

# Exploring the Determinants of Repurchase Behavior in C2B e-Commerce

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**Abstract:** The proliferation of Internet leads to the rapidly growth of online business. Consumer-to-Business e-Commerce is getting popular because of Internet recently. Online group-buying is a most representative form of C2B that ignores the limit of distance and raises the power of price negotiation and increases the ability to get better purchase conditions. This study aims to explore the factors that affecting customers' satisfaction and intention to repurchase of online group-buying with more comprehensive understanding. Through the view of shopping and social network elements of group-buying, this study introduced convenience, price and novelty as shopping elements and community identification as social network element. In order to understand the relationship among these factors and customers' satisfaction and repurchase intention, the research data collected from 352 experienced participants and examined by structural equation modeling method. The results indicated that three shopping elements have positive effect on satisfaction significantly but only price has significant influence on repurchase intention. Satisfaction has positive impacts on both of community identification and intention to repurchase. However, community identification has no significant influence on repurchase intention. These findings provide several implications for both research and practice in online group-buying behavior.

**Key words:** Community identification, intention to repurchase, online group buying, satisfaction.

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## 1. Introduction

With the rapid development of Internet, the information and communication technologies (ICTs) have created various forms of online business activity and provided more opportunities for marketers and consumers. Consumer to business (C2B) is one of e-Commerce that highly depends on ICTs. Online group-buying, a most representative form of C2B e-Commerce, aggregates consumers who have the same demands for services or products [1]. It not only ignores the limit of distance, but also raises consumers' power of price negotiation and increases the ability to get better purchase conditions from business. In Taiwan, there are many famous and popular group-buying websites and forums such as ihergo and PTT's BuyTogether. By taking advantage of group-buying websites, group-buying initiators could aggregate disparate buyers to accomplish group-buying activity. Since the online group buying is getting popular, understanding the determinants of consumer behavior of this e-Commerce form is more and more important.

In recent years, many researchers have paid attention to online group-buying topics and investigated the

factors of purchase intention or motivation of online group-buying behavior. Most of prior studies concerned the price topic of online group buying [1], [2], but there are many other factors would affect behavior intention of online consumers such as attitudes, reference group, involvement, trust, saving time and saving effort [3], [4].

However, group buying has two elements, shopping and social network [5]. Every single transaction is completed by many people that aggregate through group-buying initiator and group-buying website. The group-buying website thus forms a big virtual community or many sub-communities classified by location, product or other preferences. According to this, the community that a consumer belongs to may have great impact on the consumer's intention, but there are few researches focusing on this issue and have not gone deep yet [6].

Accordingly, the factors mentioned above indicate the consumers may not consider only the price factor from the economic perspective and would be affected by other factors that need to further empirical investigate. This study, therefore, aims to understanding the customers' behavior of group buying with more comprehensive dimension including both of shopping and social network elements. In the element of shopping, the present study explores the antecedents of the satisfaction of group buying behavior from the view of shopping orientation including the concepts of price, convenience and recreational suggested by Stephenson and Willett [7]. Contrarily, the social network element of group buying is community identity because of the online community environment. The purpose of the present study tries to develop a theoretical foundation that integrates key constructs from previous studies and to investigate factors influencing group buyers' intentions and behavior via both of community members and customers' perspective.

## **2. Literature Review and Hypothesis**

### **2.1. Shopping Orientation**

This study proposes that website quality has enhanced users' perceived benefits (including convenient, price, interpersonal, and experiential benefits) and further influences user's satisfaction and intention to reuse. The community identification is grouping variable and provides the high and low degree groups. The research model tested in this study is shown in Fig. 1. Shopping orientations reflect consumer needs for products and services and determine personal, economic, recreational, convenience and social motivations for shopping [7]-[10]. Customers would evaluate comprehensively based on themselves during the shopping process, shopping orientation represents a cognitive and affective aspect of customers' behavior and links closely with various personality traits [11], [12]. They may have a unique focus when they enter a store and shop. Some consumers consider a good price, while others are enjoy in the shopping experience. Depending on individuals' wants, consumers customize their own shopping styles which may contain different orientations [13]. Furthermore, shopping orientations not only indicate the customers' concern, but also identify which kind of benefit they want to acquire during shopping process. As a psychographic measure, shopping orientations intend to capture the motivations of shoppers and/or the desired experiences and goals they seek when completing their shopping activities [14]. This study thus takes advantage of three kinds of shopping orientations to explore the determinants of group buying behavior form economic, recreational and convenience aspects [7].

