

The Role of Relational Reward Benefits for Developing Non-Financial Value of Customer to Organization: Structural Equation Modeling Approach

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Abstract

Cognitive Evaluation Theory illustrates how the policy of reward redemptions interact with the type of offered reward (social or economic) to influence the quality of relationship with consumers. Scope of the study covered relational reward program of a non-paid and accumulated reward program. The hypotheses are empirically tested with a sample of frequent flyer program (FFP) members conducted through online survey (n=475). The data were statistically analyzed using structural equation modeling (SEM) as a first order construct. Results indicate that informational reward policy and high customer involvement have an enhancing effect on all commitment types, regardless of reward type. Commitments are more influenced by social rewards than economic rewards.

Keywords : Relational Benefits, Frequent Flyer Program, Commitments

1. Introduction

Cognitive Evaluation Theory (CET) posit that reward type and reward policy interact each other. The interactions result may affect the customer commitment. Social rewards may increase customers' intrinsic commitment, while economic rewards typically increase extrinsic motivation. Controlling reward signals typically weaken intrinsic motivation and increase extrinsic motivation, while informational reward signals typically increase intrinsic motivation. The interaction between type of rewards and structure of rewards can impact on the strength and nature of motivation of customer (Deci & Ryan, 1985).

Social benefit awarded in flexible reward structure such that customer feels being special valued customer for the organization, can become more intrinsically motivating than just social benefit only. In contrast, social benefit awarded in controlling reward structure, lessens intrinsic motivation and increases extrinsic motivation for economic rewards (Deci & Ryan, 1985). Economic rewards provided in controlling reward policy will reduce extrinsic motivating power in a greater reduction because of having more pressures on autonomy. However, economic

reward can become more intrinsically motivating if it is delivered in flexible reward structure that increases feeling of autonomy or competence (Phillips, 2007). High involvement customers are believed responding against reward benefits by having more increasing intrinsic motivations (Melancon et al., 2011). High-involvement consumers are likely to process information more thoroughly than those of low-involvement (Petty et al., 1983). When the controlling dimensions of a reward are more salient than its informational aspects, the reward will weaken intrinsic motivation. When the informational dimensions of a reward are more salient, the reward will enhance intrinsic motivation (Tietje, 2002). Furthermore, Ryan & Decy (2000) considered that diminishing intrinsic motivation may arise from threats, deadlines, directives, pressure evaluation and imposed goals related to the rewards because they conduce toward an external perceived locus of casuality (i.e. diminished autonomy). Customer will focus on maintaining rewards thus more monetary related reward in exchange for desired behavior. This condition may increase extrinsic motivation which is identified as continuance commitment.

Involvement is defined as an engagement with the product. Involvement is related on personal relevance. Hence, the product is “relevant” to the needs and values of customer and hence interest for product information and commitment to brand choice. Behavioral learning theory suggests that involvement varies depending on the relationship between the individual relevances and benefits or reward offered.

For this reason, this paper is intended to examine the interactive effect of reward type, reward policy and involvement on relationship quality of commitment in terms of loyalty reward program. Scope of the study covers analyzing the nature of a non-paid and accumulated reward program in the context of FFP offered by an airline in Indonesia.

1.1. Framework

Derived from on the above approaches, the model of interactive effect of reward type, reward policy and involvement is developed as framework shown in Figure 1.

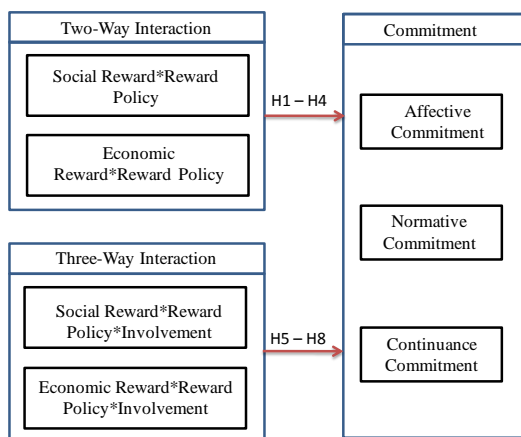


Figure 1. Conceptual Model

In the context of analyzing loyalty reward program, this research expanded previous study on the influence of effort-type program to customer outcome behavior. Understanding how customer exertions in getting the reward (ie. non-paid and accumulated reward program) enhances or undermines customer behavior is a critical area of study. The impact of customer efforts in obtaining rewards has not been considered yet on the past studies. Furthermore, this study is the first to consider construct satisfaction as a relationship quality contributing significant relationship to specific non-financial valuation.

