CONSUMER'S REVISIT BEHAVIOR IN ONLINE GROUP-BUYING: A SHOPPING VALUE PERSPECTIVE

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Abstract

There is a tremendous growth of online group-buying (OGB) in recent years. Under the intensive market competition, customer's revisit behavior is essential for OGB websites to survive. Drawing upon the shopping value perspective, this paper identifies the unique features of OGB and investigates the impacts of these features on customer shopping value and revisit behaviors. A theoretical model was developed and tested by 258 valid responses collected through an online survey. The results show that both the hedonic value and utilitarian value are salient in OGB context and the identified OGB features significantly influence the shopping value. Further, the effects of shopping value vary among different visit channels.

Keywords: Online group-buying, revisit intention, utilitarian value, hedonic value, visit channels

1   INTRODUCTION

Online Group-Buying (OGB) is a business model which aggregates the buyers' power to gain lower prices (Kauffman and Wang 2002). It brings consumers the benefit of social commerce (Stephen and Toubia 2010). That is, consumers are able to enjoy the wholesale price without ordering more than their actual demands. OGB market has risen quickly in recent few years and has already generated huge transaction volume (CECRC 2013, 2013 ; IBISWord 2013), and much academic attention has been paid to OGB market (Anand and Aron 2003; Chen, Chen, and Song 2007; Jing and Xie 2011; Kauffman, Lai, and Ho 2010a; Kuan, Zhong, and Chau 2014; Lim 2014; Luo et al. 2014). However, while many studies focused on the pricing mechanisms such as the price-curve, coalition formation, incentive mechanisms, and fairness, etc. (e.g., Anand and Aron 2003; Chen, Chen, and Song 2002; Kauffman and Wang 2002; Lai, Doong, and Yang 2006; Li, Sycara, and Scheller-Wolf 2010; Peke and Rothkopf 2003; Vaghefi, Vaghefi, and Beheshti 2014), relatively little research effort was put on investigating consumers' behavior in OGB context. Particularly, despite that consumers' revisit behavior is critical for an OGB website success, we have limited knowledge on this critical, yet under studied consumers' behavior.

Specifically, OGB is the intermediary between suppliers and buyers. Without enough participants, the OGB cannot aggregate the buyers' power to obtain the wholesale price from the suppliers. Particularly, OGB operators mostly make short-term contracts with various suppliers. Accordingly, an OGB website often provides limited range of products to customers each time and the products' interval is a relatively short period (CECRC 2013 ; CNNIC 2011; Wang, Zhao, and Li 2013). Thus, one specific OGB website can only satisfy few customer needs. Besides, there are a plenty of OGB websites in the market for consumers (CECRC 2013, 2013 ; IBISWord 2013). This makes consumer's revisit even critical for an OGB websites to survive. In the literature, some studies have found that satisfaction and emotions are critical antecedents for the customer's revisit behavior (Bigne, Sanchez, and Sanchez 2001; Han, Back, and Barrett 2009; Kabadayı and Alan 2012; Kim, Kim, and Kim 2009). Although these factors may also be significant in OGB context, they are too general to reflect the special features of OGB. Furthermore, although previous literature discussed several unique features of OGB (CECRC 2013 ; Chen et al. 2007; CNNIC 2011; Jing and Xie 2011; Kauffman, Lai, and Lin 2010b; Kauffman and Wang 2002; Li 2012; Liu, Li, and Hu 2013; Liu and Sutanto 2012; Wang et al. 2013; Zhou, Xu, and Liao 2012), a systematic analysis of these features is still lacking. Therefore, this study attempts to anchor on the research aim that is to examine the contextualized factors that can influence consumer's revisit behavior in OGB context.

Drawing upon shopping value perspective, and particularly considering the features of OGB websites, we develop a research model to explain consumers' revisit. Specifically, while utilitarian and hedonic value can directly influence revisit intention, these two values per se can be affected by specific features of OGB (i.e., timeliness, variety, and richness). Further, different channels (i.e., direct visiting channel vs. indirect visiting channel) can moderate the effects of utilitarian and hedonic values on revisit intention. The proposed research model and hypotheses are validated by the data from an online survey.

