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# VIRTUAL SOCIAL IDENTITY DEVELOPMENT FOR CUSTOMER ELECTRONIC WORD-OF-MOUTH PARTICIPATION

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## Abstract

Electronic Word-of-Mouth (eWOM) plays a persuasive role in influencing consumers' attitudes and purchase decision. There are many efforts to identify the effect of eWOM on the customers' purchase decision. However, few studies on the intrinsic motivation of eWOM participation in online shopping malls have been published to date. The main goal of this study is to identify the factors that motivate customers to participate in eWOM and to suggest relevant strategies for leading customers' eWOM participations. To accomplish this goal, we propose a structural model mainly based on social identity theory. In addition, customer citizenship behavior (CCB) which has been extended from organizational citizenship behavior (OCB) is considered. And the effect of perceived extrinsic incentives such as; e-money or e-point on eWOM participation in the online shopping mall is contrasted with the effect of intrinsic motivation.

**Keywords:** Electronic Word-of-Mouth, Virtual Social Identity, Customer Citizenship Behavior

## Introduction

As e-commerce markets have grown, the competitions in the online markets also become very intense [1]. In such severe market conditions, firms are proactively trying to encourage consumers to "spread the word" about their products or services in online space [2]. eWOM has higher credibility, empathy and relevance to customers than marketer-created sources of information [3]. Therefore, it has a significant influence on customers' purchase behavior [4]. And the number of reviews on products also strongly affects the purchasing decision of Internet shoppers because it means that many people purchased the product [5].

Although there have been many studies emphasizing the importance of eWOM, only a little effort or research has been extended towards identifying the intrinsic forces that motivate eWOM. As offline word of mouth can have an effect on sales [6], if the owners of online markets know the factors leading eWOM, they can operate proper eWOM marketing strategies. The purpose of

this study is to investigate the psychological, social, and economic motivations of eWOM participation in the e-commerce site.

The questions being addressed in this paper are 'What are the intrinsic factors that motivate eWOM participation in online shopping malls?' 'What features of the online shopping mall sites can encourage the factors?' and 'What factors affects more strongly on eWOM between virtual social identity and economic incentives?' To answer these questions addressed here, a research model is proposed based on psychological and behavioral theories.

## Literature Review

### eWOM

Electronic Word-of-Mouth (eWOM) is defined as "any positive or negative statements made by potential, actual, or former customers about a product and company via the Internet [7]." eWOM commonly includes the form of online review describing the good and ratings consist of numerical score evaluating the good [5]. eWOM provides consumers the options for gathering unbiased product information and advices from other consumers. As offline word-of-mouth has been shown to play a major role for customers' buying decision [8], the influence of online product review on consumer choice has also been extended with exponential growth of internet usage [9].

As the impacts of eWOM becomes greater, there have been many efforts and studies that conduct the correlation between eWOM and purchasing decision of customers or sales of the online shopping malls. In the past, the researchers investigated the effects of positive or negative reviews within specific purchasing situations, such as eBay.com. The current studies have focused on the impacts of eWOM on purchasing decisions of consumers across multiple product categories [10]. For instance, Ambler and Bui found the impacts of additional reviews on sales of digital micro-products [5].

However, there have been few studies identifying the intrinsic factors that motivate customers to produce eWOM in online shopping malls. One of the only a few relevant studies uses a survey methodology that respondents were

explicitly asked to report the motives of their e-WOM behavior. Henning-Thurau looked at what motivates consumers to post online reviews in general [7]. They found that consumers' desire for social interaction, desire for economic incentives, their concern for other consumers, and the potential to enhance their own self-worth are the primary factors.

However, these are not enough to map out the real business applicable strategies that can motivate eWOM participations.

### Theoretical Framework

In order to identify the factors that motivate eWOM participations of online shopping mall customers, this study mainly applies two frameworks. First the social-psychological framework based on customer citizenship behavior and social identity theory, and the other, the economic framework related with extrinsic incentives.

#### Customer Citizenship Behavior

Customer citizenship behavior (CCB) [11], also referred to as 'extra role behavior' [12], or 'customer voluntary performance' [13], or even 'pro-social behavior' [14], offers a means by which an organization can gain a competitive edge without any cost. Customer citizenship behaviors may be described as helping behaviors directed towards the service organization or other individuals, such as service employees or fellow customers.