2. Methodology, Variable and Data

2.1. Research Design

The impact of interactions between the nature and structure of rewards on the strength of customers’ commitment were examined using primary data. The data were collected from the membership of loyalty program through online survey in August 2013. The loyalty program was referred to FFP of a state owned airline in Indonesia, Garuda Indonesia. An email invitation with an embedded URL link to the online survey was sent to the respondent to participate in the study. Respondent who participated on the study was awarded an incentive of 300 free miles.

2.2. Sampling Technique

A stratified random sampling was generated by the system for 4,900 members. A total of 475 usable responses were returned (response rate was 9.69%). This number was deemed of acceptable based on the constraints of structural equation modeling. Hair et al. (2010) emphasize that the ratio of free parameters estimated to sample size lie in the range of 10:1 to 5:1. Referring to the recommendation, a minimum sample size 110 is required for representing 22 questionnaires. In term of representation of the population variance and desired precision, Krejcie & Morgan (1970) recommended an optimum sample size (n) of 384 for the population of GFF members at 0.05 of standard error. Hence, the sample size of 475 in the study is denoted as adequate representing the model.

2.3. Variable and Measurement

The variables and scales used in this study are adapted from previous studies with adjustment to the context of FFP. All indicator is measured on a 6-point Likert scale where 1=strongly disagree, 2=disagree, 3=mildly disagree, 4=mildly agree, 5=agree, 6=strongly agree. All items and scale sources of the study are presented in Table 1.

Table 1 Variables

No	Latent Variable	Scales	Items
1	Social Reward Benefit	Modification of Hennig-Thurau et al. (2002)	4
2	Economic Reward benefit		3
3	Controlling Reward Policy	Modification of Melancon et al. (2011)	3
4	Involvement		3
5	Affective Commitment		3
6	Normative Commitment	Meyer & Allen (1991)	4
7	Continuance Commitment		2

2.4. Hypotheses

This study accessed the interactionness of rewards and involvement of members in influencing the commitments. The two-way interactions between type and policy of rewards were accessed through H1 – H4, while three-way interactions amongst type and policy of rewards and involvement were accessed through H5 – H8.

- a. Two-Way Interaction of Reward Type and Policy on Customer Commitment (H1-H4)
 - H1: There will be a negative interaction between perceived social rewards and perceived controlling reward policies on affective commitment
 - H2: There will be a positive interaction between perceived social rewards and perceived controlling reward policies on continuance commitment
 - H3: There will be a negative interaction between perceived economic rewards and perceived controlling reward policies on affective commitment
 - H4: There will be a positive interaction between perceived economic rewards and perceived controlling reward policies on continuance commitment
- b. Three-Way Interaction between Reward Type, Policy & Involvement (H5-H8)
 - H5: There is a negative interaction between perceived social rewards and perceived controlling policy on affective commitment with lower involvement than higher involvement customers
 - H6: There is a positive interaction between perceived social rewards and perceived controlling policy on continuance commitment with lower involvement than higher involvement customers
 - H7: There is a negative interaction between perceived economic rewards and perceived controlling policy on

affective commitment with lower involvement than higher involvement customers

H8: There is a positive interaction between perceived economic rewards and perceived controlling policy on continuance commitment with lower involvement than higher involvement customers

2.5. Data Analysis

The analysis of non-financial value of the members to the company was conducted using two-step approach to SEM (Anderson & Gerbing, 1988), measurement model assessment and structural model assessment. LISREL version 8.30 was used in this study.

2.6. Pre-Test

A pretest was conducted on FFP member samples (n=30) to provide validation that the questions were read and understood the same way by the respondents. The validity test was done by Pearson correlation, while the reliability test was conducted by cronbach alpha test. All indicators passed the validity test with results between 0.704-0.975, and reliability tests showed more than 0.7 of cronbach alpha. The results indicated that the validity and reliability of the questionnaire were acceptable. All of the questionnaires were positioned for full release in online survey to the respondent pool.

3. Analysis and Discussion

3.1. Measurement Model Assessment

The measurement model measured the validities and reliabilities of the observed variables. An observed variable was considered to have acceptable fit as measurement instruments of the latent variables if having construct Reliability (CR) more than 0.7, Variance Extracted (VE) more than 0.5, and a ratio of factor loadings to standard error more than 0.5 (Hair et al., 2010; Joreskog & Sorbom, 1996).

The Confirmatory Factor Analysis (CFA) results showed that the factor loadings for each construct were statistically significant (i.e. ranging from 0.52 to 1.0) with reliabilities ranged from 0.72 to 0.94 and the variances extracted were above the threshold value from 0.56 to 0.83. These results indicate that the measurement model is highly reliable and reasonably valid.