Several theoretical implications can be drawn from this study. First, this study contributes to the revisit literature from customer value perspective. Second, we identify the unique features of OGB and find the different effects of them on customer value. Third, this study indicates that the effects of shopping value on revisit intention are contingent upon consumer's visiting channel.

2 LITERATURE REVIEW

2.1 OGB and OGB revisit

OGB has drawn more and more academic attention in recent years. One main stream of the prior OGB studies investigate the pricing and inventive mechanisms such as the price-curve, coalition formation, incentive mechanisms, and fairness, etc (Anand and Aron 2003; Chen et al. 2002; Cheng et al. 2015; Kauffman and Wang 2002; Lai et al. 2006; Li et al. 2010; Peke and Rothkopf 2003; Vaghefi et al. 2014). There is another stream of recent literature focuses on the continue usage of OGB. For instance, Fan et al. (2010) adapt the expectation-confirmation model to OGB context and Shiau and Luo (2012) apply social exchange theory to investigate the factors such as reputation, trust, satisfaction, and seller creativity on consumer's OGB continue intention. What is more, focused on trust, Ku (2012) proposes that beyond price, brand reputation and word of mouth are two impact factors on consumer's continue usage intention. Hsu et al. (2014) demonstrate that trust and satisfaction determined repurchase behavior. Although these factors indeed are influential, we attempt to identify more contextualized factors in OGB especially for the critical issue of revisit.

There are some unique features discussed in previous literature. First, different from traditional e-commerce websites, which mainly retail products (Jing and Xie 2011), OGB usually adopts the discount business strategy (Chen et al. 2007; Jing and Xie 2011; Kauffman and Wang 2002) and guarantees higher bargaining power for buyers (Jing and Xie 2011; Kauffman and Wang 2002; Li 2012), in such a way that they can purchase the desired products at lower prices (Chen et al. 2007; Jing and Xie 2011; Kauffman and Wang 2002). Second, compared with traditional e-commerce, OGB often provides customers with low relevance but limited types of products in a relatively short time-frame (CECRC 2013 ; CNNIC 2011; Liu et al. 2013; Wang et al. 2013). Third, traditional e-commerce does not limit the transaction volume at a certain price, while an OGB transaction can only be permitted when the number of purchases is greater than the criteria set by the seller (Kauffman et al. 2010b; Liu and Sutanto 2012; Zhou et al. 2012). Besides, while most online consumers are familiar with traditional e-commerce and often visit the target websites directly, many consumers are not that familiar with OGB, and they often turn to navigational portals to visit an OGB website (CECRC 2013 ; CNNIC 2011). Thus, beyond the price issue, we identified three unique features for OGB: timeliness, variety, and richness to reflect the product updates, type changes, and range. Further, we identified the unique yet understudied factor: visiting channel for OGB.

Following prior research, consumer revisit in this study refers to customers' perception of the likelihood that they revisit the target store in the future (Han et al. 2009; Maditinos and Theodoridis 2010; Magne and Herbjorn 2001). Due to one OGB website can only provide limited range of products and each deal will last only a short time period. Thus, each time one OGB website can only fulfil limited customer needs. Consumers often need to revisit the website to see what is on sale. Therefore, large customer flow is the basic element for OGB business. Prior research also find that revisit intention is an antecedent of repurchase intention (Maditinos and Theodoridis 2010). Thus, understanding customer's revisit is meaningful for OGB websites.

Revisit behavior is mostly investigated in marketing and tourism literature by focusing on consumers' satisfaction, attitude, or emotions (Bigne et al. 2001; Han et al. 2009; Kabadayı and Alan 2012; Kim et al. 2009). There are also some IS studies investigate the revisit behavior. For example, Koufaris (2002) integrates the technology acceptance model (TAM) and flow theory and find that shopping enjoyment and perceived usefulness significantly influence revisit intention. Kabadayı and Alan (2012) find that consumer revisit intention to electronic retailers is influenced by emotions and word-of-mouth. A more recent study suggests that task complexity can affect consumers' attitudes towards a website and their revisit intention (Reynolds and Ruiz de Maya 2013). Although the factors such as enjoyment and usefulness may also be significant in OGB, we try to identify the contextualized factors that motivate and influence consumer's revisit behavior in order to provide a deeper understanding of OGB.