### **2.2. Group Buying Communities**

As Tan and Tan [5] suggested, group buying has shopping and social network elements. In online group buying, every single transaction is completed by many people that aggregate online through initiator or

group-buying website. This kind of shopping thus has a tendency to form virtual communities that are classified by location, office, school, community or other preferences.

According to this, the community that a consumer belongs to may have great impact on the consumer's intention, but there are few researches focusing on this issue and have not gone deep yet [6]. In addition to the determinants that derive from shopping orientation, this study also explores the identification factors through community aspect that can conceive as a social network element. In virtual community related research, communication identification is an important factor that has a significant impact on various human behaviors [15], [16].

### 2.3. Research Model and Hypothesis

This study intends to explore the determinants of individuals' online group buying behavior from the views of shopping orientations and community dimension. In order to understand the consumers' intention to group buying, this study evaluates the satisfaction of their prior group buying experiences and intention to repurchase through group buying service. According to the shopping orientations (Stephenson and Willett, 1969), the present study proposes convenience, price and novelty that represent the convenience, economic and recreational shopping orientations separately. In addition, identification represents the community dimension. Therefore, the research model of this study is shown in Fig. 1.

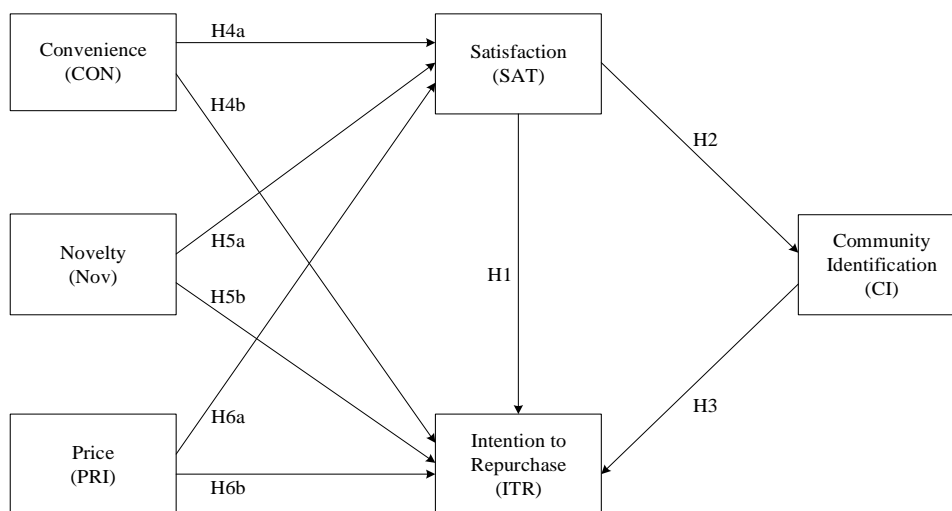


Fig. 1. Research model.

#### 2.3.1. Satisfaction and intention to repurchase

Evaluations of the satisfaction of information systems are important issues to information management. Prior studies about information systems have shown that when users are satisfied with a system, they are more likely to use the system [17]. Thus, user satisfaction has continued to be an important topic for researchers [18]-[20], and especially is used to discuss the intention to use service or products for online context [21]. Furthermore, previous researches have indicated that satisfaction is a reliable predictor of intention to reuse [22]. When consumers are satisfied with this group-buying website, they will also repurchase through the same service to do the shopping. Thus, this research proposes the following hypothesis:

H1: User satisfaction has positive effect on intentions to repurchase.