There are mainly eight types of customer citizenship behaviors: positive word of mouth participation which means favorable, informal, person-to-person communication between a perceived non-commercial communicator and receiver regarding a brand, a product, an organization, or a service. [15], [16] displays of relationship affiliation [11]; making suggestions for service improvements [17]; policing of other customers [18]; voice [19], [20]; flexibility [11]; participation in organization events/activities [18], [11] and benevolent acts of service facilitation [17].

The customer citizenship behaviors can be revealed not only in offline communities but also in online communities as eWOM participation. And these also can be applied to online shopping malls because online shopping mall is one of the virtual communities. Without extrinsic incentives or punishment, eWOM benefits the operators of online shopping malls and the customers.

According to [21], there are correlation coefficients among three types of social identity and the participation behavior of members in e-communities. Those behaviors can be transferred to member loyalty to the service providers in online

space [22].

#### Social Identity Theory

Social Identity is defined as the individual's knowledge that he/she belongs to a certain social group, with some emotional and value significance of him/herself to the group membership [23]. According to [24], social identification is basically the perception of belongingness to a group classification. The individual perceives him/herself as an actual or symbolic member of the group. A core tenet of social identity theory is that, defining them in terms of a particular social identity, individuals act to maintain or enhance the positive distinctiveness of the group with which that identity is associated [25]. Bagozzi and Dholakia addressed that people who have high level of social identity tend to desire to, at least, maintain their positions in the group [26]. They are more likely to expand their social networks because they want to maintain the structure of their groups and their own positions in the group as well. It implies that a person who has strong social identity more tends to vigorously participate in the activities related with the group or community for expanding their social network as their social capital.

Ellemers and Bergami and Bagozzi pointed out that there are three aspects of social identity: cognitive social identity, affective social identity, and evaluative social identity [27], [28]. These three social identities can be referred to as self-categorization, affective commitment, and organizational-based self-esteem, respectively, and have been regarded as sub-constructs of the concept of social identity [29]. Table 1 presents definitions of these three aspects of social identity.

Tajfel and Turner identified that feelings of social identity emerge through three consecutive processes [30]. The first process of social identity is self-categorization, which refers to group members, so that members can have positive distinctiveness in terms of 'we' rather than 'I'. This can be seen in that people tend to classify themselves and others as belonging to various social categories based on favoritism. The second process is social comparison, which is related to social categorization in the previous process. According to Tajfel, social comparison refers to "how positive or negative is his evaluation concerning this group membership [31]. The last process is social identification, and it is the extent of his/her emotional investment both in his/her membership awareness and evaluations base on the first and second process [31]. Mael and Ashforth define social identification as "the individual perceives him or herself as an actual or symbol member of the group" [24].

Aspects of Social Identity	Definition
<b>Cognitive Social Identity</b> (Self-categorization)	“The perceived overlap between one’s own self-concept and the identity of the organization/group” (Bergami and Bagozzi 2000)
<b>Affective Social Identity</b> (Affective Commitment)	“Identification with, involvement in, and emotional attachment to the organization/group” (Allen and Meyer 1996)
<b>Evaluative Social Identity</b> (Organization-based Self esteem)	Evaluation of self-worth deriving from one’s membership in the organization/group” (Bergami and Bagozzi 2000)

**Table 1. Three Aspects of Social Identity (adapted form (Moon et al. 2006))**

There have been many studies showing that strong social identity affects individuals’ job satisfaction [32], leadership [27], [33], and loyalty to the organization.

According to studies based on interaction theory, an individual in a particular group/organization can develop three different aspects of social identity through appropriate social interactions with other members [34].

The findings from studies in the area of e-community support imply that social identity can be developed in the online environment [26]. The virtual social identity can be developed through web features enabling communications and interactions among the members of virtual community [22].

### Extrinsic Incentives

According to the ten principles of economics, people respond to extrinsic incentives [35]. Extrinsic incentives generally play an important role in decision-making of human [36]. The effect of extrinsic incentives on human participation has been studied in a number of papers. For instance, the empirical study by Allen strongly supports the view that financial extrinsic incentives have an important effect on the work attendance decisions of employees [37]. Brostrom also found that extrinsic incentives affect work absence behavior [38]. As the extrinsic incentives influence human behaviors in real space, it also has a strong effect in online space. Rafaeli found that the participation of experts in Google Answers, a fee-based information market where experts sell their expertise to askers for a price quoted by the askers is associated with extrinsic incentives [39]. This supports that extrinsic incentive is a motivation of participation in online forums in general and fee-based, public information markets.