2.2   OGB shopping value

Prior study indicated that people shop for both the utilitarian value and hedonic value (Tauber 1972). Consumers can enjoy both hedonic and utilitarian value during shopping (Babin, Chebat, and Michon 2004; Babin, Darden, and Griffin 1994). Utilitarian value is defined as the obtainment of products and/or information efficiently. It is goal-oriented outcome of shopping that is cognitive and non-emotional (Babin et al. 1994; Holbrook and Hirschman 1982). It reflects the task-related value of a shopping experience (Babin and Attaway 2000). On the other hand, hedonic value refers to the value received from the esthetic, enjoyable and emotional aspects of the shopping experience (Babin et al. 1994; Holbrook and Hirschman 1982). It reflects the value derived in the shopping experience itself and is independent to the shopping task (Babin and Attaway 2000).

Both the two types of shopping value influence individual's post-adoption shopping behavior (Chitturi, Raghunathan, and Mahajan 2008; Jones, Reynolds, and Arnold 2006; Sarkar 2011). For instance, Jones et al. (2006) explore the different effects of hedonic and utilitarian shopping value on retail outcomes including positive word of mouth , loyalty, repurchase intention. Another study conducted by Chitturi et al. (2008) find the effects of hedonic and utilitarian design on word of mouth and repurchase intention.

In OGB context, both utilitarian value and hedonic value can be obtained (Lim 2014). Consumer can obtain products economically, which obviously contributes to the utilitarian value. However, when OGB users think about OGB, the first intuitive thinking is the low price. Will the utilitarian value be the only stimuli of OGB? On the other hand, the features of OGB may make the shopping experience more like exploring. To this end, hedonic value should play a role in OGB uses' continuance behavior. Therefore, in OGB context, we intend to find support for the strategies that take advantage of both the hedonic value and utilitarian value to promote the development of the OGB market.

2.3   OGB visit channels

In OGB context, consumers can visit a specific OGB website either from direct channels or indirect channels. Specifically, direct visiting channel refers to the direct ways to visit the OGB website (Li, Ye, and Li 2012). For instance, users can directly typing in the homepage address of an OGB website such as Groupon, Livingsocial or use pre-stored links of them to visit. Consumer using direct visiting channel is termed as a direct visitor. Besides the direct channel, OGB market provides indirect ways to promote OGB business such as navigation portal, online advertising, search engine, etc (Li et al. 2012). For instance, Tuan800.com and Yipit.com are OGB navigation websites. They collect various group-buying products provided by OGB websites. Customers can find interesting product exhibited and get access to an OGB website through the link of the product. The customer visiting OGB website through indirect channel is called an indirect visitor. Prior research has found that consumer's direct revisit is a good sign of loyalty which provides great value to business (Oliver 1999; Srinivasan, Anderson, and Ponnavolu 2002), and consumer's direct revisit behavior significantly increases repurchase (Maditinos and Theodoridis 2010). Prior research also has shown that the quantity of visitors through other website or search engine is positively related with an e-tailor's financial performance (Ghandour, Benwell, and Deans 2010).

The motivations of consumers' may be different with respect to the visiting channel. For the direct visitors, they directly visit the website to see what is on sale. They may enjoy the exploration process during the shopping. However, the indirect visitors get access to the target OGB website through the products exhibited in third parties. They may pay more attention to the acquisition of the product. In this case, the consumers from different visiting channel may treat the shopping value differently. Therefore, it will be meaningful to investigate the impacts of consumers visit channels on the relationship between the shopping value and the revisit intention.

