
**MODERATING ANALYSIS OF NEED FOR COGNITION ON
DETERMINANT FACTORS OF CUSTOMER LOYALTY**

(Study of Bank Mandiri in Yogyakarta)

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Abstract

Competitive banking industry in Indonesia puts customer loyalty into important place. The use of memory about customer experiences information (eg.satisfaction, credibility, value, and image) towards to future behavior is different one to another customer. It is depended on need for cognition. This research is aimed to analyze moderating role of need for cognition on relationship between satisfaction, credibility, value, and image with Bank Mandiri Yogyakarta customer loyalty. Analysis model use two multiple regression models, which are model with high and low need for cognition respondents. Results show that satisfaction and image have effect on customer loyalty with high need for cognition. Value and credibility have effect on customer loyalty with low need for cognition. It indicates that need for cognition is factor that affect customer to assess service quality of Bank Mandiri Yogyakarta.

Keywords: Loyalty, Satisfaction, Image, Value, Credibility, Need for Cognition

INTRODUCTION

High competition of banking industry in Indonesia takes bank customer loyalty into important place as competitive advantages. Bank should maintain their customer in order to generate profit in economics uncertainty (Hansen, Samuelsen, & Sallis, 2013). Customer loyalty and satisfaction are key factors of bank's decision making (Coil, Keiningham, Aksoy, & Hsu, 2007; Gustafsson, Johnson, & Roos, 2005; Mittal & Kamakura, 2001).

Satisfied customer makes them loyal to the bank. It is because customer's decision depend on their experiences of services and determine their future expectation (R L Oliver, 1980; Yi, 1990). Those experiences felt by customer as customer satisfaction, bank credibility, value, and image (Hansen *et al.*, 2013).

Memory of experiences does not affected directly by external factors, such as advertising or word-of-mouth (Rottenstreich, Sood, & Brenner, 2007). Hansen *et al.*(2013)explains that memory usage of experiences information is different between one customer to another. It depends on customer's need for cognition. Need for cognition shows difference between one

customer to another about the likelihood of cognitive activities involvement and enjoyment (Cacioppo & Petty, 1982). Hansen *et al.* (2013) states that there is difference of memory usage to determine customer behavior between high and low need for cognition customer

Experiences of satisfaction, value, bank's credibility, and image do not always make customer to be loyal one. It depends on customer's need for cognition. Need for cognition determines if customer want to think harder than another (Hansen *et al.*, 2013). Customer satisfaction and bank image are picture of intrinsic quality of bank services that cannot be evaluated directly and observed rapidly, so high need for cognition customer have more concern about these factors than low one. Bank's credibility and value are picture of extrinsic quality of bank services that can be evaluated directly and observed rapidly, so these factors have more effect to low need for cognition customer. This research uses need for cognition to moderates effect of satisfaction, value, bank's credibility, and image on customer loyalty.

As one of biggest bank in Indonesia, Bank Mandiri should maintain their customer loyalty to generate profit. In the other hand, there is potential of customer loyalty decreasing because of some customer that engaged in deceptions by using their bank accounts in Bank Mandiri, such as deception by phone (Gunawan, 2017) or skimming cases (Ramadhan, 2018) that use Bank Mandiri E-Cash account of the deceivers. Even though Bank Mandiri has no engagement in the deceptions behavior and Bank Mandiri also can directly and legally clear the problems, there is still potential of image decreasing in front of public. This research is important to be performed in Bank Mandiri, especially in Bank Mandiri branch in Yogyakarta, to maintain the customer loyalty. Based on above explanation, this research is aimed to examine (1) Do customer satisfaction and image of Bank Mandiri Yogyakarta have stronger effect on loyalty for high need for cognition customer than low one? (2) Do customer value and credibility of Bank Mandiri Yogyakarta have stronger effect on loyalty for low need for cognition customer than high one?

THEORITICAL REVIEW

Loyalty Customer loyalty refers to behavior to be loyal to certain object; such as brand, product, service, store, etc (Alexander, 2014). Loyalty can be seen from customer commitment to keep valuable long term relationship (Tjahyadi, 2006). Oliver (1999) also states loyalty as deep commitment to do repeat buying of product or service, even in uncertainty condition. Griffin (2003) classifies loyalty in to four domain of loyalty that determined by combination between customer attachment and repeat buying scheme. Customer attachment and repeat buying scheme made by preferences and differentiation.