Therefore, the extrinsic incentives can be the factors motivate eWOM participations.

## Research Methodology

### Research Model

Based on the two theories, customer citizenship behavior and social identity theory and extrinsic incentives; the research model for identifying the factors motivate eWOM participation in online shopping malls and relevant strategy is proposed in Figure1. Organizational citizenship theory is also considered for explaining the online shopping mall customers’ eWOM behaviors as a virtual citizenship behavior that can benefit online shopping malls.

We hypothesize that through certain types of web features on an interface of online shopping mall sites, people can develop their virtual social identity. As a result, people who have higher social identity level in the shopping mall, they tend to leave eWOM more frequently.

*H1: Perceived Interactions thorough the interface of online shopping mall positively influences virtual social identity in an online shopping mall.*

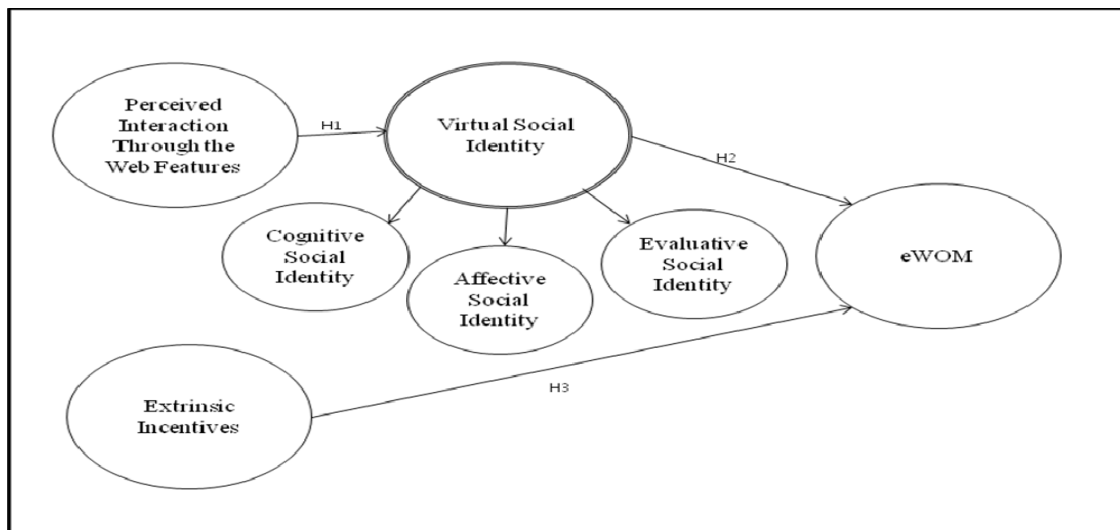
*H2: Increased virtual social identity positively influences eWOM participation in an online shopping mall.*

We also hypothesize that the perceived extrinsic incentive for e-WOM is another factor that motivates eWOM participation.

*H3: Extrinsic Incentives motivate eWOM participations in an online shopping mall.*

### Construct Operationalization

This study conducts the survey method to test the



**Figure 1. Research Model**

research model. Survey instruments are developed by identifying appropriate measurements from a literature review. Some modifications are made to the existing scale to make those more suitable in the context of virtual space, especially online shopping malls.

The survey items for measuring Perceived Interaction through the Online Shopping Mall and Virtual Social Identity were adapted from previous study, [22] that is based on several literatures, such as [40], [28], and [27] were referred for measuring Virtual Social Identity.

For surveying perceived extrinsic incentives, the survey items of [7] are adapted to online shopping mall. And the most correct method measuring the frequency of eWOM is counting the number of reviews that the respondents left for a certain period in an online shopping mall site. All the measure items developed for this study are shown in Appendix 1

#### **Pilot Test**

Before collecting the data, a pilot study is conducted to validate the measurement model of this study. We check out whether we developed relevant measurement

instruments (see Appendix) through a reliability check and factor loadings. Likert scales (1-7), with anchors ranging from “strongly disagree” to “strongly agree,” were used for most questions pertaining to each construct.

A web-based survey form was developed and e-mails were distributed to facilitate online customers to participate in this pilot test. A total of 39 respondents joined for this pilot test, 23 responses were usable for the test among others. All respondents are customers of an online book/CD/DVD shopping mall, and all of them have experiences of posting eWOM at least once. 44.4% of them are male, and the average age is 35.17 year old.