#### 2.3.2. Community identification

In group-buying context, people with same interests, demand or living in the same area will gather and

become many virtual communities. People participating in the same group-buying transaction can discuss their experiences or product information, and then in-group is formed. Members will find their identity in community and be more willing to interact with other members [23]. Bressler and Grantham [24] found the community identification can meet individual basic need, and Hagel and Armstrong [25] suggested identification of community could help consumers to build interpersonal relationship and satisfy the need of transaction. Further, Pai and Tsai [16] suggested the identification of community would be influence significantly by satisfied experience and has a positive impact on the repurchase behavior of online store. Thus, this research proposes following hypothesis:

H2: User satisfaction has positive effect on identification.

H3: Identification has positive effect on intention to repurchase.

### **2.3.3. Shopping orientation of group buying**

The present study takes advantage of shopping orientations to frame the determinants of group buying behavior. Shopping orientations are common propensities toward shopping behavior and operationalized based on activities, interests and opinion statements related to shopping [26][27]. As Brown, Pope and Voges [28] suggested, individuals may be motivated by one of possible shopping orientations or all simultaneously. In addition, prior researchers have investigated the role of shopping orientation on consumers' intentions to purchase online, but with mixed results [29]. Since shopping orientation differs across product types and shopping environments, the three basic dimensions of shopping orientation in the research model of this study are selected from previous research on shopping orientation [7]. Hence, inferring from shopping orientations, this study identifies antecedents of group buying which including price, novelty-seeking and convenience.

Although these factors are derived from shopping orientations, the importance of them for consumption behavior has already been proved in prior studies. First, according to Osman [30], customers with economical concern are likely to shop at stores that are perceived to offer goods at cheaper prices than other stores. Price is an important factor in consumption behavior that would lead to significant influence on customers' motivation [2]. In group buying context, consumers not only can bargain through cumulating purchase volume, but also can lower the freight fee by share [1]. Past research suggested that better price would increase customers' intention to participate group buying activities [1], [31].

Second, convenience orientation refers to customers who approach shopping from time-saving point of view [32]. Seiders *et al.* [33] found that about 52% customers are unwilling to spend time in shopping. Further, convenience is conceived as a main reason why consumers use the Internet for the purpose of purchasing [34], [35]. Donthu and Garcia [36] and Rohm and Swaminathan [4] also found that online shoppers were likely to concern convenience which is saving both time and effort. Group-buying, just like online shopping, offers a convenience way to communicate with seller and initiator and can pick up the goods from the local initiator nearby.

Thus, according to the feature of online group buying and the finding of past studies that suggested the consumers who value convenience are more likely to buy [27], the current study proposes the convenience would influence on the group buying behavior.

Third, the orientation of recreation indicated the enjoyment of shopping and emphasizing the emotional aspects of shopping [37], [38]. Since recreational orientation is associated with the traits of novelty consciousness [39], this study introduces this feature to fit the various and novelty features of group buying goods that collected by initiators, websites or community members. Since group buying is an activity that need a lot of people to participate, the information of a large variety of merchandise would be collected and informed on the group buying communities, websites or other communication channels. Though this

mechanism, customers who would like to experience new and difference goods or services could be satisfied. According to the study of Cheng, Wang, Lin and Vivek [40], the experience of novelty could lead to online shopping intention and repurchase intention.

Based on the literature review and the features of group buying mention above, this study proposes following hypothesis:

H4a: Convenience has positive effect on satisfaction.

H4b: Convenience has positive effect on intention to repurchase.

H5a: Novelty has positive effect on satisfaction.

H5b: Novelty has positive effect on intention to repurchase.

H6a: Price has positive effect on satisfaction.

H6b: Price has positive effect on intention to repurchase.

### **3. Research Method**

#### **3.1. Instrument**

To assure the validity of the instrument, items used to measure the constructs were adapted from the previous research and modified the wording of the questionnaire to fit the group buying context. Three items on convenience were developed from Rohm & Swaminathan [4]. The items used to measure price and novelty were adapted from Bhatnagar & Ghose [41] and Wolfinbarger & Gilly [3] and items used to measure user satisfaction and intention to repurchase were adopted from Wang [42]. The items for community identification were adopted from Chiu *et al.* [15]. All the items had been further modified as appropriate. The questionnaire used seven-point Likert scale from “strongly disagree” to “strongly agree”. Pre-test was used to validate the measurement. The pre-test was conducted with experienced group buying users and experts in e-commerce. Based on the feedback at the pre-test, several questionnaire items were modified to reflect more clearly the survey’s purpose.

