Involvement Willingness as Mediation Variable of The Influence of Customer Relationship Management on Social Customer Relationship Management

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Abstract—The purpose of this research is to find out the influence of customer relationship management on social customer relationship management; to find out the influence of customer relationship management on involvement willingness; to find out the influence of involvement willingness on social customer relationship management; to find out the role of involvement willingness in mediating the influence of customer relationship management on social customer relationship management. This research is categorized as explanatory research. The population used is bachelor degree students (SI) of five faculties at Budi Luhur University Jakarta who are at least already on their 4th semester. Data are gathered using questionnaire which reliability and validity are tested for 30 respondents. The research sampling is using purposive sampling with 110 respondents in total. Data are analyzed using Structure Equation Modeling (SEM) which consists of measurement model and structural model of Partial Least Square (PLS). Based on the research result, it can be concluded that customer relationship management influences social customer relationship management, customer relationship management influences involvement willingness, involvement willingness influences social customer relationship management, and involvement willingness does not mediate the influence of customer relationship management on social customer relationship management.

Keywords—customer relationship management; involvement willingness; social customer relationship management

I. INTRODUCTION

Reaching the highest number of customer satisfaction is the main goal of marketing. In reality, recently there are a lot of attention given on the concept of cumulative satisfaction which implication is reaching partial satisfaction is inadequate to make loyal customer comes back. If customers are satisfied of the service received during transaction process and also satisfied of the goods or services they get, therefore there is a big possibility that the customer will come back and recommend it to other people. This can come into realization if company, in this case university also uses customer relationship management program. To get loyal member as company’s wish, it has to be supported by strategy to create relationship between company and customer which is known as customer relationship management.

The result of the previous research conducted by Febrika states that customer relationship management activity emphasizes more on the customer’s preference and in a long term can increase customer engagement [1]. Kress et al. conducts research about the role of health promotion without involving CRM activity to test people’s response on the warning of obesity negative impact in United States of America [2]. According to Van Doorn et al. involvement is reflected from customer's behavior toward a company or brand that exceeds common purchase process and influenced by motivation [3].

This research replicates the research conducted by Bompolis and Boutsouki to test the same theory on different research object [4]. The research of Bompolis and Boutsouki is conducted on banking institution while this research is on Private University (PTS), in this case Budi Luhur University Jakarta. The purpose is to find out how to maintain customer in this case students, and to make them loyal to Budi Luhur University Jakarta which later on will be profitable and generate outstanding value for the students.

II. THEORETICAL FRAMEWORK

In the research conducted by Febrika entitled CRM Activity of Pigeon Baby through Social Media by R-Cubed in enhancing Customer Engagement, it mentions three stages in CRM which mostly have been done by Pigeon Baby [1]. The stages are drawing new customer and maintaining the existed. In the process, R-Cubed has been able to increase Pigeon Baby’s customer in commitment stage, where customers are happy and loyal to the company. R-Cubed needs to develop CRM activity that emphasizes on the preferences of Pigeon Baby’s customer. It takes a little bit more time for R-Cubed to bring most of the customers to the engagement stage.

Other previous research is conducted by Ongkowijoyo entitled Customer Relationship Management Strategy done by The Duck King Group through Social Media in Creating Customer Engagement. This research uses qualitative approach with case study method. The research data are descriptive, using analysis method of Miles and Huberman (data reduction, data model, conclusion withdrawal/verification). The result of
this research refers to Customer Knowledge, Relationship Strategy, Communication, and the Individual Value Proposition. The engagement strategy done leads more to the domination of promotion content.

The research of Kim and Kim shows the possibility of consumer’s negative attitude on CRM if they consider that there are manipulative and exploitative activity in the CRM of the commercial brand [5]. Moreover, people without promotional activity like CRM naturally will also react on a stimulant. As example, the research of Kees et al. about the role of health promotion without involving CRM activity to test people’s response on the negative impact of obesity in United Stated of America [2]. CRM research also examines the role of gender and amount of donation as conducted by Moosmayer and Fuljahn; they conclude that CRM activity is more effective to be conducted on females, while on males, the relatively smaller amount of donation is adequate to form consumer positive attitude on CRM activity [6].

