

Examining Model of Effect of Adopting Information Technology and Relationship Marketing toward True Loyalty through Multidimensional Commitment

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Abstract

Nowadays, business with very tough competition is increasingly difficult to build loyalty. This phenomenon is the object of this research. The purpose of this study was to test the conceptual model of the effect of the adoption of information technology and relationship marketing to true loyalty (empirical studies of bank customers in Central Java). This is a survey typed research. The data used are primary and secondary data by taking bank customer as the object of research. Data collection instruments in the form of a list of questions (questionnaire) either by open or closed questions. Data analysis methods used include 1) instrument test analysis that is validity and reliability test, 2) descriptive statistical analysis, 3) SEM (Sequential Equation Model) analysis. Theoretical approach used in the research are Behavioral Intention and Attribution Intention. The results showed that: 1) The conceptual model testing of the effect of adoption of information technology and relationship marketing toward true loyalty (repurchase intention and advocacy intention) through customer satisfaction and multidimensional organizational commitment (affective commitment, continuance commitment and normative commitment) using the SEM analysis, shows the model meets the criteria Goodness of fit, 2) Square Multiple Correlation (coefficient of determination) model for Repurchase Intention is of 0.808 which means the Repurchase Intention variability that can be explained by the variability of the adoption of information technology, relationship marketing, customer satisfaction, multidimensional organizational commitment (affective commitment, continuance commitment and normative commitment) is of 80,8% or Advocacy Intention of 0.995 which means Advocacy Intention variability that can be explained by the variability of the adoption of information technology, relationship marketing, customer satisfaction, multidimensional organizational commitment (affective commitment, continuance commitment and normative commitment) is of 99, 5%. This claimed that the conceptual model being tested is valid. 3) Allen and Meyer's theoretical approach (Planned Behavioral Theory), which point on the individual's relationship with organization, strongly supports the concept of marketing to build true loyalty. The main finding of this study is that to build true loyalty, building a strong relationship between the individual and the organization are needed. The relationship can be done by optimizing the use of information technology approach.

Keywords: Adoption of Information Technology, Relationship Marketing, True Loyalty (Repurchase Intention, Advocacy Intention), Multidimensional Commitment

1. Introduction

Bank as a financial institution are in a very high business competition and constant evolution are required. Banks are trying to meet all the customers' needs, with the goal to make customers to have high loyalty to the bank institutions. Loyalty is the crowning achievement of the business. Loyalty is an important base in business development. The Company will benefit greatly from customer loyalty. Loyalty is believed to be caused by customer satisfaction, perceived quality, the perceived value, trust and commitment. Construct that bare often be focus of research on loyalty is the satisfaction (Garbarino and Johnson, 1999). Ways in which banks currently use are; 1) Information Technology (IT) development, banks consider the adoption of Information Technology provides effectiveness and efficiency on the aspects of data security, service promptness and competition advantage value, 2) Relationship marketing, relationship marketing principle is believed to give effect to the customer's commitment to the company (Garbarino and Johnson, 1999). Commitment is believed to be relational force, which is believed to be the main variable in the relationship development of relationship marketing paradigm (Morgan and Hunt, 1994). *Based on this background, researchers took the title "Examining Model of Effect of Adopting Information Technology and Relationship Marketing Toward True Loyalty Through Multidimensional Commitment"*.

2. Literature Review

The electronic revolution in the Malaysian banking sector has started in the 1970's. The first visible form of electronic innovation in the Malaysian banking industry was the introduction of Automated Teller Machines in 1981. Finally, on June 1, 2000, the Malaysian Central Bank gave the green light for locally owned commercial banks to offer Internet banking services. Due to the drastic changes in the business environment, it leads financial institutions to revise their marketing strategies to stress long-lasting relationships with customers. Relationships is important criteria in the selection of private bank. In many conditions, customer satisfaction mediates the relationship between antecedent's factors and marketing performance. Hence, CRM performance is about maintaining good relationship and repurchases behavior, word-of-mouth and customer retention. Trust has been studied in traditional physical commercial environments. In the marketing and management literatures, trust is strongly associated with attitudes toward products, services, and purchasing behaviors. So that, the main objective of this research paper is to investigate the role of CRM performance as the mediator in the relationship between trust and E-Banking adoption. Hence, this empirical paper confirmed the role of customer relationship management performance as the mediators in the relationship between trust and electronic banking adoption.

3. Theoretical

The term loyalty is often expressed by marketing experts and business practitioners, loyalty is a concept that seems easy to be discussed in the context of everyday life, but it becomes more difficult when the meaning analyzed. In many definitions Ali Hasan (2008:81) elaborated loyalty as following:

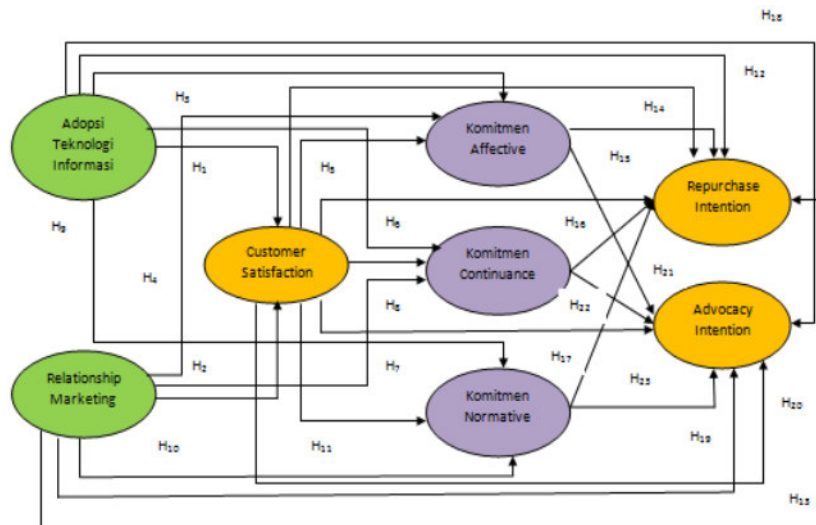
1. Generic concept, loyalty shown a tendency of consumers to buy a particular brand with a high level of consistency.
2. The concept of behavior, repeat purchase is often associated with brand loyalty. The difference, if the brand loyalty reflects the psychological commitment to a particular brand, repeat purchase behavior is regarding the purchase of the same brand repeatedly.
3. Repeated purchases are the result of the dominance of (1) managed to make the product to be the only alternative available, (2) which continuously conduct promotions to lure and entice customers repurchase the same brand.