#### **3.2. Participants**

Participants who had experience of online group buying were recruited through convenience sampling approach in this study. The main reason of this study needed an experienced subjects is because the prior experience is needed to test their satisfaction and intention to repurchase. In order to retain the representativeness of the sample, this study collected sample on famous group-buying related websites and discussion boards (www.ihergo.com, PTT, FG discussion board) in Taiwan. A total of 352 useable responses were collected from online group-buying websites and discussion boards. The surveyed sample consisted of more females than males. Of the respondents, 68.8% were female and the largest group of users was in the age range of 21-25 (40.3%), with the majority being students (36.4%) and 56.3% had bachelor degree.

### **4. Data Analysis and Results**

#### **4.1. Assessment of Measurement Model**

A confirmatory factor analysis using AMOS 19 was conducted to test the measurement model. Six common model-fit measures were used to assess the model’s overall goodness of fit: the ratio of  $\chi^2$  to degrees of freedom (df), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), normalized fit index (NFI), comparative fit index (CFI) and root mean square residual (RMSR). After examining the modification indices, four items, including item CI5, CON3, ITR3 and NS3 (see Appendix) were eliminated due to cross factor loadings.

As shown in Table 1, all the model-fit indices exceeded their respective common acceptance levels

suggested by previous research, thus demonstrating that the measurement model exhibited a fairly good fit with the data collected. We could therefore proceed to evaluate the psychometric properties of the measurement model in terms of reliability, convergent validity and discriminant validity.

Reliability and convergent validity of the factors were estimated by composite reliability and average variance extracted (see Table 2). The interpretation of the composite reliability is similar to Cronbach's alpha, except that it also takes into account the actual factor loadings rather than assuming that each item is equally weighted in the composite load determination.

Composite reliability for all the factors in our measurement model was above 0.90. The average extracted variances were all above the recommended 0.50 level [43]. This means that more than one-half of the variance observed in the items was accounted for by their hypothesized factors. Convergent validity can also be evaluated by examining the factor loadings and squared multiple correlations from the confirmatory factor analysis (see Table 3). Following the recommendation made by Hair *et al* (1992), a factor loading greater than 0.50 was considered very significant. All of the factor loadings of the items in the research model were greater than 0.60. Also, squared multiple correlations between the individual items and their a priori factors were higher than 0.20 [44], [45]. Thus, all factors in the measurement model had adequate reliability and convergent validity.

Table 1. Fit Indices for Measurement and Structural Models

Goodness-of-fit measure	Recommended value	Measurement model	Structural model
$\chi^2/df$	$\leq 3.00$	1.811	1.988
GFI	$\geq 0.90$	0.953	0.948
AGFI	$\geq 0.90$	0.917	0.914
NFI	$\geq 0.90$	0.972	0.968
CFI	$\geq 0.90$	0.987	0.983
RMSR	$\leq 0.08$	0.048	0.053

Notes: *df*: degrees of freedom; GFI: goodness-of-fit index; AGFI: adjusted goodness-of-fit index; NFI: normalized fit index; CFI: comparative fit index; RMSR: root mean square residual.

Table 2. Reliability, Average Variance Extracted and Discriminant Validity

Constructs	CR	CI	CON	ITR	Nov	PRI	SAT
CI	0.921	0.838					
CON	0.963	0.319	0.964				
ITR	0.971	0.579	0.378	0.972			
Nov	0.912	0.322	0.405	0.458	0.915		
PRI	0.954	0.297	0.427	0.488	0.569	0.956	
SAT	0.967	0.677	0.435	0.829	0.428	0.422	0.952

Notes: 1. CR: composite reliability. 2. CI: community identification; CON: convenience; ITR: intention to repurchase; Nov: novelty; PRI: price; SAT: satisfaction. 3. Diagonal elements are the square roots of the average variance extracted (AVE) values; off-diagonal elements are correlations among constructs.