3   RESEARCH MODEL AND HYPOTHESES

From the shopping value perspective, a research model is proposed (see Figure 1) to investigate OGB user's revisit behavior. In particular, we hypothesize that the hedonic value and utilitarian value directly affect consumers' revisit intention (i.e., H1 and H2). Three features of OGB are identified and hypothesized to influence the shopping value (H3a-c, H4a-c). What is more, the effects of customer value may be moderated by visit channels (H5a and H5b).
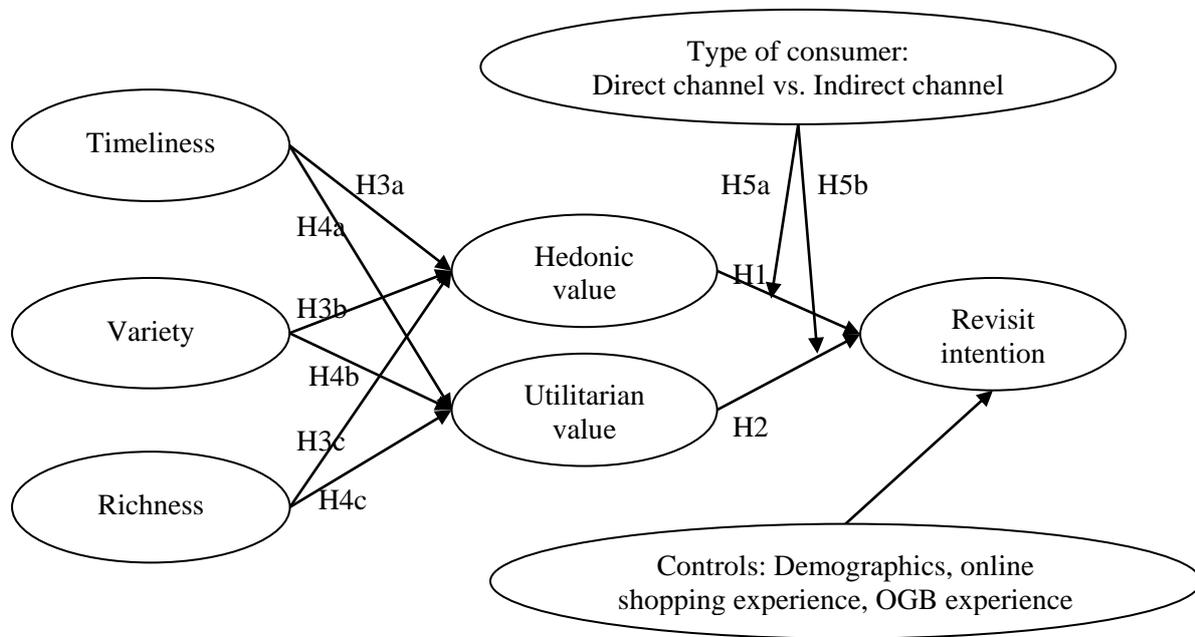

Figure 1.   Research model

Based on the shopping value perspective, OGB can bring consumers both the utilitarian value (e.g. low price) and the hedonic value (e.g. feelings of exploring) (Lim 2014). These values influence individuals' post-adoption shopping behavior (Chitturi et al. 2008; Jones et al. 2006; Lim 2014; Sarkar 2011). For OGB users, if they perceived higher shopping value from an OGB website in terms of utilitarian value and hedonic value, they will have stronger motivation to revisit the website. Therefore, consistent with prior literature, we also propose that both the hedonic value and utilitarian value increase consumer's revisit intention in OGB context.

Hypothesis 1: Utilitarian value is positively related to revisit intention.

Hypothesis 2: Hedonic value is positively related to revisit intention.

In order to have a deeper understanding of the OGB, we identified three features of OGB: timeliness, variety, and richness. Compared to traditional e-commerce websites, OGB websites is unique in timeliness and variety (CECRC 2013 ; CNNIC 2011; Wang et al. 2013). Timeliness refers to the length a deal is available on a website. It describes the time interval of the deal each time. High timeliness means that the product on the website will last short time and change quickly. Consumers may feel excited when finding the products they want before the ending time (Lim 2014). The variety refers to the product type change. It describes the similarity of the previous deals and the following deals in a website. Variety can increase the surprising of finding new products or unexpected products (Lim 2014). Therefore, timeliness and variety may increase the sense of exploring and surprising

when they visit the OGB website. To this end, we hypothesize that timeliness and variety will positively be related to the hedonic value.

Hypotheses 3a and 3b: Timeliness and variety is positively related to the hedonic value.