3.3. Structural Model Assessment

The structural equation model specifies the causal relationship among the latent variables and describes the causal effects and the amount of unexplained variances.

The measurement model demonstrated good fit with indices within the designated cutoff (RMSEA=0.075,GFI=0.96,AGFI=0.94,NFI=0.95, NNFI=0.94, CFI=0.96)

Table 4 Result of hypotheses H1-H8 testing

Hypothesis	Hypothesized Direction	Standardized Beta Coefficient	t-value
H1	-	0.37	7.37
H2	+	0.45	5.91
H3	-	0.28	2.58
H4	+	0.28	2.31
H5	-	0.35	7.80
H6	+	0.40	5.82
H7	-	0.28	6.40
H8	+	0.27	4.07

All the interactions indicated positively significant results. On the two-way interaction, reward policy enhanced the relationship between social and economic rewards to all type of commitments to become much stronger. This suggested that FFP members considered social rewards (special privileges, making consumer feel as a special customer, personal recognition, customized treatments and priority reservation) and economic rewards (award ticket, upgrading ticket and other non-air redemption transactions) that are offered in flexible and easy policy/condition would enhance emotional-based, obligation-based, and investment-based bonds of the relational to the airline. The informational reward policy involves the manner in which FFP members feel of having flexibility and or no limitation in getting the members' benefit, perceived few limitations governed by the airline in acquiring the member's benefit, and easy to redeem the benefit.

This finding implies that social rewards of FFP play important role for the members in engaging and strengthening the relationship with the airline by means of emotional bonds (affective commitment), obligation feelings (normative commitment) and also intention to maintain the current level of benefits (continuance commitment). The study found that social reward on the policy circumstances result in higher level of affective and continuance commitments to the airline than economic rewards. Involved customers appear to influence on the same level of commitments on the three-way interactions.

Referring decision making behavior literature, consumers would highly involved on decision making on acquiring product with brand image, high price, high risk, emotional engagement or social norms (Assael on Sumarwan, 2012).

Involvement of the FFP members moderated these two-way interactions such that the impact of social and economic reward in a given reward policy produced a stronger relationship between customer and organization. Behavioral learning theory suggests that involvement varies depending on the relationship between the individual relevances and benefits or reward offered. Under high-involvement, the product and not the reward can become the primary reward (Dowling & Uncles, 1997). High-involvement consumers are likely to process information more thoroughly than those of low-involvement (Petty et al., 1983). Essentially, referring to behavioral learning theory the FFP members are characteristic by high-involvement consumers whom more concerned with the congruency between reward and the product being consumed (Yi & Jeon, 2003). The FFP members contribute to high involvement on the relationship with the airline by means of prioritizing the associated airline' flight, regularly visiting the FFP website to get new information or check the mileage balance, and using the FFP membership card for any relating transaction.

Hypothesis H1, H2, H5, H7 predicted the interaction will have a negative influence on relationship quality with the customer. The result found that the interactions were positively related to affective commitment. One of the reasons might due to the perceived controlling reward policies of FFP were not considered as tightening and threatening such enhancing feeling of emotional bounding of the relationship. Customers feel their autonomy still preserved. Furthermore, the relationship between members and the associated airline is considered mutual relationship in which no party is highly dependent to the other.

The study implies that controlling reward policy enhanced the influence of social and economic reward on customer commitments. Moreover, involvement is proven to enhance the influence of rewards in term of type and policy on customer commitment.

3.4. Managerial Implication

Results indicate that informational reward policy and high customer involvement have an enhancing effect to customers on all commitment types, regardless of reward type. As a managerial recommendation, the goal would be for airline to govern the reward policy for the easiness and

flexibility of FFP members in obtaining and or redeeming the reward. The associated FFP' issues of the difficulty and restriction of the redemption policy could be exempted by means of clear and transparent rules communicated to customer and also offering reward benefits likely preferred by customer.

Using social rewards with flexible reward policy can be particularly helpful in increasing the level of customers' commitment. The impact of social rewards on the two-way and three-way interactions to consumers' commitment is greater than that of economic rewards. Considering that social reward is not costly but producing significant outcomes in strengthening customer commitment, the company is suggested to focus on the level of social rewards than that of economic rewards.