To examine discriminant validity, this study compared the shared variance between factors with the average variance extracted of the individual factors [46]. This analysis showed that the shared variances between factors were lower than the average variance extracted of the individual factors, thus confirming discriminant validity (see Table 3). In summary, the measurement model demonstrated adequate reliability, convergent validity and discriminant validity.

#### 4.2. Structural Model and Hypotheses Testing

A similar set of model-fit indices was used to examine the structural model (see Table 2). Coincidentally, the six common model-fit measures of the structural model were similar as those of the measurement model. This provided firm evidence of a good model data fit.

Standardized path coefficients in the hypothesized model are shown in Fig. 2. As expected, hypotheses 1, 2, 4a, 5a, 6a and 6b were supported, the path coefficients for the SAT-ITR, SAT-CI, CON-SAT, Nov-SAT, PRI-SAT and PRI-ITR links in the model were all significant ( $\gamma = 0.894$ ,  $\gamma = 0.752$ ,  $\gamma = 0.290$ ,  $\gamma = 0.251$ ,  $\gamma = 0.150$  and  $\gamma = 0.181$  respectively). Altogether, the model accounted for 71% of the variance in intention to repurchase, with satisfaction contributing more to intention than the other constructs. However, hypotheses 3, 4b and 5b were not supported. Table 4 summarizes the results of the hypotheses testing.

Table 3. Factor Loadings and Squared Multiple Correlations of Items

	Factor loadings	Squared multiple correlations
Community identification		
CI1	0.698	0.487
CI2	0.819	0.671
CI3	0.909	0.827
CI4	0.842	0.709
CI6	0.660	0.436
Convenience		
CON1	0.893	0.797
CON2	0.961	0.924
Intention to repurchase		
ITR1	0.928	0.861
ITR2	0.956	0.915
Novelty		
Nov1	0.886	0.786
Nov2	0.751	0.564
Price		
PRI1	0.926	0.857
PRI2	0.892	0.796
Satisfaction		
SAT1	0.907	0.823
SAT2	0.951	0.905
SAT3	0.923	0.853

Notes: CI: community identification; CON: convenience; ITR: intention to repurchase; Nov: novelty; PRI: price; SAT: satisfaction.

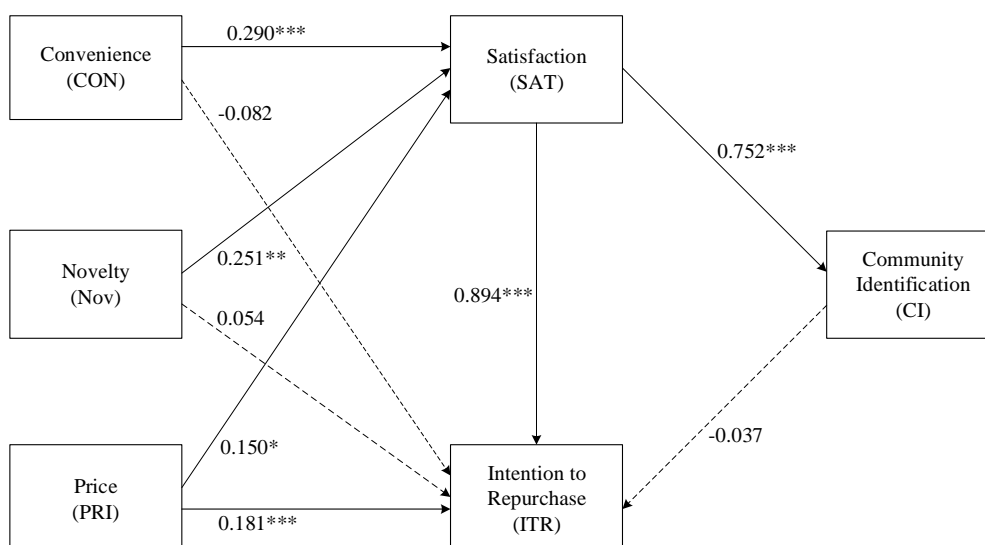


Fig. 2. Standardized path coefficients for all respondents.

