., (2015) and Padmavathy, Balaji and Sivakumar (2012) which show that customer relationship management significantly influences consumer satisfaction.

Communication Influences Satisfaction

Hypothesis 2b test result shows that the relation of communication variable on satisfaction indicates 0.006 path coefficient value with t value 2.826. This value is bigger than t table (1.960). It means that communication positively and significantly influences satisfaction, which mean it corresponds with hypothesis 2b that states communication influences satisfaction. Therefore, hypothesis 2b is accepted. This research is in line with the research conducted by Victor et al., (2015) and Padmavathy, Balaji and Sivakumar (2012) which show that customer relationship management significantly influences consumer satisfaction.

Service Quality Influences Satisfaction

Hypothesis 2c test result shows that the relation of service quality variable on satisfaction indicates 0.020 path coefficient value with t value 2.381. This value is bigger than t table (1.960). It means that service quality positively and significantly influences satisfaction, which mean it corresponds with hypothesis 2c that states service quality influences satisfaction. Therefore, hypothesis 2c is accepted. This research is in line with the research conducted by Victor et al., (2015) and Padmavathy, Balaji and Sivakumar (2012) which shows that customer relationship management significantly influences consumer satisfaction, and Lupiyoadi's (2013) which states that the important factor of customer relationship management application is service quality that can be seen from customer satisfaction achievement.

Satisfaction Influences Loyalty

Hypothesis 3 test result shows that the relation of satisfaction variable on loyalty indicates 0.000 path coefficient value with t value 4.059. This value is bigger than t table (1.960). It means that satisfaction positively and significantly influences loyalty, which mean it correspond with hypothesis 3 that states satisfaction influences loyalty. Therefore, hypothesis 3 is accepted. This research is in line with the research conducted by Ersi and Samuel (2014), and Iriandi (2005) which states that customer satisfaction significantly influences customer loyalty.

Table 4.2: *Sobel Test.*

Path	T Statistic (>1.99)	P Values (<0.05)	Remarks
Commitment -> Student Statisfaction -> Student Loyalty	2.132	0.033	Significant
Communication -> Student Statisfaction -> Student Loyalty	2.319	0.020	Significant
Service Quality -> Student Statisfaction -> Student Loyalty	2.053	0.040	Significant

Source: SmartPLS output

Satisfaction Mediates the Influence of Customer Relationship Management on Loyalty

The purpose of hypothesis 4 testing is to examine the indirect influence of customer relationship management variable on loyalty through satisfaction. The mediation influence test is conducted using Sobel formula. The test on the mediation influence between intervening variable and dependent variable is conducted using calculation of Sobel formula. The result of mediation test using Sobel test to find out whether satisfaction truly mediates or not, can be seen on Table 4.2 above :

Based on Table 4.2 above, it can be concluded that satisfaction mediates the influence of commitment on loyalty and it is shown by 0.033 P value and 2.132 t statistic (these numbers are above the value of T table 1.99), which means significant. Meanwhile, the role of satisfaction variable as mediation variable can be seen from the direct influence of commitment on loyalty which is insignificant. It is proven by the P value 0.874. This result proves that satisfaction plays role as full mediation variable because commitment does not directly influence loyalty, while satisfaction variable indirectly and significantly mediates the influence of commitment on loyalty.

In the testing of the role of satisfaction in mediating the influence of communication on loyalty, it can be seen that the direct influence of communication on loyalty is insignificant because the P value (0.631) is bigger than P table (0.05). It means that the direct influence is insignificant. Meanwhile, the indirect influence of communication on loyalty through satisfaction is significant because P value (0.020) is smaller than P table (2.319). This research result shows that satisfaction plays role as full mediation variable, because in direct influence communication does not influence loyalty, while through mediation role the influence is significant.

The role of satisfaction in mediating the influence of service quality on loyalty is significant, with P value 0.040 and T table 2.053. In the testing of direct influence of service quality on loyalty, the influence is significant. This result means that satisfaction plays role as partial mediation variable, because in the direct influence, service quality significantly influences loyalty, while in indirect influence, satisfaction significantly mediates the influence of service quality on loyalty.

From the testing above, it can be concluded that satisfaction plays role as variable that mediates the influence of customer relationship management factors on loyalty. Therefore, hypothesis 4 is accepted. From the hypothesis test using Sobel formula, it can be seen that satisfaction plays role as mediation variable. This research result corresponds with the research conducted by Caruana (2002), Iskandar (2015) and Iriandi (2015).

5 CONCLUSIONS

Based on the previous analysis and discussion, therefore it can be concluded that: The first hypothesis test result shows that there is direct and positive relation between commitment and loyalty, communication and loyalty, and service quality and loyalty. The second hypothesis test result shows that there is direct and positive relation between commitment's influence on satisfaction, communication's influence on satisfaction, and service quality's influence on satisfaction. The third hypothesis test result shows that there is a direct and positive relation between satisfaction and loyalty. The fourth hypothesis test result shows that satisfaction mediates the influence of customer relationship management on loyalty.

Suggestion for further research is to conduct pre-sampling questionnaire test since there are still dual indicators (one indicator that can measure two variables) in this research. The source of sample in this research is taken only from one institution, therefore for further research, it is suggested to use more samples by expanding the number of institutions which used as research object. This research is conducted on service institution, specifically university. Further research needs to conduct such research on different population, for instance service company, trading and manufacturing sector or other financial institutions, except banking institution. The analysis tool used in this research is SEM-PLS, further research is suggested to use other analysis tool, such as SEM-AMOS, SPSS and others.