Need for Cognition

Need for cognition explains personal characteristic to enjoy the thinking process (Hansen *et al.*, 2013). Cacioppo & Petty (1982) shows that motivation to think harder is different from one to another, such as cognitive misers that have low motivation to think harder and chronic cognizers that have high motivation to think harder. Study of Cacioppo & Petty (1982) provides need for

cognition as stable factor to differs individuals enjoyment of think harder. It shows that high need for cognition individual tend to think harder than low one.

Hansen *et al.*(2013)assumes that high need for cognition individual processes information differently than low one, either external information or information from individual's memory. Customer with low need for cognition are less likely to engaged in information processing, while the high one are more likely to engaged in information processing (Cacioppo, Petty, Feinstein, & Jarvis, 1996). Hansen *et al.*(2013)states that previous studies use more demographic factors, while demographic factors cannot explain information processing well.

Hypotheses Development

Evaluation object of satisfaction is service itself. In order to achieves accurate evaluation, satisfaction is needed to be evaluated from actual service quality (Hansen *et al.*, 2013). If satisfaction is a construct of behavior, then individual with high need for cognitionwill be able to elaborate satisfaction evaluation. Cacioppo *et al.*(1996) also finds that individual with high need for cognition can evaluates satisfaction more than low one. Hansen *et al.*(2013) states that need for cognition has effect on relationship between satisfaction and customer intention. High need for cognition customer evaluates satisfaction more cognitively than low one to decides if they will be loyal to service provider Hansen *et al.*(2013)finds that the more customer can elaborate satisfaction, the stronger effect of satisfaction on loyalty. In this research, satisfaction of customer of Bank Mandiri Yogyakarta has stronger effect on customer loyalty for high need for cognition customer.

H1: Customer satisfaction of Bank Mandiri Yogyakarta has stronger effect on loyalty for high need for cognition customer compared to low need for cognition customer

Bank image does not grow directly from experience of customer with service provider. It grows from interaction with other people and external information (eg. Newspaper, TV, blog, etc.) (Hansen*etal.*,2013).It shows that image has to be evaluated by information processing. Individual with high need for cognition are motivated to do such a thing, so that image has more effect on customer loyalty with high need for cognition. Image evaluation also needs process of comparison satisfaction level with other factors (Hansen *et al.*, 2013). Individual with high need for cognition are more likely to do so. Hansen *et al.*(2013)finds that bank image is more appropriate used by high need for cognition customer. In this research context, increasing of Bank Mandiri Yogyakarta image can be consumed by high need for cognition customer.

H2: Image of Bank Mandiri Yogyakarta has stronger effect on loyalty for high need for cognition customer compared to low need for cognition customer

This research defines value as perception of overall value perceived by customer. Value of service does not only need information elaboration, but also capability to elaborate. Need for cognition does not correlate with special capability to provide detail evaluation of intrinsic quality evaluation (Hansen *et al.*, 2013). Even though both high and low need for cognition

customer have each different perception, high need for cognition customer is more sensitive on accurate value evaluation, so they are less likely to evaluate value and focus more on service quality (Hansen *et al.*, 2013). High need for cognition customer are also more careful with information asymmetric between customer and service provider (Akerlof, 1970). Hansen *et al.* (2013) finds that high needs for cognition customer are more like lyskeptic about accuracy of value evaluation than low one. In this research context, perceived value of low need for cognition customer of Bank Mandiri Yogyakarta can explain more about loyalty.

H3: Customer perceived value of Bank Mandiri Yogyakarta has stronger effect on loyalty for low need for cognition customer compared to high need for cognition customer

Credibility shows service provider characteristic, it is not the intrinsic quality of main service (Ganesan, 1994). Customer does not need big effort of thinking to evaluate credibility compare to other service quality. In banking industry, interest rate and return are intrinsic quality that need effort to calculated by customer, while the way bank serves the customer and response on customer problem are perception of credibility (Zeithaml, 1988). Evaluation of service provider does not need more thinking process than other intrinsic service quality, so it more suitable for low need for cognition customer to decide the loyalty. Hansen *et al.* (Hansen *et al.*, 2013) finds that high need for cognition customer are more likely to evaluate intrinsic value and they determine that credibility is irrelevant if intrinsic quality service is low. In this research context, increasing of Bank Mandiri Yogyakarta credibility can be consumed by low need for cognition customer.

H4: Credibility of Bank Mandiri Yogyakarta has stronger effect on loyalty for low need for cognition customer compared to high need for cognition customer

RESEARCH METHOD

Sample

This research is done in Bank Mandiri Yogyakarta. Research sample are 200 individual customer of Bank Mandiri Yogyakarta.