Customer loyalty is one of the core objectives pursued in modern marketing. Information technology in banking institutions, exemplified by their ability of online realtime feature in every branches. Various technology involving delivery channel to connect with customers, namely: ATM (Automatic Teller Machine), Telephone Banking, PC Banking, Internet Banking, TV Banking, and Mobile Banking (Arunachalam dan Sivasubramanian, 2007). The banking industry has been using the Internet as a new market channel to offer various services with indefinite activity. Several studies have shown that the application of information technology is certainly impact on customer satisfaction, commitment and result in a customer loyalty.

The sense of satisfaction, Engel, Roger & Miniard (1994) said that satisfaction is the evaluation of post-consumer to choose several alternatives in order to meet expectations. Band (in Nasution, 2005) said that satisfaction is achieved when the quality meets and exceeds expectations, wants and needs of consumers. Conversely, if the quality does not meet and exceed the expectations, desires and needs of consumers, the satisfaction is not achieved. Consumers who are not satisfied with the goods or services will look for other companies that are able to supply their needs.

Meaning of commitment, by attitude approach, focusing on individual thought processes about the relationship of individuals and the organization (Mowday in Allen & Meyer, 1991). Individuals will consider the appropriateness of their values and goals with the organization. High organizational commitment will be demonstrated by the strong belief and acceptance of the values and objectives of the organization. According to Allen and Meyer (1991) there are three components in organizational commitments, which are; 1) Affective component shows clients emotional attachment, identify themselves and show their involvement in the company, 2) Continuance Component shows awareness of losses faced by customers when they left to move to other institutions, 3) Normative component, reflecting a sense of obligation to remain a customer in the banking company.

The conceptual framework (theoretical) in this study was:



Sumber: Allen dan Meyer (1990), Garbarini dan Johnson(1999), Morgan dan Hunt (1994)

4. Hypothesis

- H1. Information Technology Adoption have significant effect on Customer Satisfaction
- H2. Relationship marketing have significant effect on Customer Satisfaction.
- H3. Information Technology Adoption have significant effect on Affective Commitment
- H4. Relationship marketing have significant effect on Affective Commitment
- H5. Customer Satisfaction have significant effect on Affective Commitment
- H6. Information Technology Adoption have significant effect on Continuance Commitment
- H7. Relationship marketing have significant effect on Continuance Commitment
- H8. Customer Satisfaction have significant effect on Continuance Commitment
- H9. Information Technology Adoption have significant effect on Continuance Commitment
- H10. Relationship marketing have significant effect on Normative Commitment
- H11. Customer Satisfaction have significant effect on Normative Commitment
- H12. Information Technology Adoption have significant effect on Repurchase Intention
- H13. Relationship marketing have significant effect on Repurchase Intention
- H14. Customer Satisfaction have significant effect on Repurchase Intention
- H15. Affective Commitment have significant effect on Repurchase Intention
- H16. Continuance Commitment have significant effect on Repurchase Intention
- H17. Normative Commitment have significant effect on Repurchase Intention
- H18. Information Technology Adoption have significant effect on Advocacy Intention
- H19. Relationship marketing have significant effect on Advocacy Intention
- H20. Customer Satisfaction have significant effect on Advocacy Intention
- H21. Affective Commitment have significant effect on Advocacy Intention
- H22. Continuance Commitment have significant effect on Advocacy Intention
- H23. Normative Commitment have significant effect on Advocacy Intention

5. Research methods; object and location.

- a. Research Object and Location
 Object of the study include society who become customers of a bank in Province of Central Java Indonesia
- b. Research Type and Method
 Primary data is data obtained directly from the source, that is the data obtained from respondents through questionnaire containing questions regarding matters related to the variable indicator.
- c. Data Collection Methods and Techniques
 Data collection methods, the methods used to collect the data are questionnaire and documents.
- d. Population and Sample
 Population in this research is a society as bank customers located in Central Java. Respondents in this research are of 200 people, so it has qualified to get model estimation using Maximum likelihood (MC). In determining the data to be studied, sampling technique used is the non-probability sampling. It is a technique that does not provide equal opportunity for each element or member of the population to be selected into the sample. One of its method is accidental sampling. It is a method in selecting samples,

which researchers have no other consideration except by convenience only.

e. Type of Operational Variables

In this research's theoretical conceptual model, variables consist of exogenous and endogenous variables. Exogenous variables are the adoption of information technology and relationship marketing. endogenous variables include the repurchase intention and advocacy intention. Intervening variables include: Customer Satisfaction, affective commitment, continuance commitment and normative commitment.

f. Research Design

This research is *explanatory research* that studies on causality, it describes a relationship between variables through hypothesis testing (Ghozali, 2004). This type of research is chosen considering the objectives to be achieved include efforts to explain the relationships and influences that occur between the questioner as a means of collecting primary data. Next step is to determine the instruments based on the variables and then determine the sample. Data collected by observation, interview and questionnaire. The collected data were processed using descriptive and quantitative analysis tools. Analysis techniques used was the analysis of SEM (Structural Equation Model). Results of analysis then interpreted and the final step is concluded and given advice.