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REFERENCES

Aydin, Serkan, and Ozer, Gokhan. 2005. The Analysis of Antecedents of Customer Loyalty in the Turkish Mobile Telecommunication Market. *European Journal of Marketing,* 39(7/8):910-925.

Aydin, Serkan, and Ozer, Gokhan. 2005. National Customer Satisfaction Indices : An Implementation in the Turkish Mobile Telephone Market. *Marketing Intellegence & Planning*, 23(5):486-504.

Aydin, Serkan, and Ozer, Gokhan. 2005. Customer Loyalty and the Effect of Switching Costs as a Moderator Variable : A Case in the Turkish Mobile Phone Market. *Marketing Intellegence & Planning*, 23(1):89-103.

Caruana, 2002. Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, Vol. 36 Iss: 7/8, pp.811 – 828.

Chan, Syafruddin.2003. *Relationship Marketing : Inovasi pemasaran yang menbuat pelanggan Bertekuk lutut.* Jakarta : Pt. Granmedia Pustaka Utama.

Ersi, Dzikiryati Yuni dan Semuel, Hatane. 2014. Analysis CRM, kepuasan pelanggan dan loyalitas produk UKM berbasis bahan baku terigu di Jawa Timur. *Jurnal Manajemen Pemasaran*, 8(1): 1 8. Diakses pada tanggal 9 April 2015 dari http://jurnalpemasaran. petra.ac.id/index.php/ mar/article/view/19093/18714.

Febrianingtyas, Media., Zainul Arifin., Dahlan Fanani. 2014. Pengaruh Customer Relationship Management Terhadap Kepuasan Dan Loyalitas (Survey pada Nasabah Bank Jawa Timur Cabang Gedung Inbis Malang). *Jurnal Administrasi Bisnis* (JAB) Vol. 9 No. 2.

Gaffar, V. 2007. *CRM dan MPR Hotel (Customer Relationship Management and Marketing Public Relation)*. Alfabeta. Bandung.

Guenzi, Paolo; Pelloni, Ottavia. 2004. The impact of interpersonal relationships on customer satisfaction and loyalty to the service provider. *Department of marketing*, Scuola di Direzione Aziendale, Universita Commerciale Luigi Bocconi, Milano, Italy.

Griffin, Jill. 2005. *Customer Loyalty: Menumbuhkan dan Mempertahankan Kesetiaan Pelanggan*. Jakarta : Erlangga.

Imasari, K. dan Nursalin, K. K. 2011. Pengaruh Customer Relationship Managementterhadap Loyalitas Pelanggan pada PT BCA Tbk. *Jurnal Fakultas Ekonomi Universitas Kristen Maranatha*. Vol 10 (03), 183-192.

Iriandini, A. P. 2015. Pengaruh Customer Relationship Management terhadap Kepuasan dan Loyalitas Pelanggan. Jurnal Administrasi Bisnis, Vol 23 (2), 1-8.

Iskandar, Priasmoro 2015. Pengaruh Kualitas Pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Sebagai Variabel Intervening pada Pengguna Jasa Transportasi PT. Tara Megah Muliatama (Taksi Gemah Ripah) di Kota Bandung. *e-Proceeding of Management*. 2 (3), 3953-3960.

Kotler, Philip. 1997. *Dasar-Dasar Pemasaran – Principles of Marketing*. Edisi VII. Jakarta.

Kotler , Philip and Kevin Lane Keller. 2009. *Management pemasaran.* Edisi 13 jilid 1.Dialihbahasakan oleh Bob Sabran, MM. Jakarta: Erlangga.

Lovelock, Christopher H. dan Wright, Lauren K. 2007. *Manajemen Pemasaran Jasa*. Dialihbahasakan oleh Agus Widyantoro. Jakarta: PT Indeks.

Lupiyoadi, Rambat. 2013. *Manajemen Pemasaran Jasa*. Jakarta: Salemba Empat.

Neal, William D. 1998. Satisfaction is Nice, but Value Drives Loyalty, *Journal of Marketing Research.*

Olson, Jerry C & Peter, J. Paul. 1999. *Consumer Behavior, Perilakukonsumen dan Strategi Pemasaran.* Jilid kedua, Edisi Keempat. Terjemahan Damos Sihombing dan Peter Remy Yossi Pasla. Jakarta: Erlangga.

Padmavathy, Balaji, and Sivakumar. 2012. Measuring Effectiveness Of Customer Relationship management In Indian Retail Banks. *International Journal of Bank Marketing*, 30 (4), 246-266.

Smith, M and Chang. 2010. Improving customer outcomes through the implementation of customer relationship management Evidence from Taiwan. *Asian Review of Accounting*, 18(3), 260-285.

Supar, Dewa Ayu Wina Ariyunita dan Suasana, I Gusti Agung Ketut Gede. 2012. Peran Kepuasan Pelanggan Dalam Memediasi Pengaruh Customer Relationship Management Terhadap Loyalitas Pelanggan. *E-Jurnal Manajemen Unud*, Vol. 6, No. 3, 2017: 1534-1563. ISSN : 2302-8912.

Victor, Christian, Rotinsulu J.P, Jacky S.B. Sumarauw. 2015. Pengaruh Customer Relationship Management dan Kepercayaan terhadap Kepuasan serta Dampaknya terhadap Loyalitas Konsumen. *Jurnal EMBA* Universitas Sam Ratulangi Manado.Vol 3 (2), 671-683.