III. HYPOTHESIS

Research conducted by Gustafsson, Johnson & Roos and Wang, Lo, Chi & Yang explains that CRM performance is considered to be the main “product” of a successful CRM practice which impacts on involvement prospect, and the existence of Social Web (Media) is considered as vital factor (positive) in the process to get to customer involvement [7,8]. Other result of research conducted by Febrika states that customer relationship management in a long period can increase customer engagement [1]. Based on the previous research, therefore the hypothesis is:

H1: customer relationship management influences social customer relationship management.

Research conducted by Kim and Kim shows the possibility of consumer’s negative attitude on CRM if they consider that there are manipulative and exploitative activity in the CRM of the commercial brand [5]. According to CRM literatures, cumulative satisfaction is defined as “cumulative evaluation based on the total purchase and consumption of goods or services from time to time”. Moreover, it is considered to be able to express more of how effective CRM strategy which purposed for client’s long-term satisfaction and retention is, compared to the transaction-based satisfaction [9,10]. Based on the opinion, therefore the hypothesis is:

H2: customer relationship management influences involvement willingness.

According to Van Doorn et al. involvement is reflected from customer’s behavior toward a company or brand that exceeds common purchase process and influenced by motivation [3]. Based on the theory, therefore the hypothesis is:

H3: involvement willingness influences social customer relationship management.

Customer engagement is declared as cognitive, affective, behavior or social. Cognitive and affective elements combine customer’s experience and sentiment, and social and behavior elements are taken from the recent customer’s participation and potential customer. Meanwhile, CRM is used as tool to make a good relationship with customer, and involvement as the maker of customer experience. Customer engagement strategy is formed by long and continuous interaction of company that persuades customer to involve and participate in events. The formation of customer engagement will influence customer loyalty toward company. Based on the theory, therefore the hypothesis is:

H4: the role of involvement willingness in mediating the influence of customer relationship management on social customer relationship management.

IV. METHOD

This research is categorized as explanatory research. The number of samples used in this research is determined using proportional sampling technique. The number of the research sample is settled for 100 plus 10%, therefore the total number of the sample (n) is 110 students. It is determined with consideration that if there are some invalid samples during the collection of the questionnaire, the rest of it will still be able to fulfill the principle of minimum sample measurement. If it is based on its proportion, therefore the total sample of students of each faculty is described on table 1 below:

<table>
<thead>
<tr>
<th>TABLE I.</th>
<th>TOTAL SAMPLES IN RESEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>Total</td>
</tr>
<tr>
<td>FTI</td>
<td>606</td>
</tr>
<tr>
<td>FIKOM</td>
<td>566</td>
</tr>
<tr>
<td>FEB</td>
<td>484</td>
</tr>
<tr>
<td>FISIP</td>
<td>125</td>
</tr>
<tr>
<td>FT</td>
<td>77</td>
</tr>
<tr>
<td>Total Number</td>
<td>1,858</td>
</tr>
</tbody>
</table>

In this research, data analysis is using Partial Least Square (PLS) approach. The testing on the mediation influence between intervening variable and dependent variable is conducted using the calculation of Sobel formula.

Variable operationalization is needed to find out the type, indicator and scale of the related variables in this research, thus hypothesis test that will be conducted with the help of statistic tools will suit the variables in this research. To test the proposed hypothesis, therefore the variables studied need to be given limitation. Details of variable operationalization can be seen in the table below:

<table>
<thead>
<tr>
<th>TABLE II.</th>
<th>VARIABLE OPERATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Indicator</td>
</tr>
<tr>
<td>Customer Relationship Management</td>
<td>Affective Commitment (AC) Overall Satisfaction (OS) Based Behaviour (BB)</td>
</tr>
<tr>
<td>Involvement Wilingness</td>
<td>Event (E) Interaction (I)</td>
</tr>
</tbody>
</table>

In the formula, JT= Total Number, Ln = Sample.
There are three criteria in the usage of data analysis technique by SmartPLS to grade outer model, they are Convergent Validity, Discriminant Validity and Composite Reliability. Convergent validity of measurement model with reflexive indicator is graded based on the correlation between item score/component score which is estimated by PLS Software. Reflexive individual is said to be high if it correlates more than 0.70 with the measured construct. However, according to Chin (1998) in Ghozali, for the early stage of the expansion of measurement scale, loading value from 0.5 until 0.6 is considered to be adequate. The limit of loading factor uses in this research is 0.60 [11].