6. Results

a. Research Instrument Test

Based on calculations using SPSS program, validity testing in Table-1 below shows that all the indicator variables studied were valid.

Table 1. Questionnaire Validity Testing Results

| Constructs/Latent Variable | Indicator Item | Corrected – Total item Correlation | Correlation R-tabel | Result |
|------------------------------------|----------------|------------------------------------|---------------------|--------|
| IT Adoption (ATI) | ATI_1 | 0,7102 | 0,138 | Valid |
| | ATI_2 | 0,8238 | 0,138 | Valid |
| | ATI_3 | 0,7120 | 0,138 | Valid |
| | ATI_4 | 0,6857 | 0,138 | Valid |
| Relationship Marketing (RM) | RM_1 | 0,6803 | 0,138 | Valid |
| | RM_2 | 0,7587 | 0,138 | Valid |
| | RM_3 | 0,6362 | 0,138 | Valid |
| Customer Satisfaction (CS) | CS_1 | 0,5797 | 0,138 | Valid |
| | CS_2 | 0,6296 | 0,138 | Valid |
| | CS_3 | 0,4404 | 0,138 | Valid |
| | CS_4 | 0,5978 | 0,138 | Valid |
| Affective Commitment (AC) | AC_1 | 0,5687 | 0,138 | Valid |
| | AC_2 | 0,6790 | 0,138 | Valid |
| | AC_3 | 0,6069 | 0,138 | Valid |
| | AC_4 | 0,5078 | 0,138 | Valid |
| | AC_5 | 0,6384 | 0,138 | Valid |
| Continuance Commitment (CC) | CC_1 | 0,5440 | 0,138 | Valid |
| | CC_2 | 0,5708 | 0,138 | Valid |
| | CC_3 | 0,5668 | 0,138 | Valid |
| | CC_4 | 0,7673 | 0,138 | Valid |
| | CC_5 | 0,6584 | 0,138 | Valid |
| Normative Commitment (NC) | NC_1 | 0,5688 | 0,138 | Valid |
| | NC_2 | 0,4834 | 0,138 | Valid |
| | NC_3 | 0,5345 | 0,138 | Valid |
| | NC_4 | 0,6073 | 0,138 | Valid |
| | NC_5 | 0,4263 | 0,138 | Valid |
| Repurchase Intention (RI) | RI_1 | 0,7033 | 0,138 | Valid |
| | RI_2 | 0,6992 | 0,138 | Valid |
| | RI_3 | 0,5626 | 0,138 | Valid |
| Advocacy Intention (AI) | AI_1 | 0,7984 | 0,138 | Valid |
| | AI_2 | 0,7269 | 0,138 | Valid |
| | AI_3 | 0,6928 | 0,138 | Valid |

b. Reliability Test

Based on calculations using SPSS program, reliability testing as in Table 2 below, shows that all the indicator variables studied are reliable.

Table 2. Questionnaire Reliability Testing Results

| Construct/Latent Variable | Reliability Coefficients Alpha | Reliability Criteria | Conclusion |
|--|--------------------------------|----------------------|------------|
| Adoption of Information Technology (ATI) | 0,8725 | 0,60 | Reliable |
| Relationship Marketing (RM) | 0,8292 | 0,60 | Reliable |
| Customer Satisfaction (CS) | 0,7612 | 0,60 | Reliable |
| Affective Commitment (AC) | 0,8101 | 0,60 | Reliable |
| Continuance Commitment (CC) | 0,8218 | 0,60 | Reliable |
| Normative Commitment (NC) | 0,7541 | 0,60 | Reliable |
| Repurchase Intention (RI) | 0,8039 | 0,60 | Reliable |
| Advocacy Intention (AI) | 0,8577 | 0,60 | Reliable |

c. Descriptive Variables: Index Analysis Techniques

Index Analysis, to describe the perception of respondents on items questioned. Processing results as follows:

1) Adoption of Information Technology (ATI) variable Index Analysis

Table 3. Adoption of Information Technology (ATI) Index

| Purchase Decision Indicator | Respondents' Answer Frequency on IT Adoption | | | | | IT Adoption Index |
|-----------------------------|--|---|----|-----|----|-------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| ATI_1 | 0 | 2 | 15 | 85 | 98 | 72,1 |
| ATI_2 | 0 | 5 | 36 | 78 | 81 | 83,5 |
| ATI_3 | 0 | 4 | 37 | 109 | 50 | 80,5 |
| ATI_4 | 1 | 8 | 30 | 84 | 77 | 82,8 |
| | Total | | | | | 79,725 |

Source : 2015 Data

2) Relationship Marketing Variable Index Analysis

Table 4. Relationship Marketing (RM) Index

| Relationship Marketing Indicator | Respondents' Answer Frequency on Relationship Marketing | | | | | Relationship Marketing Index |
|----------------------------------|---|---|---|---|-----|------------------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| RM_1 | 0 | 1 | 5 | 8 | 110 | 90,3 |
| RM_2 | 0 | 5 | 7 | 9 | 93 | 87,6 |
| RM_3 | 0 | 0 | 1 | 9 | 93 | 87,8 |
| | Total | | | | | 88,567 |