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 5. Discussion

This study explores the factors affecting satisfaction and intention to repurchase by the two dimensions of group buying: shopping and social network. Based on the shopping orientations that represent the motivations and propensities of consumption behavior, this study frames the determinants of online group buying by selecting economic, convenience and recreation orientation from prior study to predict the shopping side of group buying behavior. On the contrary, community identity is adopted to represent the social network side because of the online community environment of group buying.

Table 4. Summary of Testing Results

	<i>Relationship</i>	<i>Hypothesis</i>	<i>Testing result</i>
H1	SAT-ITR	Positive	Supported
H2	SAT-CI	Positive	Supported
H3	CI-ITR	Positive	Not supported
H4a	CON-SAT	Positive	Supported
H4b	CON-ITR	Positive	Not supported
H5a	Nov-SAT	Positive	Supported
H5b	Nov-ITR	Positive	Not supported
H6a	PRI-SAT	Positive	Supported
H6b	PRI-ITR	Positive	Supported

Notes: 1. H: hypothesis. 2. CI: community identification; CON: convenience; ITR: intention to repurchase; Nov: novelty; PRI: price; SAT: satisfaction.

According to the result, satisfaction of online group buying is found a positive influence on the identification of group buying community. This result is consistent with the work of Pai and Tsai [16]. It indicates the higher satisfaction consumers perceived in online group buying experience, the higher level identification in group buying community they could feel. However, identification has no significant effect on intention to repurchase. This represents that even customers found identification in group-buying communities, the intention of repurchase would not be formed. Differing from the finding of Pai and Tsai [16], this study found community identification maybe not a major determinant of repurchase in online group buying context.

In the antecedents that inferred from shopping orientations, convenience, novelty and price both have positive effects on satisfaction of online group buying. This finding shows these three factors are still customers' concern and play important roles in this consumption method. Furthermore, in line with prior studies and hypothesis, satisfaction remains a strong predictor of intention to repurchase.

The present study also examines the influences of antecedents on repurchase intention and only price to repurchase intention was found have positive relationship. This indicates convenience and novelty are not involved in customers' consideration when customers decide to repurchase through group buying or not. It is noteworthy that price is a primary concern in the development of customers' satisfaction and repurchase intention.

## 6. Implication and limitation

From the theoretical view, this study may advance our knowledge in two ways. First, the present research is among the first attempts at the investigation of the determinants in group-buying behavior that studies through the two dimensions: social network and shopping. Second, taking advantage of shopping orientations, this study introduces three determinants from the economic, convenience and recreation orientations that have been discussed in prior marketing and business research. Through the Structural



equation modeling (SEM) method, this study identified these three factors as significant predictors in group buying behavior. This indicates customers would concern group buying in these ways and also represents there are at least three kinds of underlying shopping orientations in this consumption behavior.

The findings of the current study are believed to be applicable to group-buying behavior in C2B e-Commerce. For practitioners, understanding the factors of group buying behavior is critical to stimulate the marketing effectiveness. The website designer and webmaster of group buying website, community or discussion board must ensure that they have provided convenient and sufficient navigation to avoid overlook or misguiding of the most concerned function or information for customers, such as new fancy goods and better price information. Furthermore, this study also offers insights into the segmentation of online group buying customers for online marketers in C2B e-Commerce.

Although rigorous research procedures were employed, this study has some limitations that could be addressed in future studies. First, in the selection of shopping orientations, this study just choose a basic set to frame the factors of group buying. There are probably other possible indicators to take into account and future researchers who interested in this area should notice.

Second, the use of self-report scales to measure study variables suggests the possibility of a common method bias for some of the results. Third, the findings and their implications discussed in this paper were targeted customers in Taiwan. The convenience sampling method has potential bias, as a sample of respondents with willingness may not be generalizable. If future researchers wish to achieve more generalization, they could include other nationalities and geographical areas outside of Taiwan.

Finally, although the research model tested by this study has achieve adequate model fit, the investigation of group buying behavior should be continue for more comprehensive aspect. For example, trust and risk are both important factors in shopping behavior, especially in online context. Therefore, future researchers could consider these factors' relationship between customers' satisfaction or repurchase behavior in group buying environment.