First of all, Cronbach alpha was investigated as a reliability test. As shown in Table 2, all constructs passed the test where each alpha value is greater than 0.70.

However, it was found that when INT5, INT7, AS4, and ES3 are eliminated, the alpha value of each construct would be increased to .905 (INT), .898 (INT), .938 (AS), and .973 (ES), respectively. In addition to the reliability test, individual item loadings from the Partial Least Square method were investigated. An individual item loading of 0.70 or

Constructs	Number of Item	Cronbach's Alpha
Perceived Interaction through the Web Feature (INT)	8	.886
Cognitive Social Identity: Self-categorization (CS)	3	.910
Affective Social Identity: Affective Commitment (AS)	5	.932
Evaluative Social Identity: Group-based Self-esteem (ES)	3	.938
Extrinsic Incentive (EI)	2	.943
eWOM (WOM)	1	N/A

**Table 2. Reliability Values from Pilot Test**

higher from the Partial Least Square method is considered adequate. Finally, it was found that all factor loadings, except for INT5 (.326) and INT7 (.455), are greater than 0.70.

After these quantitative analyses, several changes were recommended to improve the survey questionnaire; INT5 and INT7 are deleted from the measurement model, and AS4 and ES3 are reworded for the future data collection. In addition, one more measurement item will be added for Extrinsic Incentive (EI).

### Future Plans and Discussion

The main goal of this study was to provide an integrated model of eWOM participation behavior based on socio-psychological theories. What facilitates online customers to leave reviews, opinions, and recommendations on products on the online shopping mall? To answer this research question of this study, we will collect more than 200 samples for structural equation modeling analysis using PLS. Several real online shopping malls will be used for the data collection, and the result will be used to develop effective eWOM strategies enhancing customers' eWOM participation behavior.

### References

- [1] Schmitz, SW. and Latzer, M. "Competition in B2C e-Commerce: Analytical Issues and Empirical Evidence," *Electronic Markets*, 12(3), 2002, pp.163-174.
- [2] Godes, D., Mayzlin, D., Chen, Y., Das, S., Dellarocas, C., Pfeiffer, B., Libai, B., Sen, S., Shi, M., and Verlengh, P. "The Firm's Management of Social Interactions," *Marketing Letters*, 16(3), 2005, pp.414-428.
- [3] Bickart, B. and Schindler, R.M. "Internet forums as influential sources of consumer information," *Journal of Interactive Marketing*, 15(3), 2001, pp.31-40.
- [4] Piller, C. "Everyone Is A Critic in Cyberspace," *Los Angeles Times*, Dec 3, 1999, A1.
- [5] Amblee, N. and Bui, T. "The impact of electronic word-of-mouth on sales of micro-products: A longitudinal analysis of Amazon shorts," *Hawaii International Conference on System Science* (IEEE 07) 2007.
- [6] Beck, J. "The sales effect of word-of-mouth: A model for creative goods and estimates for novels," *Working paper*, Humboldt University, Berlin, Germany, 2005.
- [7] Henning-Thurau, T., Gwinner, K.P., Walsh, G., Gremler, D.D. "Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?" *Journal of Interactive Marketing* 18(1), 2004, pp.38-52.
- [8] Richins, M.L., and Root-Shaffer, T. "The Role of Involvement and Opinion Leadership in Consumer Word-of-Mouth: An Implicit Model Made Explicit," *Advances in Consumer Research*, 15, 1988, pp.32-36.
- [9] Dellarocas, C. and Narayan, R. "A Statistical Measure of a Population's Propensity to Engage in Post-Purchase Online Word-of-Mouth," *Statistical Science*, 21(2), 2006, pp.277-285.
- [10] Hankin, L. "The Effect of User Review on Online Purchasing Behavior across Multiple Product Categories," *Working Paper*, University of California, Berkeley, 2007.
- [11] Gruen, T.W. "The Outcome Set of Relationship Marketing in Consumer Markets", *International Business Review*, 4(4), 1995, pp. 447-69.
- [12] Keh, H.T. and Teo, C.W. "Retail Customers as Partial Employees in Service Provision: A Conceptual Framework," *International Journal of Retail and Distribution Management* 29(8), 2001, pp. 370-78.
- [13] Bailey, J.J., D.D.Gremler, and M.A. McCollough. "Service Encounter Emotional Value: The Dyadic Influence of Customer and Employee Emotions." *Services Marketing Quarterly*, 23(1), 2001, pp. 1-25.
- [14] Bettencourt, L.A. and S.W. Brown. "Contact Employees: Relationships Among Workplace Fairness, Job Satisfaction and Pro-social Service Behaviors", *Journal of Retailing*, 73 (1), 1997, pp. 39-61.
- [15] Gremler, D.D. and K.P.Gwinner. "Customer-Employee Rapport in Service Relationships", *Journal of Service Research*, 3(1), 2000, pp.82-104.
- [16] Harrison-Walker, L.J. "The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Customer Commitment as Potential Antecedents", *Journal of Service Research*, 4(1), 2001, pp. 60-75.
- [17] Bettencourt, L.A. "Customer Voluntary Performance: Customers as Partners in Service Delivery," *Journal of Retailing*, 73 (1), 1997, pp. 39-61.
- [18] Podsakoff, P.M., S.B. MacKenzie, R. H. Moorman, and R.Fetter. "Transformational Leader Behaviors and their Effects on Followers' Trust in Leader, Satisfaction, and Organizational Citizenship Behaviors," *Leadership Quarterly*, 1(2), 1990, pp.107-42.
- [19] Singh, J. "Consumer Complaint Intentions and Behavior: Definitional and Taxonomical Issues," *Journal of Marketing*, 52, January, 1988, pp. 93-107.