Source : 2015 Data

3) Customer Satisfaction Index Analysis

Table 5. Customer Satisfaction (CS) Index

| Customer Satisfaction Indicator | Respondents' Answer Frequency on Customer Satisfaction | | | | | Index Customer Satisfaction |
|---------------------------------|--|----|----|-----|----|-----------------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| CS_1 | 0 | 9 | 55 | 113 | 23 | 75 |
| CS_2 | 1 | 32 | 90 | 64 | 13 | 65,6 |
| CS_3 | 0 | 6 | 77 | 92 | 25 | 73,6 |
| CS_4 | 0 | 18 | 65 | 103 | 14 | 76,8 |
| | Total | | | | | 72,75 |

Source : 2015 Data

4) Affective Commitment Variable Index Analysis

Table 6. Affective Commitment (AC) Index

| Affective Commitment Indicator | Respondents' Answer Frequency on Affective Commitment | | | | | Affective Commitment Index |
|--------------------------------|---|----|----|-----|----|----------------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| AC_1 | 0 | 15 | 45 | 120 | 20 | 74,5 |
| AC_2 | 0 | 7 | 55 | 123 | 15 | 74,6 |
| AC_3 | 0 | 18 | 90 | 75 | 17 | 69,1 |
| AC_4 | 0 | 6 | 69 | 110 | 15 | 73,4 |
| AC_5 | 0 | 24 | 86 | 78 | 12 | 67,8 |
| | Total | | | | | 71,8 |

Source : 2015 Data

5) Continuance Commitment Variable Index Analysis

Table 7. Continuance Commitment (CC) Index

| Continuance Commitment Indicator | Respondents' Answer Frequency on Continuance Commitment | | | | | Continuance Commitment Index |
|----------------------------------|---|----|----|-----|----|------------------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| CC_1 | 0 | 43 | 67 | 67 | 23 | 67 |
| CC_2 | 0 | 19 | 50 | 107 | 24 | 73,6 |
| CC_3 | 1 | 41 | 70 | 52 | 36 | 68,1 |
| CC_4 | 0 | 25 | 58 | 91 | 26 | 71,8 |
| CC_5 | 0 | 11 | 71 | 80 | 38 | 74,5 |
| | Total | | | | | 71 |

Source : 2015 Data

6) Normative Commitment Variable Index Analysis

Table 8. Normative Commitment (NC) Index

| normative commitment indicator | Respondents' Answer Frequency on normative commitment | | | | | normative commitment index |
|--------------------------------|---|----|----|-----|----|----------------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| NC_1 | 1 | 40 | 98 | 47 | 14 | 63,3 |
| NC_2 | 0 | 19 | 76 | 88 | 17 | 70,3 |
| NC_3 | 2 | 26 | 59 | 88 | 25 | 70,8 |
| NC_4 | 0 | 9 | 69 | 103 | 19 | 73,2 |
| NC_5 | 0 | 6 | 38 | 122 | 34 | 78,4 |
| | Total | | | | | 71,2 |

Source : 2015 Data

7) True Loyalty Variable Index Analysis

Table 9. True Loyalty index (Repurchase Intention (RI)&Advocacy Intention (AI))

| True loyalty indicator | Respondents' Answer Frequency on true loyalty | | | | | True Loyalty Index |
|-----------------------------|---|----|----|-----|----|--------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Repurchase Intention | | | | | | |
| RI 1 | 1 | 38 | 88 | 57 | 16 | 64,9 |
| RI 2 | 1 | 32 | 94 | 64 | 9 | 64,8 |
| RI 3 | 0 | 17 | 70 | 100 | 13 | 70,9 |
| | | | | | | 66,867 |
| Advocacy Intention | | | | | | |
| AI 1 | 1 | 28 | 98 | 63 | 10 | 65,3 |
| AI 2 | 3 | 27 | 89 | 72 | 9 | 65,7 |
| AI 3 | 9 | 55 | 73 | 53 | 10 | 60 |
| | Total | | | | | 63.667 |

Source : 2015 Data

The results showed that the index of all the variables studied was high (above 60%), meaning that respondents' perceptions of the question items is high.

d. Analysis and Testing

Steps of testing with SEM, refers to the process as proposed by Ferdinand (2006). The sequence of analysis steps include :

- 1) The model development is based on literature review and framework. In general, the model consists of: 1) the independent variable, 2) the mediating variables, and 3) the dependent variable. Independent variable are 1) Adoption of Information Technology (ATI), 2) Relationship marketing (RM). Mediating variable are 1) Customer Satisfaction (CS), 2) Affective Commitment (AC), 3) Continuance Commitment (CC), 4) Normative Commitment (NC). Dependent variable are 1) Repurchase Intention (RI), 2) Advocacy Intention (AI).

2) Developing Flowcharts

The next step is to construct the model in the form of a diagram/flowchart

3) Conversion of flowcharts into the equation

Structural equation is basically built using the following guidelines:

$$\text{Endogenous Variable} = \text{Exogenous Variable} + \text{Endogenous Variable} + \text{Error}$$

Structural equation model :

- a) $CS = \gamma_1 ATI + \gamma_2 RM + Z_1$
- b) $AC = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + Z_2$
- c) $CC = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + Z_3$
- d) $NC = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + Z_4$
- e) $RI = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + \gamma_4 AC + \gamma_5 CC + \gamma_5 NC + Z_5$
- f) $AI = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + \gamma_4 AC + \gamma_5 CC + \gamma_5 NC + Z_5$

4) Selecting Input Matrix and Estimation Techniques

Input matrix used is covariance matrix. Hair et.al. (1995; in Ferdinand, 2006) stated that in testing causality relationship covariance matrix taken as input for SEM operation.