On the other hand, variety refers to the inconsistence of the type between the following and the previous deals. The website with high variety feature will frequently change the product type from one time to the next. Under high timeliness and variety situation, consumers may meet different products each time. Accordingly, it will be more possible for consumers to encounter the products they want instead of getting the same product each time. Thus, more customer needs will potentially be satisfied. The perception of utilitarian value will be increased (Lim 2014).

Hypotheses 4a and 4b: Timeliness and variety is positively related to the utilitarian value.

Product richness refers to the product category width of an OGB website in a time period. A website high in richness means that it provides many kinds of products. Richness and variety can be theoretically distinguished. High richness does not necessarily mean high variety. For instance, a website can focused on only one or two type of products (e.g., travel, hotel) but provided large quantity of choices for consumers. On the other hand, website in low richness can also provided high variety of product by changing from different types of products each time. When an OGB website provides many kinds of products, consumers will have more choice and more products to explore and/or to buy. Therefore, it will lead to higher level sense of hedonic value and utilitarian value (Chiu et al. 2012; To, Liao, and Lin 2007). Thus, we hypothesize that richness positively related to both the hedonic value and utilitarian value.

Hypothesis 3c and 4c: Richness is positively related to hedonic value and utilitarian value.

Besides the OGB features, consumers may treat the utilitarian and hedonic value differently through different channels. For the direct visitors, they directly visit the website to check the deals. They may enjoy more from exploring the website. However, the indirect visitors get access to the target OGB website through the products exhibited in third parties. They pay more attention to the acquisition of the products. Therefore, the motivation of consumers' is depends on visit channels. The direct visitors are motivated relatively high on the hedonic perspective of shopping in OGB. Therefore, the effect of hedonic value is proposed to be stronger in direct visiting channel than in indirect channel. On the other hand, the indirect visitors are motivated by the utilitarian perspective of the shopping. In this case, the effect of utilitarian value is posited to be stronger for indirect channel than for direct channel.

Hypothesis 5a: The effect of hedonic value on revisit intention is stronger in direct visit channel than in indirect visiting channel.

Hypothesis 5b: The effect of utilitarian value on revisit intention is stronger in indirect visit channel than in direct visiting channel.

4   RESEARCH METHODS

4.1   Data collection and analysis tools

An online survey was conducted to test the research model. The data was collected a professional online survey website in China. Respondents could track a hyperlink to get access to the questionnaire webpage and we used a screening question to limit the subjects to OGB users. 258 valid responses were collected. The demographics of the respondents are presented in Table 1. Smart partial least squares (SmartPLS, version: 2.0.M3, www.smartpls.de) was used to test the measurement model and structural model. SPSS Amos 21 was used to detect the common method bias.

Gender	Male	39.92%	Education	High school	4.26%
	Female	60.08%		Junior college	12.79%
Age	<=25	19.77%		Undergraduate	72.09%

	26-30	48.84%		Postgraduate	10.85%
	31-35	21.71%	Visit channels	Direct visit	64.34%
	>=36	9.69%		Indirect visit	35.66%
Income	<=2000	5.04%	OGB experience	<1 year	28.68%
	2001~3000	12.40%		1~2 years	42.25%
	3001~5000	36.05%		>2 years	29.07%
	5000~8000	30.62%	Online shopping experience	<1 year	2.33%
	>=8000	15.89%		1~3 years	27.52%
				4~5 years	46.12%
				>5 years	24.03%

Table 1.   Demographics statistics (sample size 258)

4.2 Measurements

Existing scales were adapted to OGB context where possible. Some necessary wording modifications were made to the items in order to fit the OGB context. All the measures for constructs in the research model were seven-point Likert scale.

Consumer's revisit was measured by behavioral intention (Zhang, Agarwal, and Lucas 2011) using the instruments from Hausman and Siekpe (2009) and Jones et al. (2006). Utilitarian value and hedonic value were measured using the items in Lee, Kim, and Fairhurst (2009) and Overby and Lee (2006). The instruments for timeliness was adapted from Wixom and Todd (2005)'s study. Variety, and richness were measured by the scales adapted from (Premkumar, Ramamurthy, and Saunders 2003) and (Bettencourt, Gwinner, and Meuter 2001) respectively. The items for each constructs are presented in Appendix I. Furthermore, consumer's visit channel was measured by a filter question that asked the subjects about through which channel (direct channel vs. indirect channel) they visit an OGB website last time. Then, the subject filled the questionnaire anchored on the shopping experience with the website they just answered.