- [20] Spake, Deborah F., Sharon E. Beatty, Beverly K. Brockman, and Tammy Neal Crutchfield, "Consumer Comfort in Service Relationships: Measurement and Importance," *Journal of Service Research*, 5(4), 2003, pp.316-332.
- [21] Dholakia, U.M., Bagozzi, R.P., Pearo, L. K. "A Social Influence Model of Consumer Participation in Network- and Small-Group-Based Virtual Communities," *International Journal of Research in Marketing*, 21, 2004, pp.241-263.
- [22] Moon, J., Li, J., and Sanders, G.L. "The Role of Virtual Social Identity through Blog Use in Social Life," in: Proceedings of the 12<sup>th</sup> Americas Conference on Information Systems, Accapulco, Mexico, 2006.
- [23] Adams, D. and Hogg, M.A. "Social Identity Theory: Constructive and Critical Advance," New York, 1990, 1-9.
- [24] Mael, F. and Ashforth, B.E. "Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification," *Journal of Organizational Behavior*, 13(2), 1992, pp.103-123.
- [25] Haslam, S.A., Eggins, R.A., and Reynolds, K.J. "The ASPIRe Model: Actualizing Social and Personal Identity Resources to Enhance Organizational Outcomes," *Journal of Occupational and Organizational Psychology*, 76(1), 2003, pp.83-113.
- [26] Bagozzi, R.P. and Dholakia, U.M. "Open Source Software User Communities: A Study of Participation in Linux User Groups," *Management Science*, 52(7), 2006, pp.1099-1115.
- [27] Ellemers, N., Kortekaas, P., and Ouwerkerk, J. "Self-categorization Commitment to the Group and Group Self-esteem as Related but Distinct Aspect of Social Identity," *European Journal of Social Psychology*, 29(3), 1999, pp. 371-389.
- [28] Bergami, M. and Bagozzi, R.P. "Self-categorization, Affective-commitment, and Group Self-esteem as Distinct Aspects of Social Identity in the Organization," *British Journal of Social Psychology*, 39(4), 2000, pp.555-577.
- [29] Bagozzi, R.P. and Dholakia. "International social action in virtual communities," *Journal of Interactive Marketing*, 6(2), 2002, 2-21.
- [30] Tajfel, H., and Turner, J.C. "In The Psychological of Intergroup Relations," in: Eds, Austin, W. G. and Worchel, S., 1979.
- [31] Tajfel H. "In Differentiation between Social Groups: Studies in the psychology of intergroup relations," in *Academic Press*, London, UK, 1978.
- [32] Brenetto, Y. and Farr-Wharton, R. "Using Social Identity Theory to Explain the Job Satisfaction of Public Sector Employees," *International Journal of Public Sector Management*, 15, 2002, pp. 534-551.
- [33] Grewal, R., Mehta, R., and Kardes, F.R. "The Role of the Social-Identity Function of Attitudes in Consumer Innovativeness and Opinion Leadership," *Journal of Economic Psychology*, 21(3) 2000, pp.681-694.
- [34] Maltas, C.J. "The Rural Music Teacher: An Investigation of the Relationship between Socialization Factors and career Satisfaction Using Symbolic Interaction Theory," in: *School of Music.*, University of Oklahoma., 2004.
- [35] Mankiw, N. Gregory, "Principles of Economics," Dryden Press, Forth Worth, TX, 1998.
- [36] Lawler, E.E. "The Strategic Design of Reward Systems. In C. Fombrun, N. Tichy, & M. Devvana (Eds.)," *Strategic Human Resource Management*, 1984, pp. 127-147, New York: Wiley.
- [37] Allen, S.G. "An empirical model of work attendance, Review of Economics and Statistics," *The MIT Press*, 63, 1981, pp.77-87.
- [38] Brostrom, G., Johansson, P., and Palme, M. "Economic Incentives and Gender Differences in Work Absence Behavior," *Working paper*, Institute for Labor Market Policy Evaluation, 2002.
- [39] Rafaeli, S., Raban, D., Ravid, G. "Social and Economic Incentives in Google Answers, Center for the Information Society, Jacobs Bldg., University of Haifa, Mount Carmel, Haifa 31905, Israel, 2005.
- [40] Allen, N.J., and Meyer, J.P. "Affective, continuance, and normative commitment to the organization: An examination of contrast validity," *Journal of Vocational Behavior*, 49(3), 1996, pp 252-276.