- a) Confirmatory Factor Analysis of Exogenous Construct

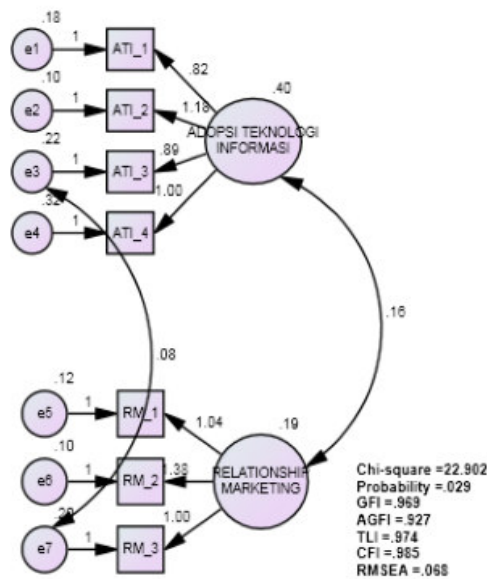


Table 10. Results of Exogenous Constructs Confirmatory Factor Model Test

| Criteria | Cut of value | Result | Evaluation |
|-------------|----------------------------|--------|------------|
| Chi Square | 2 with df : 26 ; p : 5 % = | 22,902 | Good |
| Probability | > 0,05 | 0,029 | Good |
| GFI | > 0,90 | 0,969 | Good |
| AGFI | > 0,90 | 0,927 | Good |
| TLI | > 0,95 | 0,974 | Good |
| CFI | > 0,95 | 0,985 | Good |
| RMSEA | < 0,08 | 0,068 | Good |

The picture above is Exogenous Constructs Confirmatory Factor Analysis, which shows that the model has met the criteria of goodness of fit determined. The goodness of fit testing value with χ^2 shows 60.809 with probability equal to 0.058 which indicated no difference between the predicted models and observational data. The value of goodness of fit testing with χ^2 shows at 60.809 with probability equal to 0.058 which showed no difference between the predicted models with observational data. Feasibility measurements of other models are in good category. Thus the fitness of predicted model with the values of observations on exogenous variables already qualified.

b) Endogenous Construct Confirmatory Factor Analysis

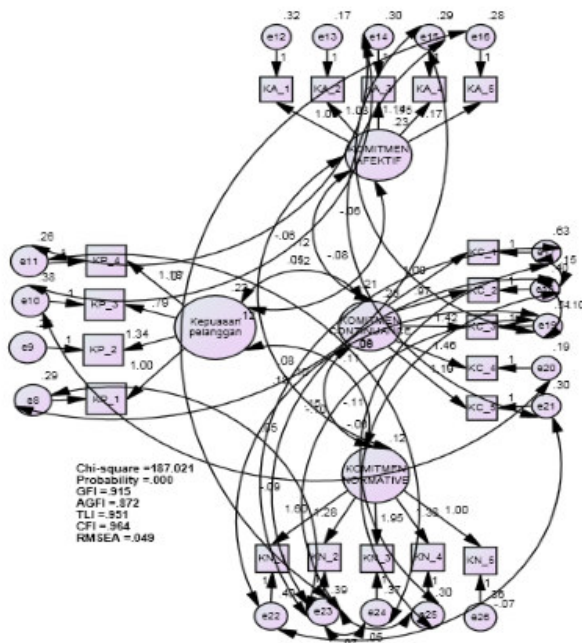


Table 11. Endogenous Construct Confirmatory Factor Model Test Results

| Criteria | Cut of value | Result | Evaluation |
|-------------|----------------------------|---------|------------|
| Chi Square | 2 with df : 26 ; p : 5 % = | 187,021 | Good |
| Probability | > 0,05 | 0,000 | Good |
| GFI | > 0,90 | 0,915 | Good |
| AGFI | > 0,90 | 0,871 | Good |
| TLI | > 0,95 | 0,951 | Good |
| CFI | > 0,95 | 0,965 | Good |
| RMSEA | < 0,08 | 0,049 | Good |

By the results of confirmatory factor analysis conducted on endogenous variables it was known that the model has met the criteria of goodness of fit determined. The goodness of fit testing value with χ^2 shows 84,864 with probability equal to 0,363 which showed no difference between the predicted models with observational data. Feasibility measurements of other models are in good category. Thus the fitness of predicted model with the values of observations on exogenous variables already qualified.