5   RESULTS

5.1   Measurement model results

All the constructs in the research model used reflective measurements. Their reliability was assessed using Cronbach's alpha, Composite reliability, and Average Variance Extracted (AVE). The Cronbach's alpha and Composite reliability should higher than 0.7 and AVE should no lower than 0.5 (i.e., the square root of AVE higher than 0.7). Scores for all the constructs in the research model reached these criteria.

Convergent validity was assessed by checking the factor loadings that whether the items within one construct highly correlated among themselves. Discriminant validity was tested by examining the factor loadings to see if the item loadings on the intended constructs were higher than on the other constructs (Kankanhalli, Tan, and Wei 2005). The results show that all the tests are successfully passed. The statistics were shown in Table 2, including the mean value, standardized deviation, the correlations, Cronbach's Alpha, Composite Reliability, and the square root of AVEs. The loadings-cross loadings table is shown in the Appendix II.

	Mean	SD	Alpha	C.R.	AVE	VARI	RICH	TIME	UTIV	HEDV	REVI
INCO	3.910	1.231	0.860	0.904	0.703	**0.838**					
RICH	5.990	0.729	0.838	0.892	0.673	-0.006	**0.820**				
TIME	3.985	1.445	0.940	0.957	0.847	0.517	-0.027	**0.920**			
UTIV	5.800	0.706	0.807	0.874	0.635	0.040	0.490	0.119	**0.797**		
HEDV	5.500	0.793	0.793	0.867	0.625	0.231	0.469	0.246	0.534	**0.791**	
REVI	6.052	0.747	0.892	0.920	0.698	-0.122	.597	-0.060	0.548	0.568	**0.835**

Note:
1. SD: Standard Variance; Alpha: Cronbach's Alpha; C.R.: Composite Reliability; AVE: Average Variable Extraction
2. Values bonded in the diagonal are the square root of AVE
3. VARI: variety; RICH: richness; TIME: timeliness; UTIV: utilitarian value; HEDV: hedonic value; REVI: revisit intention;

Table 2.   Correlations and AVEs

Furthermore, as all of the questions were answered by the same respondents, a threat of common-method bias (CMB) may exist. We firstly use the Harman's single-factor test to detect the CMB. Results show that all the variance explained by on factor for all the factors is 29.69%. This suggests that CMB may be not a problem in our study. Secondly, as suggested by et al. Podsakoff et al. (2003), we use common latent factor approach to further test the CMB issue. Following the approach in Sun, Fang, and Lim (2012) and Zhou et al. (2007) , the CMB did not pose a major threat to the current study (see details in Appendix III).

5.2   Structure model results

The results of the main effects are summarized in Figure 2. Consistent with shopping value theory, we find significant positive effect of hedonic value on revisit intention ($\beta=0.381$, $p<0.001$) and utilitarian value on revisit intention ($\beta=0.295$, $p<0.001$). Therefore, hypothesis 1 and hypothesis 2 are supported.

With respect to the OGB features, results show significant positive effect of timeliness on hedonic value ($\beta=0.188$, $p<0.01$) and utilitarian value ($\beta=0.150$, $p<0.05$). Thus, hypotheses 3a and 4a are supported. Variety is found positively related to hedonic value ($\beta=0.137$, $p<0.05$) but insignificantly related to utilitarian value ($\beta=-0.034$, $p>0.1$). Therefore, hypothesis 3b is supported but hypothesis 4b is not supported. Richness is found positively related to both hedonic value ($\beta=0.475$, $p<0.001$) and utilitarian value ($\beta=0.493$, $p<0.001$). Thus, hypothesis 3c and 4c are supported.