According to table 4, it can be seen that some of the loading factor value for every indicator of each latent variable has already have the biggest loading factor value compared to loading factor value if it is connected to other latent variables. It means that every latent variable already has a good discriminant validity in which some already have measurement that highly correlates with other constructs. It means that the value between variables (inner) in coefficient path has already been influenced.

The criteria of validity and reliability can also be seen from the reliability value of a construct and the Average Variance Extracted (AVE) value of each construct. Construct is said to have high reliability if the value is 0.70 and the AVE value is above 0.50. Table 1.5 presents Composite Reliability and AVE value for all variables.

The processed result using SmartPLS can be seen in Table 1.3. Outer Model Value or correlation between construct and variables have fulfilled the convergent validity because the value of indicator already has loading factor value above 0.60. On Table 1.3, it shows that the value of all loading factors is already above 0.60, therefore there are no construct for all variables that is eliminated from the model.

Discriminant validity is done to confirm that every concept of each latent variable is different from other variables. Model is said to have a good discriminant validity if every loading value of every indicator of a latent variable has the biggest loading value compared to other loading value of other latent variables. Below is the test result of discriminant validity:

<table>
<thead>
<tr>
<th>Table 2. Cont.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Customer Relationship Management</td>
<td>Absorption (A)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Dedication (D)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Vigor (V)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interaction (I)</td>
<td></td>
</tr>
</tbody>
</table>

V. RESULT

According to table 4, it can be seen that some of the loading factor value for every indicator of each latent variable has already have the biggest loading factor value compared to loading factor value if it is connected to other latent variables. It means that every latent variable already has a good discriminant validity in which some already have measurement that highly correlates with other constructs. It means that the value between variables (inner) in coefficient path has already been influenced.

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<table>
<thead>
<tr>
<th>Table 4. Cont.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A31</td>
<td>0.954</td>
</tr>
<tr>
<td></td>
<td>D32</td>
<td>0.928</td>
</tr>
<tr>
<td></td>
<td>V33</td>
<td>0.972</td>
</tr>
<tr>
<td></td>
<td>I34</td>
<td>0.979</td>
</tr>
</tbody>
</table>

Based on Table 5, it can be concluded that all constructs have fulfilled reliability criteria. It is shown by its composite reliability value which is above 0.70 and AVE value above 0.50 as the recommended criteria.

Structural model in PLS is evaluated using R2 for dependent variable and coefficient path value for independent variable which significance will be graded based on the t-statistic value of every path. The structural model of this research can be seen in figure 1 below:

![Result of PLS algorithm Bootstrapp.](image-url)
To measure the significance of prediction model in structural model test, the value of t-statistic from independent variable to the dependent variable can be seen in the table Path Coefficient on PLS output below:

### TABLE VI. PATH COEFFICIENTS (T-VALUE)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Original Estimate (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>T-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM→SCRM</td>
<td>0.672</td>
<td>0.608</td>
<td>0.307</td>
<td>2.187</td>
</tr>
<tr>
<td>CRM→IW</td>
<td>0.315</td>
<td>0.316</td>
<td>0.040</td>
<td>7.765</td>
</tr>
<tr>
<td>IW→SCRM</td>
<td>1.534</td>
<td>1.452</td>
<td>0.337</td>
<td>4.538</td>
</tr>
<tr>
<td>CRM→IW→SCRM</td>
<td>-1.025</td>
<td>-0.930</td>
<td>0.484</td>
<td>2.116</td>
</tr>
</tbody>
</table>

#### A. The Influence of Customer Relationship Management on Social Customer Relationship Management

Based on the test result of the first hypothesis, it can be concluded that customer relationship management variable positively influences social customer relationship management. This is in line with the hypothesis which states that customer relationship management influences social customer relationship management, which is developed of research result of Gustafsson, Johnson & Ross, and Febrika. Empirical fact shows that affective commitment, overall satisfaction, based behavior indicators of customer relationship management have been well perceived by respondents [1,7].