c) Equation Model Structural Test Result

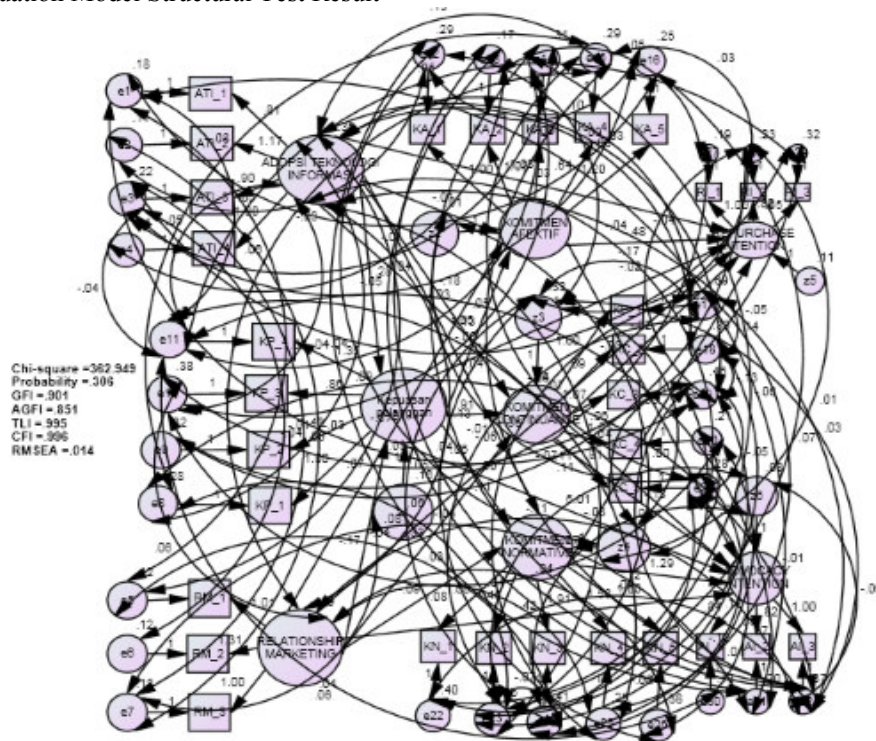


Table 12. Equation Model Structural Test Result

| Criteria | Cut of value | Result | Evaluation |
|-------------|----------------------------|---------|------------|
| Chi Square | 2 with df : 26 ; p : 5 % = | 362,949 | Good |
| Probability | > 0,05 | 0,306 | Good |
| GFI | > 0,90 | 0,901 | Good |
| AGFI | > 0,90 | 0,851 | Marginal |
| TLI | > 0,95 | 0,995 | Good |
| CFI | > 0,95 | 0,996 | Good |
| RMSEA | < 0,08 | 0,014 | Good |

Based on observation of the full model image analysis chart, it can be shown that the model meets the fit criteria. Results of chi-square test calculation on full model obtain the value of 102.211 above chi-square table for freedom degrees of 127 at 5% significance level of 143.231. The results showed that the overall model meets the fit model criteria. Probability value of 0.160 which is above the value of 0.05 as well as other criteria that mostly goodly comply. The results showed that the overall model meets the fit model criteria.

The output shows the coefficient of determination for Repurchase Intention equation of

0.808 which means the repurchase intention variable that can be explained by the variables of the adoption of information technology, relationship marketing, customer satisfaction, multidimensional commitment is of 80.8%. Meanwhile, 19.2% were other variable that not investigated. The determination coefficient for equality Advocacy Intention is of 0.960 which means advocacy intention variable that can be explained by the variables of the adoption of information technology, relationship marketing, customer satisfaction, multidimensional commitment is of 96.0%. Meanwhile, 14% were other variable that not investigated. These results suggested that models are good and acceptable because they matched the data state.

Based on the calculation, repurchase intention total determination is of 0.976 meaning repurchase intention variable which can be explained by the variables of the adoption of information technology, relationship marketing, customer satisfaction, multidimensional commitment amounted 97.6%. Meanwhile, 2.4% were other variables not studied. Determination coefficient for Advocacy Intention equation is of 0.995 which means advocacy intention variable can be explained by variables of the adoption of information technology, relationship marketing, customer satisfaction, multidimensional commitment is of 99.5%. Meanwhile, 0.5% were other variables not studied. These results suggest that models were in good state and acceptable because they fit with empirical data.

5) Identification Problem Analysis

The next test is to know whether the developed model emerging problem of identification or not. Identification Problem is principally the problem of developed models' inability to produce unique estimation. Identification problem can occur through indications as follow :

- a) Error Standard for one or more coefficients are very big.
- b) The program was not able to produce a matrix of information that should be presented.
- c) Th appear of strange numbers such as the negative error variance.
- d) The emergence of a very high correlation between the estimated coefficients obtained (> 0.9).

Based on the analysis of the carried out research model tests, it did not show any indications of identification problem as mentioned above.

6) Data Normality Test

The assumption of data normality must be met in order that the data can be processed further for SEM modeling. Normality test done by observing the value of the used data skewness, whether there were a value of CR that exceeds + 2.58 at 0.01 significance level. Based on the results of data processing, it appeared that there were no CR values beyond + 2.58. It can be concluded that it was good in univariate way. Normality test is done by using the criteria of the critical ratio of ± 2.58 at a significance level of 0.01 (1%) (Ghozali, 2004, p.105), so that it can be concluded that there were no distorted data. Data normality test for each indicator proved to be normal.

7) Conformance Test and Statistical Test

Research models conformance test used to test on how well the level of *goodness of fit* of the research models. Based on test results that have been presented above, known that from eight criteria, seven of which are in good condition and one (GFI and AGFI) is still in marginal condition. By this result, as a whole, it can be said that the research model had decent goodness of fit level.

8) Residual Value Evaluation

Evaluation of the residual value can be done by taking into account the value of the standardized residuals. The expected value of the standardized residuals is $< 2:58$. From the result of statistical analysis conducted in this research, there was no value of *standardized residual covariance* exceeded 2:58, so that it can be said that the residual requirement is met.