## References

- [1] Anand, K. S., & Aron, R. (2003). Group buying on the web: A comparison of price-discovery mechanisms. *Management Science*, *49*(11), 1546-1562.
- [2] Kauffman, R. J., & Wang, B. (2001). New buyers' arrival under dynamic pricing market microstructure: The case of group-buying discounts on the Internet. *Journal of Management Information Systems*, *18*(2), 157-188.
- [3] Wolfinbarger, M., & Gilly, M. (2001). Shopping online for freedom, control, and fun. *California Management Review*, *43*(2), 34-55.
- [4] Rohm, A. J., & Swaminathan, J. (2004). A typology of online shoppers based on shopping motivations. *Journal of Business Research*, *57*(7), 748-757.
- [5] Tan, W.-K., & Tan, Y.-J. (2010). Online or offline group buying? *Proceedings of IEEE FSKD*, 2853-2857.
- [6] Tsai, M.-T., Cheng, N.-C., & Chen, K.-S. (2011). Understanding online group buying intention: The roles sense of virtual community and technology acceptance factors. *Total Quality Management & Business Excellence*, *22*(10), 1091-1104.
- [7] Stephenson, R. P., & Willett, R. P. (1969). Analysis of consumers' retail patronage strategies. In P. R. McDonald (Eds.), *Marketing Involvement in Society and the Economy*. Chicago: American Marketing Association.
- [8] Lumpkin, J. R., Hawes, J. M., & Darden, W. R. (1986). Shopping patterns of the rural consumer: Exploring the relationship between shopping orientations and outshopping. *Journal of Business Research*, *14*(1), 63-81.

- [9] Shim, S., & Kotsiopoulos, A. (1993). A typology of apparel shopping orientation segments among female consumers. *Clothing and Textiles Research Journal*, 12(1), 73-85.
- [10] Shim, S., & Mahoney, M. Y. (1992). The elderly mail-order catalog user of fashion products: A profile of the heavy purchaser. *Journal of Direct Marketing*, 6(1), 49-58.
- [11] Mokhlis, S. (2006). The effect of religiosity on shopping orientation: An exploratory study in Malaysia. *Journal of American Academy of Business*, 9(1), 64-74.
- [12] Sproles, G. B., & Kendall, E. L. (1986). A methodology for profiling consumers' decision-making styles. *Journal of Consumer Affairs*, 20(2), 267- 279.
- [13] Mandhlazi, L., Dhurup, M., & Mafini, C. (2013). Generation Y consumer shopping styles: Evidence from South Africa. *Mediterranean Journal of Social Sciences*, 4(14), 153-164.
- [14] Stone, G. P. (1954). City shoppers and urban identification: Observations on the social psychology of city life. *The American Journal of Sociology*, 36-45.
- [15] Chiu, C., Hsu, M., & Wang, E. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42, 1872-1888.
- [16] Pai, P., & Tsai, H. T. (2011). How virtual community participation influences consumer loyalty intentions in online shopping contexts: An investigation of mediating factors. *Behaviour & Information Technology*, 30(5), 603-615.
- [17] DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60-95.
- [18] Melone, N. (1990). The theoretical assessment of user satisfaction construct in information system research. *Management Science*, 36(1), 76-91.
- [19] Aladwani, A. M. (2003). A deeper look at the attitude-behavior consistency assumption in information systems satisfaction research. *The Journal of Computer Information Systems*, 44(1), 57-63.
- [20] Whitten, D. (2004). User information satisfaction scale reduction: application in an IT outsourcing environment. *Journal of Computer Information Systems*, 45(2), 17-26.
- [21] Mellarkod, V., Appan, R., Jones, D. R., & Sherif, K. (2007). A multi-level analysis of factors affecting software developers' intention to reuse software assets: An empirical investigation. *Information & Management*, 44, 613-625.
- [22] Yi, C. C., Liao, P., Huang, W. C. F., & Hwang, I. H. (2009). Acceptance of mobile learning: A respecification and validation of information system success. *World Academy of Science, Engineering and Technology*, 53, 726-730.
- [23] Turner, J. H. (1986). *The Structure of Sociological Theory* (4th ed.). Chicago, IL: Dorsey Press.
- [24] Bressler, S., & Grantham, C. (2000). *Community of Commerce*. New York: McGraw-Hill.
- [25] Hagel, J. III., & Armstrong, A. G. (1997). *Net Gain: Expanding Markets through Virtual Communities*. Boston, MA: Harvard Business School Press.
- [26] Gehrt, K. C., Alpander, G. G., & Lawson, D. A. (1992). A factor-analytic examination of catalog shopping orientations in France. *Journal of Euromarketing*, 2(2), 49-69.
- [27] Li, H., Kuo, C., & Rusell, M. G. (1999). The impact of perceived channel utilities, shopping orientations, and demographics on the consumer's online buying behavior. *Journal of Computer-Mediated Communication*, 5(2).
- [28] Brown, M., Pope, N., & Voges, K. (2003). Buying or browsing? : An exploration of shopping orientations and online purchase intention. *European Journal of Marketing*, 37(11), 1666-1684.
- [29] Hansen, T., & Jensen, J. M. (2009). Shopping orientation and online clothing purchases: the role of gender and purchase situation, *European Journal of Marketing*, 43(9/10), 1154-1170.
- [30] Osman, M. Z., & Muayyad, J. (1996). The antecedents of loyalty patronage behavior. *Jurnal Pengurusan*,