We also test several control variables such as gender, income, education, online shopping experience, and OGB experience. Only the OGB experience, which refers to how many years the users have used the OGB, is significantly positively related to revisit intention ($\beta=0.122$, $p<0.05$). The positive effect of OGB experience is reasonable. Consumer who has longer experience with OGB may be more familiar with the target OGB website and may also build some habitual behavior of revisit (Wang et al. 2014).
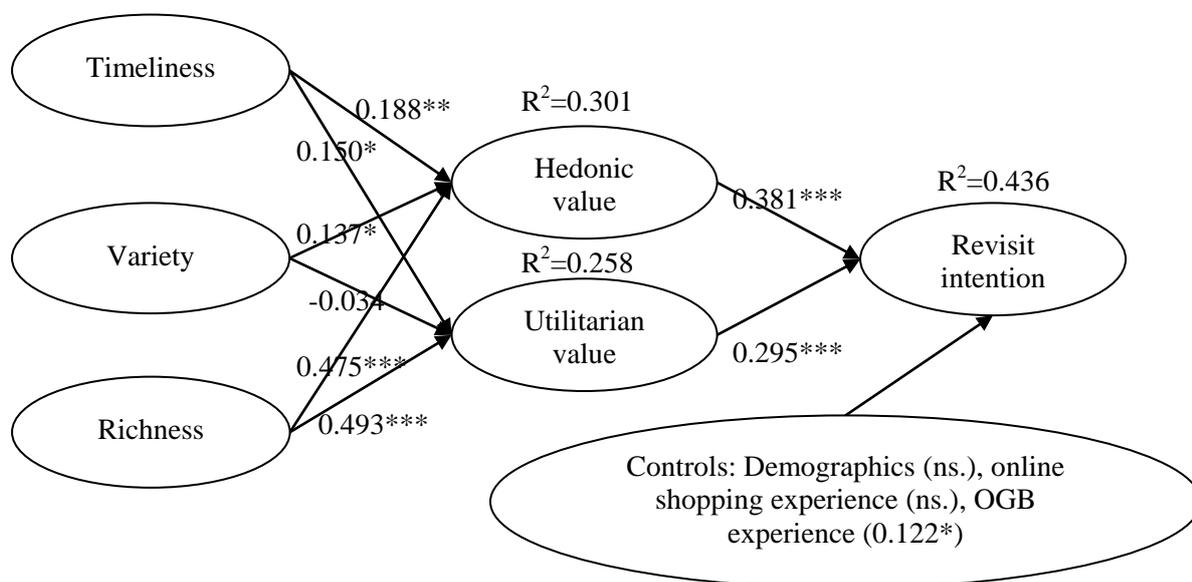
Notes: ns.: insignificant; * p<0.05; ** p<0.01; *** p<0.001

Figure 2. *Structural model results*

In order to test the moderating effect of visiting channel, we split the sample by visit channels and test whether the effects are different in direct and indirect visitor groups. We utilized the method in Ahuja and Thatcher (2005) and Zhang et al. (2009) to compare the results across subgroups. We calculated t-statistics to evaluate the differences in path coefficients across models. The comparison results are shown in Table 3.

	Whole (N=258)	Direct (Nd=166)	Indirect (Ni=92)	
	Path coefficient	Path coefficient	Path coefficient	t test
Hedonic value	0.381***	0.434***	0.289**	14.12***
Utilitarian value	0.295***	0.221***	0.417***	14.89***
Notes: * 0.05, ** 0.01, *** 0.001				

Table 3. *Comparisons of visiting channel*

The results indicate that the effects are indeed significantly different between direct visit and indirect visit channels. Specifically, the effect of hedonic value is stronger in direct channel and the utilitarian value is stronger in indirect channel. Therefore, hypothesis 5a and hypothesis 5b are supported.

6 DISCUSSION AND IMPLICATIONS

6.1 Main findings

In this study, we investigate the OGB users' revisit behavior from shopping value perspective. Consistent with previous customer shopping value research (Chitturi et al. 2008; Jones et al. 2006; Lim 2014; Sarkar 2011), the results support that both the utilitarian value and hedonic value are significant in OGB. This implies that the utilitarian value is not the only stimuli of OGB and the

perception of hedonic value indeed influences consumer's revisit behavior in OGB. Besides, this study extends the shopping value research by involve in the OGB visiting channel, which is seldom discussed in prior research. The results show that the utilitarian value and hedonic value have significant different effects in different channels. In particular, the effect of hedonic value on revisit intention is stronger in direct channels, while the utilitarian value has stronger effect in indirect channels. This demonstrates that the emphasis of shopping value is different for consumers from different visiting channels. The direct visitors enjoy more of the hedonic value of an OGB website than the indirect visitors. Thus, the enjoyment of the shopping process is more critical to keep customers. On the other hand, the indirect visitors pay close attention to the acquisition of the discounted product (i.e. utilitarian value). The provision of good deals is the major factors to attract indirect visitors.