9) Hypothesis Testing

Table 13. Hypothesis Conclusion

| No | Hypothesis | CR and P | Test Result |
|----|---|--------------------------|-------------|
| 1 | IT Adoption significantly influence customer satisfaction | CR = 2,321 P = 0,000 | Accepted |
| 2 | Relationship Marketing significantly influence customer satisfaction | CR = -1,635 P = 0,102 | Rejected |
| 3 | customer satisfaction significantly influence affective commitment | CR = 7,914 P = 0,000 | Accepted |
| 4 | customer satisfaction significantly influence continuance commitment | CR = 5,683 P = 0,000 | Accepted |
| 5 | customer satisfaction significantly influence normative commitment | CR = 5,378 P = 0,000 | Accepted |
| 6 | IT Adoption significantly influence affective commitment | CR = -0,120 P = 0,905 | Rejected |
| 7 | IT Adoption significantly influence continuance commitment | CR = -1,601 P = 0,109 | Rejected |
| 8 | IT Adoption significantly influence normative commitment | CR = -0,986 P = 0,324 | Rejected |
| 9 | Relationship Marketing significantly influence affective commitment | CR = -0,895 P = 0,371 | Rejected |
| 10 | Relationship Marketing significantly influence continuance commitment | CR = -2,447 P = 0,014 | Accepted |
| 11 | Relationship Marketing significantly influence normative commitment | CR = -1,305 P = 0,192 | Rejected |
| 12 | affective commitment significantly influence repurchase intention | CR = -1,198 P = 0,231 | Rejected |
| 13 | affective commitment significantly influence advocacy intention | CR = -1,593 P = 0,111 | Rejected |
| 14 | continuance commitment significantly influence repurchase intention | CR = -0,160 P = 0,873 | Rejected |
| 15 | continuance commitment significantly influence advocacy intention | CR = -1,077 P = 0,282 | Accepted |
| 16 | normative commitment significantly influence repurchase intention | CR = 1,225 P = 0,221 | Rejected |
| 17 | normative commitment significantly influence advocacy intention | CR = 3,328 P = 0,000 | Accepted |
| 18 | IT Adoption significantly influence repurchase intention | CR = 0,224 P = 0,823 | Rejected |
| 19 | customer satisfaction significantly influence repurchase intention | CR = 3,565 P = 0,000 | Accepted |
| 20 | IT Adoption significantly influence advocacy intention | CR = -0,847 P = 0,397 | Rejected |
| 21 | customer satisfaction significantly influence advocacy intention | CR = 1,837 P = 0,066 | Rejected |
| 22 | Relationship Marketing significantly influence advocacy intention | CR = -1,127 P = 0,260 | Rejected |
| 23 | Relationship Marketing significantly influence repurchase intention | CR = -2,427 P = 0,015 | Accepted |

The test results showed that there were hypothesis that has significant influence and some with insignificant influence, however the test results showed that each independent variable has influence on the dependent variable.

Descriptive analysis were further used to test whether the relation were significant or insignificant. Processing results from 100 respondent (Students of Master Management) showed as follow :

Table 14. Descriptive results of 100 respondents

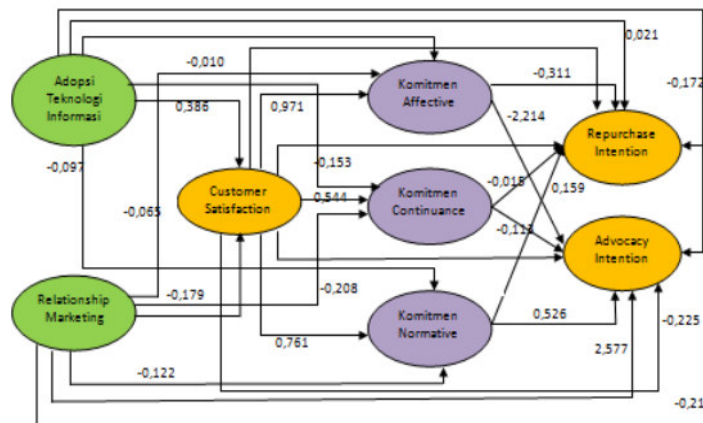
| QUESTION ITEMS | SCORE | |
|--|---------------------|-----------|
| In your opinion, can Relationship Marketing (marketing that promotes good relations with customers / subscribers) significantly (real) influence customer satisfaction | Strongly agree (SA) | SA = 70 % |
| | Agree (A) | A = 23 % |
| | Disagree (D) | D = 8 % |
| In your opinion, can Information Technology Application significantly (real) influence multidimensional commitment (strong beliefs of the values of the organization) of customers toward banking institutions | Strongly agree (SA) | SA = 54 % |
| | Agree (A) | A = 46 % |
| | Disagree (D) | D = 0 % |
| In your opinion, can Relationship Marketing significantly (real) influence multidimensional commitment (strong beliefs of the values of the organization) of customers | Strongly agree (SA) | SA = 46 % |
| | Agree (A) | A = 38 % |
| | Disagree (D) | D = 16 % |
| In your opinion, can multidimensional commitment (strong beliefs of the values of the organization) significantly (real) influence customers' loyalty on banking institutions | Strongly agree (SA) | SA = 38 % |
| | Agree (A) | A = 54 % |
| | Disagree (D) | D = 8 % |
| In your opinion, can Information Technology Application significantly (real) influence customers' loyalty (behavior, positive attitude) on banking institutions | Strongly agree (SA) | SA = 62 % |
| | Agree (A) | A = 32 % |
| | Disagree (D) | D = 0 % |
| In your opinion, can relationship marketing significantly (real) influence customers' loyalty (behavior, positive attitude) on banking institutions | Strongly agree (SA) | SA = 38% |
| | Agree (A) | A = 54 % |
| | Disagree (D) | D = 8 % |

Based on the descriptive analysis results, the average respondents agreed with the statement (item questions) were above 70%. This described a significant relationship between the variables studied. The results above confirmed that empirically models were goodly acceptable and there were a match with the model theoretically conceptualized by researchers.