15, 63-90.

- [31] Yuan, S., & Lin, Y. (2004). Credit based group negotiation for aggregate sell/ buy in e-markets. *Electronic Commerce Research and Applications*, 3(1), 74-94.
- [32] Bellinger, D. N., Robertson, D., & Greenberg, B. (1977). Shopping center patronage motives. *Journal of Retailing*, 56, 77-92.
- [33] Seiders, K., Berry, L. L., & Gresham, L. G. (2000). Attention retailers! How convenient is your convenience strategy? *Sloan Management Review*, 41, 79-89.
- [34] Burke, R. R. (1998). Real shopping in a virtual store. In S. P. Bradley, & R. L. Nolan (Eds.), *Sense and Respond: Capturing the Value in the Network Era*, Boston: Harvard Business School.
- [35] Jarvenpaa, S. L., & Todd, P. A. (1997). Is there a future for retailing on the Internet? In R. A. Peterson (Eds.), *Electronic Marketing and the Consumer*, CA: Sage, Thousand Oaks.
- [36] Donthu, N., & Garcia, A. (1999). The Internet shopper. *Journal of Advertising Research*, 39(3), 52-58.
- [37] Bellenger, D. N., & Korgaonkar, P. K. (1980). Profiling the recreational shopper. *Journal of Retailing*, 56(3), 77-92.
- [38] Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92-101.
- [39] Ravindran, D. S., Ram, H., & Sathish, M. (2010). Study on shopping orientation and consumption of fashion among youth a study with reference to the youth in Bengaluru. *Journal of Contemporary Research in Management*, 5(4).
- [40] Cheng, J. M.-S., Wang, E. S.-T., Lin, J. Y.-C., & Vivek, S. D. (2009). Why do customers utilize the internet as a retailing platform?: A view from consumer perceived value. *Asia Pacific Journal of Marketing and Logistics*, 21(1), 144-160.
- [41] Bhatnagar, A., & Ghose, S. A latent class segmentation analysis of e-shoppers. *Journal of Business Research*, 57(7), 758-767.
- [42] Wang, Y. S., Wang, H. Y., & Shee, D. Y. (2007). Measuring e-learning systems success in an organizational context: Scale development and validation. *Computers in Human Behavior*, 23(4), 1792-1808.
- [43] Hair, J. T., Anderson, R. E., Tatham, R. L., & Black, W. C. (1992). *Multivariate Data Analysis with Readings*, (3rd ed.). New York: Macmillan.
- [44] Bentler, P. M., & Wu, E. J. C. (1993). *EQS/Windows User's Guide*. Los Angeles: BMDP Statistical Software.
- [45] Jöreskog, K. G., & Sörbom, D. (1989). *LISREL 7: A Guide to the Program and Applications*. Chicago, IL: SPSS Inc.
- [46] Fornell C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.



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