## Appendix

### Operationalization of Latent Variables

#### Perceived Interaction thorough the Web Features

(Moon et al. 2006)

**INT1** I share ideas with other customers efficiently through the feature of the online shopping mall interface.

**INT2** I express my feelings or thoughts about the products I bought or will buy to other customers efficiently through the features of online shopping mall interface.

**INT3** I can check what other customers buy and the opinion about the products in the online shopping mall without any difficulty.

**INT4** I can check how many other customers have visited my blog provided by the online shopping mall and read my reviews.

**INT5** I can find out who visited my blog in the online shopping mall.

**INT6** Quick response is possible between I and other customers through features of the interface provided by the online shopping mall.

**INT7** This online shopping mall does not impose a length (size) limitation on postings.

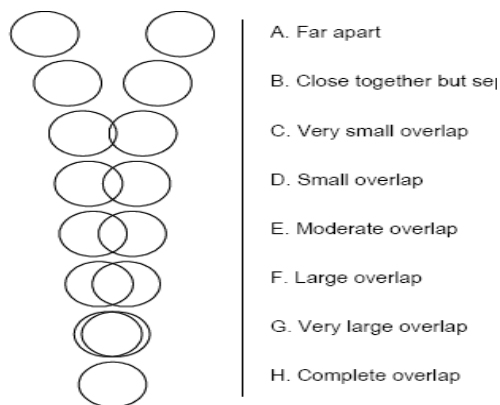
**INT8** Overall I think I am satisfied with interaction with other customers through the features of the online shopping mall interface.

#### **Virtual Social Identity** (Moon et al. 2006)

##### *Cognitive Social Identity*

**CS1** I believe I am similar to other customers on the online shopping mall site.

**CS2** I perceive an overlap between my self-identity and customers group of the online shopping mall site.



**CS3** Imagine that one of the circles at the left in each row represents your own self-definition or identity and the other circle at the right represents the identity of the customers group of the online shopping mall. Please indicate which case (A, B,

C, D, E, F, G, or H) best describes the levels of overlap between your own and customers group's identity.

##### *Affective Social Identity*

**AS1** I am emotionally attached to the group of the customers on the online shopping mall site.

**AS2** I feel feelings of belongingness towards the group of customers on this online shopping mall site.

**AS3** I am happy to spend time with the group of customers on the online shopping mall site.

**AS4** I enjoy discussing the group of customers on the online shopping mall site with people outside it.

**AS5** The customers group of the online shopping mall site has a great deal of personal meaning for me.

##### *Evaluative Social Identity*

**ES1** I am a valuable member of the group of customers in the online shopping mall site.

**ES2** I am an important member of the group of customers in the online shopping mall site.

**ES3** I feel that I am respected by other customers of the group in the online shopping mall site.

#### **Perceived Extrinsic Incentives** (Henning-Thurau T. et al. 2004)

**EI1** The extrinsic incentives for the comments about products that I bought are valuable for me.

**EI2** The extrinsic rewards that I can get when I leave comments about products in the online shopping malls are very useful for me

**EI3** I expect extrinsic incentives, such as e-money or e-point when I post review or comments on products on the site.(will be added)