References :

- Anderson, J.C. & Gerbing, D.W. 1988. Structural Equation Modeling in Practice: A Review and Recommended Two Step Approach. *Psychological Bulletin*, 103: 411-423
- Bendapudi, N., Berry, L. 1997. Customers' motivations for maintaining relationships with service providers. *J of Retailing*, 73 (1): 15 – 37
- Bolton, R.N., Lemon, K.N., Verhoef, P.C. 2004. The theoretical underpinnings of customer asset management: a framework and propositions for future research. *J of the Academy of Marketing Science*, 32 (3): 271–292
- Bowen, J., Shoemaker, S. 2003. Development of Taxonomy on Services to gain Strategic Marketing Insights Loyalty: A Strategic Commitment. *Cornell Hotel & Restaurant Administration Quarterly*, 44 18: 431–469
- Dowling, G., Uncles, M. 1997. Do Customer Loyalty Program Really Work? *Sloan Management review*, 38 (4): 71-82
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. 2010. *Multivariate Data Analysis 7th Edition*. New Jersey (US): Prentice Hall.
- Hennig-Thurau, T., Gwinner, K., Gremler, D.D. 2002. Understanding Relationship Marketing Outcomes. *J of the Service Research*, 4 (3): 230–247
- Hess, R.L., Ganesan, S, Klein, N.M. 2003. Service failure and recovery: The impact of relationship factors on customer satisfaction. *J of Academy of Marketing Science*, 31 (2): 127 – 144
- Hirschman. 1970. *Exit, Voice, & Loyalty*. Cambridge, Massachusetts & London: Havard University Press
- Hogan, J., Lemon, K.N., Libai, B. 2003. What is the True Value of a Lost Customer? *J of Service Research*, 5 (3): 196-208
- Ivens, B.S. 2004. How relevant are different forms of relational behavior? An empirical test based on Macneil's exchange framework. *J of Business and Industrial Marketing*, 19 (4/5): 300–309
- Johansson, J. 2009. *Global Marketing. Foreign Entry, Local Marketing & Global Management*. Ed5. Singapore: McGraw-Hill.
- Joreskog, K., Sorbom. 1996. *Lisrel 8: User's reference Guide*. Chicago: Scientific Software International
- Joshi, A.W., Arnold, S.J. 1997. The impact of buyer dependence on buyer opportunism in buyer-supplier relationships: the moderating role of relational norms. *J of Psychology & Marketing*, 14 (8): 823–845
- Krejcie, R.V., Morgan, D.W. 1970. Determining Sample Size for Research Activities. *Educational & Psychological Measurement*, 30: 607-610.
- McCaughey, N.C., Behrens, C. 2011. *Paying for Status? The effect of frequent flier program member status on air fare choice*. [Working Paper]. Department of Economics, Monash University.
- Melancon, J.P., Noble, S.M., Noble, C.H. 2011. Managing rewards to enhance relational worth. *J of Academy Marketing Science*: 39, 341– 362
- Meyer, J., Allen, N. 1991. A three-component conceptualization of organization commitment. *J of Human Resource Management review*, 1 (1): 61–89
- Morgan, R., Hunt, S. 1994. The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58: 20-38.
- O'Connell, J.F. 2009. *Frequent Flyer Programs*. [Working Paper]. Presented to Garuda Indonesia in December 2009.
- Oliver, R.L. 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. *J of Marketing Research*, 17: 46-49
- Phillips, J. 2007. *Relational Program Effectiveness: The Impact of Reward Type & Policy on Customer Commitment and Relational Worth*. [Dissertation]. The University of Mississippi
- Ping, R. 1993. The effect of Satisfaction & Structural Constraints on Retailer Exiting, Voice, Loyalty, Opportunism, and Neglect. *J of Retailing*, 69 (3): 320-352
- Reichheld, F., Sasser, E. 1990. Zero Defections: Quality Comes to Services. *Harvard Business Review*, September-October: 105-111
- Reinartz, J.W. & Kumar, V. 2000. On the Profitability of Long-Life Customers in a Noncontractual Setting: An Empirical Investigation and Implications for Marketing. *J of Marketing*, 64 (4): 17-35
- Rust, R., Zeithaml, V., Lemon, K.N. 2000. *Driving Customer Equity: How Customer Lifetime Value Is Reshaping Corporate Strategy*. New York: The Free Press
- Sumarwan, U., Jauzi, A., Mulyana, A., Karno, B.N., Mawardi ,P.K., Nugroho, W. 2011. *Riset Pemasaran Dan Konsumen. Panduan Riset & Kajian*. Ed 1. Bogor: IPB Press
- Wilson, D.T. 1995. An integrated model of buyer-seller relationships. *J of the Academy of Marketing Science*, 23 (4): 335 – 345

Yang, J., Liu, A. 2003. Frequent Flyer Program: a case study of China airline's marketing initiative – Dynasty Flyer Program. *J of Tourism Management*, 24 (1):587-595