Operational Definition and Variable Measurement

This research uses primary data that directly accessed from respondent by using questionnaires. The questionnaires use 1 to 6 likert scales for each question with options from “very disagree” to “very agree”.

Loyalty measured by questionnaire with three questions (Hansen *et al.*, 2013; Zeithaml, Berry, & Parasuraman, 1996). Satisfaction measured by questionnaire with four questions of satisfaction, fulfilment of expectation and customer interest to the bank (Hansen *et al.*, 2013; Selnes, 1993). Image measured by questionnaire with three questions of image in front of customer, customer’s friends, and other customer (Hansen *et al.*, 2013; Selnes, 1993). Value measured by questionnaire with six questions related to value received by customer from the bank (Hansen *et*

al., 2013; Hansen, Samuelsen, & Silseth, 2008). Credibility measured by questionnaire with seven questions related to customer problem solving (Ganesan, 1994; Hansen *et al.*, 2013).

In order to examine moderating role of need for cognition, this research performs analysis with two sub sample, which are group of high need for cognition customer and low need for cognition customer. Need for cognition measured by questionnaire with 18 questions relate to thinking activities (Cacioppo, Petty, & Kao, 1984; Hansen *et al.*, 2013). Group of high need for cognition customer consists of customer with value of need for cognition above median value, while low need for cognition customer consists of customer with value of need for cognition below median value (Hansen *et al.*, 2013).

Analysis Method

Analysis method uses multiple regressions. In order to ensure unbiased regression model, this research performs validity and reliability tests, and classical assumption tests. Regression model is as followed.

$$\begin{aligned}
 &CUSTOMERLOYALTY_{highneedforcognition} \\
 &= a_0 + a_1 * SATISFACTION_{highneedforcognition} + a_2 \\
 &* IMAGE_{highneedforcognition} + a_3 * VALUE_{highneedforcognition} + a_4 \\
 &* CREDIBILITY_{highneedforcognition}
 \end{aligned}$$

$$\begin{aligned}
 &CUSTOMERLOYALTY_{lowneedforcognition} \\
 &= a_0 + a_1 * SATISFACTION_{lowneedforcognition} + a_2 \\
 &* IMAGE_{lowneedforcognition} + a_3 * VALUE_{lowneedforcognition} + a_4 \\
 &* CREDIBILITY_{lowneedforcognition}
 \end{aligned}$$

RESULTS AND DISCUSSION

Validity and Reliability Tests

Table1. Validity and Reliability Tests

Variables	Number of Questions	Corrected item-total correlation	Cronbach's Alpha
Loyalty	3	> 0.3	0.900
Satisfaction	4	> 0.3	0.913
Image	3	> 0.3	0.946
Value	6	> 0.3	0.932
Credibility	7	> 0.3	0.886
Need For Cognition	18	> 0.3	0.973

Source: proceed data by SPSS

Table 1 show that questionnaires of 41 questions for 6 variables have corrected item-total correlation value above 0.3 and cronbach's alpha value above 0.6. It shows that questionnaires is valid and reliable and can be used in this research.

Classical Assumption Tests

Table2. Classical Assumption Tests

Test	Result		Notes
	High Need For Cognition	Low Need For Cognition	
<i>Kolmogorov Smirjnov</i>	Sig. > 0.05	Sig. > 0.05	Data normally distributed
<i>Glejser</i>	Sig. > 0.05	Sig. > 0.05	Free of heteroscedasticity problem
VIF and Tolerance	VIF < 10 <i>tolerance</i> > 0.1	VIF < 10 <i>tolerance</i> > 0.1	Free of multicollinearity problem

Source: proceed data by SPSS

Table2 shows that significance value of *Kolmogorov Smirjnov* dan *Glejser* above 0.05. it indicates data is normally distributed and free of heteroscedasticity problem. VIF value below 10 and tolerance value above 0.1 indicates that this research is free of multicollinearity problem.