#### B. The Influence of Customer Relationship Management on Involvement Willingness

The test result of the second hypothesis shows that customer relationship management also significantly influences involvement willingness. This result is in line with the research result of Kim and Kim, Anderson, Fornell and Lehmann quoted from Garbino & Johnson which states that the purpose of CRM strategy effectiveness is for client’s long term satisfaction and retention [5,10].

#### C. The Influence of Involvement Willingness on Social Customer Relationship Management

The test result of the third hypothesis shows that there is a significant influence of involvement willingness on social customer relationship management. This is in line with the hypothesis which states that involvement willingness influences brand loyalty, which is developed of the research result of Van Doorn et al. [3]. Empirical fact shows that the indicator of event and interaction of involvement willingness variable has been well perceived by respondents. This research is in line with the research conducted by Van Doorn et al. which states that involvement is reflected from customer behavior on a company or brand that is more than common purchase process and influenced by motivation [3].

#### D. The Role of Involvement Willingness Variable in Mediating the Influence of Customer Relationship Management on Social Customer Relationship Management

The test on mediation variable between intervening variable and dependent variable is conducted by using the calculation of Sobel formula. The result of the two tests is summarized as follows:

![Fig. 2. The role of Involvement Willingness (IW) in mediating the influence of Customer Relationship Management (CRM) on Social Customer Relationship Management (SCRM).](image)

The amount of indirect coefficient of customer relationship management (CRM) on social customer relationship management (SCRM) is the multiplication of CRM variable influence on IW variable and IW on SCRM, therefore, the result is:

\[ P_{12} = P_1 X P_2 \]

\[ = (0.314) \times (1.533) \]

\[ = 0.481 \]

The amount of CRM indirect standard error on SCRM is the multiplication of CRM influence on IW and IW on SCRM, therefore the result is:

\[ S_{e12} = \sqrt{(P_1^2S_{e1}^2) + (P_2^2S_{e2}^2) + (S_{e1}^2S_{e2}^2)} \]

\[ = \sqrt{(0.314)^2(0.316)^2+(1.533)^2(1.452)^2+(1.452)^2}. \]

\[ = 0.481 \]

\[ = 5.172194 \]

\[ = 2.274 \]

Thus, the test value of \( t \) is:

\[ t = P_{12}/S_{e12} = 0.481/2.274 = 0.212 \]

The influence of customer relationship management on social customer relationship management with involvement willingness as intervening variable shows insignificantly positive relation. This fourth hypothesis testing is conducted to find out the testing between involvement willingness and social customer relationship management variables first. From the testing, its result of t-statistic is bigger than 1.96, which is 4.538. It means that involvement willingness positively and significantly influences social customer relationship management. Meanwhile, for mediation influence, test is conducted between intervening variable and dependent variable by using the calculation of Sobel formula. From the testing, its result of t value is smaller than 1.96, which is 0.212. It means that the mediation parameter is insignificant. Therefore, the model of indirect influence of customer relationship management variable on social customer relationship management...
management through involvement willingness cannot be accepted. From those two tests, it can be said that a high customer relationship management tends to easily influence social customer relationship management, while through involvement willingness will not influence, therefore it can be said that involvement willingness is not mediation variable considering the value of t Sobel (0.212) is smaller than 1.96. Therefore, the involvement willingness variable in this research does not have role as mediation variable.

VI. CONCLUSION

Based on the analysis and discussion in the previous section, therefore it can be concluded that: The first hypothesis test result shows that there is direct and positive connection between customer relationship management and social customer relationship management; the second hypothesis test result shows that there is direct and positive connection between customer relationship management and involvement willingness; the third hypothesis test result shows that there is direct and positive connection between involvement willingness and social customer relationship management; the fourth hypothesis test result shows that involvement willingness does not mediate the influence of customer relationship management on social customer relationship management.

Suggestions for further research are: a). Next research needs to conduct pre-sampling questionnaire test, because in this research there are still some dual indicators, that is an indicator that can measure two variables; b). The sample in this research originated only from one institution, therefore for the next research it is suggested to add more samples by expanding the number of institutions used as research object; c). This research is conducted at service institution, in this case university. Next research can be conducted in different population, such as service company, commerce and manufacturer sector, or other monetary institution other than banking; d). The analysis tool used in this research is SEM-PLS, therefore for further research it is suggested to process using other analysis tools like SEM_AMOS, SPSS and others.

REFERENCES