10) Path Analysis Results

a) Path Analysis Equation

Diagram jalur /path diagram :



Sumber: Allen dan Meyer (1990), Garbarini dan Johnson(1999), Morgan dan Hunt (1994)

Structural equation model :

1. Equation I : $CS = \gamma_1 ATI + \gamma_2 RM + Z_1$

Based on the results of data processing by AMOS obtained the following results:

$$CS = 0,386**ATI - 0,179 RM + Z_1$$

This showed that the variable ATI (Adoption of Information Technology) has positive effect, while the RM (Relationship Marketing) negative.

2. Equation II : $AC = \gamma_1 ATI + \gamma_2 RM+ \gamma_3 CS + Z_2$

Based on the results of data processing by AMOS obtained the following results:

$$AC = -0,010 ATI - 0,065 RM+ 0,971** CS + Z_2$$

This showed that the variable ATI (Adoption of Information Technology) and RM (Relationship Marketing) has negative effects,but CS (Customer Satisfaction) has positive effect.

3. Equation III : $CC = \gamma_1 ATI + \gamma_2 RM+ \gamma_3 CS + Z_3$

Based on the results of data processing by AMOS obtained the following results:

$$CC = -0,153 ATI - 0,208 RM + 0,544^{**} CS + Z_3$$

This showed that the variable ATI (Adoption of Information Technology) and RM (Relationship Marketing) has negative effects, but CS (Customer Satisfaction) has positive effect.

4. Equation IV : $NC = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + Z_4$

Based on the results of data processing by AMOS obtained the following results:

$$NC = -0,097ATI - 0,122 RM + 0,761^{**} CS + Z_4$$

This showed that the variable ATI (Adoption of Information Technology) and RM (Relationship Marketing) has negative effects, but CS (Customer Satisfaction) has positive effect.

5. Equation V : $RI = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + \gamma_4 AC + \gamma_5 CC + \gamma_5 NC + Z_5$

Based on the results of data processing by AMOS obtained the following results:

$$RI = 0,021 ATI - 0,210 RM + 1,058^{**} CS - 0,311 AC - 0,015 CC + 0,159 NC + Z_5$$

This shows that the variables ATI, RM, AC and CC has negative effects, while CS and NC has positive effects.

6. Equation VI : $AI = \gamma_1 ATI + \gamma_2 RM + \gamma_3 CS + \gamma_4 AC + \gamma_5 CC + \gamma_5 NC + Z_5$

Based on the results of data processing by AMOS obtained the following results:

$$AI = -0,172ATI - 0,225RM + 2,577CS - 2,214AC - 0,113CC + 0,526^{**}NC + Z_5$$

This shows that the variables ATI, RM, CS, AC and CC has negative effects, while NC has positive effects.

A variable positive effect means that if the independent variable is increased then will have an impact on the increase in the value of the dependent variable. variable negative effect means that if the independent variable on the increase it will have an impact on the reduction of the dependent variable

b) Analysis of the total influence , direct and indirect

- 1) Based on the data analysis, the total influence from adoption of information technology toward repurchase intention was 0.346, while the influence of relationship marketing toward repurchase intention was -0.361. This means that the most influencing variable on loyalty (Repurchase Intention) was information technology adoption.
- 2) Based on the above results, total influence adoption of information technology toward advocacy intention was 0.111, while the influence of relationship marketing toward repurchase intention was -0.259. This means that the most influencing variable on loyalty (advocacy intention) was information technology adoption. Results above concluded findings that showed the biggest influencing variable toward loyalty was adoption of information technology .
- 3) The direct effect adoption of information technology toward repurchase intention was 0.021, while the indirect effect was 0.325, meant the indirect effect is greater than the direct effect. The direct effect adoption of information technology toward the advocacy intention was -0.172, while the indirect effect was 0.283, meant the indirect effect is greater than the direct effect. This means that variables of customer satisfaction and multidimensional commitment was effective as intervening variables in relation between information technology adoption and loyalty.
- 4) The direct effect of relationship marketing toward repurchase intention was -0,210, while the indirect effect was -0,152, meant the indirect effect is lesser than the direct effect. The direct effect of relationship marketing toward advocacy intention was -0,225, while the indirect effect was -0034, meant the indirect effect is lesser than the direct effect. This means that variables of customer satisfaction and multidimensional commitment was not effective as intervening variables in relation between relationship marketing and loyalty.

7. Implications

Based on the model suitability test results, the suitability of the model and criteria *Goodness of fit* was met, showing that the model drafted by the researchers was acceptable, according to the data's empirical state. Causality between the variables studied were acceptable, and supported existing research. Structural model was accepted, the research showed that there were several variables with significant effects, but most of the relationship was not significant. This needs to be studied more deeply, further research are needed. This is in line with the research conducted by Fifip Chopipah (2013), which stated that internet services has a significant effect on customer satisfaction. Another study referred to the results of this study were that by Ferry Kurniawa (2013),

which stated that the relationship marketing has significant positive effect on the satisfaction of customers of Isuzu Astra International Company in Semarang.

8. Conclusion

- a. Adoption of information technology has positive effect on customer satisfaction, while relationship marketing has negative effect on customer satisfaction.
- b. Adoption of information technology, relationship marketing has negative effect on multidimensional organizational commitment (affective commitment, continuance commitment and normative commitment). Meanwhile, customer satisfaction has positive effect on multidimensional organizational commitment.
- c. Adoption of information technology, customer satisfaction and normative commitment has positive effect on repurchase intention, while relationship marketing, affective commitment and continuance commitment has negative effect on repurchase intention.
- d. Customer satisfaction and normative commitment has positive effect on repurchase intention, while information technology adoption, relationship marketing, affective commitment and continuance commitment has negative effect on repurchase intention.

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