Hypotheses Test

Table3. Hypotheses Test

Variable	Coefficient		Notes
	High Need For Cognition	Low Need For Cognition	
Constant	0.285	-0.394	
Satisfaction	0.659*	-0.057	H1 accepted
Image	0.205*	0.035	H2 accepted
Value	0.149	0.442*	H3 accepted
Credibility	-0.077	0.645*	H4 accepted
<i>R Square</i>	0.680	0.942	
<i>Sig. F</i>	0.000	0.000	
*Significant in 0.01 (1%)			

Source: proceed data by SPSS

Based on table 3, satisfaction has significant effect on loyalty for high need for cognition customer. It can be seen by coefficient 0.659 with significance value below 0.01. Satisfaction has no effect on loyalty for low need for cognition customer. It can be seen by coefficient -0.057 (insignificant). Based on the result, H1 is accepted, customer satisfaction of Bank Mandiri Yogyakarta has stronger effect on loyalty for high need for cognition customer compared to low need for cognition customer. Individual with high need for cognition will be able to elaborate satisfaction evaluation than low one. It is consistent with Hansen *et al.* (2013) that support individual with high need for cognition can evaluate satisfaction more than low one.

Image has significant effect on loyalty for high need for cognition customer. It can be seen by coefficient 0.205 with significance value below 0.01. Image has no effect on loyalty for low need for cognition customer. It can be seen by coefficient 0.035 (insignificant). Based on the result, H2 is accepted, image of Bank Mandiri Yogyakarta has stronger effect on loyalty for high need for cognition customer compared to low need for cognition customer. Bank image does not grow directly from experience of customer with service provider. It grows from interaction with other people and external information (eg. Newspaper, TV, blog, etc.) (Hansen *et al.*, 2013). It shows that image has to be evaluated by information processing. Individual with high need for cognition are motivated to do such a thing, so that image has more effect on customer loyalty with high need for cognition. Image evaluation also needs process of comparison satisfaction level with other factors (Hansen *et al.*, 2013). Individual with high need for cognition are more likely to do so.

Value has significant effect on loyalty for low need for cognition customer. It can be seen by coefficient 0.442 with significance value below 0.01. Value has no effect on loyalty for high need for cognition customer. It can be seen by coefficient 0.149 (insignificant). Based on the result, H3 is accepted, Customer perceived value of Bank Mandiri Yogyakarta has stronger effect on loyalty for low need for cognition customer compared to high need for cognition customer. Need for cognition does not correlate with special capability to provide detail evaluation of intrinsic quality evaluation (Hansen *et al.*, 2013). Even though both high and low need for cognition customer have each different perception, high need for cognition customer is more sensitive on accurate value evaluation, so they are less likely to evaluate value and focus more on service quality (Hansen *et al.*, 2013). High need for cognition customer are also more careful with information asymmetric between customer and service provider (Akerlof, 1970).

Credibility has significant effect on loyalty for low need for cognition customer. It can be seen by coefficient 0.645 with significance value below 0.01. Credibility has no effect on loyalty for high need for cognition customer. It can be seen by coefficient -0.077 (insignificant). Based on the result, H4 is accepted, Credibility of Bank Mandiri Yogyakarta has stronger effect on loyalty for low need for cognition customer compared to high need for cognition customer. Evaluation of service provider does not need more thinking process than other intrinsic service quality, so it more suitable for low need for cognition customer to decide the loyalty. Hansen *et al.* (Hansen *et al.*, 2013) finds that high need for cognition customer are more likely to evaluate intrinsic value

and they determine that credibility is irrelevant if intrinsic quality service is low. Customer does not need big effort of thinking to evaluate credibility compare to other service quality.

CONCLUSION

Based on data analysis, it can be conclude that:

Customer satisfaction of Bank Mandiri Yogyakarta has stronger effect on loyalty for high need for cognition customer compared to low need for cognition customer. It indicates that high need for cognition customer can elaborate satisfaction evaluation to be loyal customer.

Image of Bank Mandiri Yogyakarta has stronger effect on loyalty for high need for cognition customer compared to low need for cognition customer. It indicates that high need for cognition customer motivated to process any kind of information of bank image.

Customer perceived value of Bank Mandiri Yogyakarta has stronger effect on loyalty for low need for cognition customer compared to high need for cognition customer. It indicates that high need for cognition customer are more sensitive on determinant of accurate evaluation and focus more on experience about intrinsic quality service.

Credibility of Bank Mandiri Yogyakarta has stronger effect on loyalty for low need for cognition customer compared to high need for cognition customer. It indicates that credibility evaluation needs less thinking than other intrinsic quality service, so low need for cognition customer are more depend on credibility valuation to be loyal.

This research is limited to evaluate need for cognition by using questionnaires without considers stimulation to thinking process to customer. Hansen *et al.*(2013)states that stimulation is important to determine behavior, such as information accessing and processing to evaluate individual habit.

Future research is expected to uses stimulation by using experimental method to determine level of need for cognition; such as giving response or answer certain case in certain condition. Stimulation for customer to think gives more accurate picture of customer's need for cognition.

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