In order to further understand the OGB context, this study identifies three features of OGB website which significantly influence customer's shopping value perception. Specially, the timeliness and richness of an OGB website positively influences both the hedonic value and utilitarian value. The variety positively related to the hedonic value. These results can provide cues for OGB operators to develop appropriate strategies to improve customer's shopping value and consequently keep their customer flow.

6.2 Theoretical implications

Several theoretical implications can be draw from this study. Firstly, this study extends the customer value to a relatively new context (i.e. OGB) and investigates the consumer's revisit behavior which is an essential question to OGB. Focused on the revisit behavior, the current study not only echo to the economic analysis of OGB that the utilitarian perspective is significant in OGB, but also demonstrates that the hedonic perspective should not be ignored.

Secondly, this study contributes to the OGB literature by identifying three features of OGB website which influence customer shopping value. Most of previous OGB literature focuses on general constructs such as attitude, satisfaction, usefulness (Fan et al. 2010; Ku 2012; Shiau and Luo 2012; Xie et al. 2011). To our knowledge, this is the first study attempting to identify the context-specific features of OGB from the shopping value perspective.

Thirdly, this study contribute to customer shopping value literature by examine the effects of visiting channel. Prior studies do find that consumer behavior differently through multi channels in terms of information searching, page view, etc (Detlor, Sproule, and Gupta 2003; Li et al. 2012). However, the current study further explores the effects of visiting channels from shopping value perspective. The results demonstrate that the effects of shopping value are contingent upon visit channels.

6.3 Practical implications

This study also suggests several implications in practice. First, we emphasizes on consumer's revisit behavior, which is a critical issue for OGB business. Both the utilitarian value and hedonic value are salient to OGB users' revisit behavior. Thus, the OGB operators should be informed that discount is not always the silver bullet. Strategies should be considered to improve the hedonic perspective of the shopping process.

Second, this study identifies three features of OGB which provide cues for website operators to improve their business. For instance, through suitable design of the timeliness, variety, and richness can increase customer's hedonic value. Low update rate and rigid provision will damage customer's shopping experience and consequently inhibit customer's revisit behavior.

Thirdly, this study provides evidence to the potential market segment for OGB operators. Consumers from different visiting channels behave differently. Designs can potentially improve the business by providing customized services that emphasized on different perspectives of shopping value.

7 LIMITATIONS AND FUTURE RESEARCH

There are some limitations of this study. First, the online survey in the current study utilized self-reported design. Self-selection bias may be a limitation of the results (Stanton 1998; Wright 2005). Although the test for common method bias can release it in some extent (Malhotra, Kim, and Patil 2006), it cannot be fully ruled out.

Second, the methodology of investigating the visiting channel may have some limitation. In the online survey, we ask the respondents to recall the last OGB website they transacted with and answer the questionnaire about that website. Thus, it is not impossible that consumer could visit the target website from both the direct and indirect channels in the past. Other methodologies may be utilized to further examine and confirm the effect of visiting channels in the future.

Third, there are two types of users in OGB context: suppliers and consumers. The OGB website plays an intermediary role among them. We only focused on consumer's perspective in this study. Future study may focus on the seller's perspective in order to have deeper insight of the OGB market.

Finally, the sample of the survey is limited to China context. Culture issue may influence consumer's revisit behavior. Therefore, the generalizability may be limited to China OGB context. The regional factors or culture factors could be examined in future study. Besides, there could be other confounding factors that we did not control in the current study. Future study could further test our model in a large context.

8 CONCLUSIONS

OGB is a relatively new business format and has grown up to a huge market of e-commerce. The unique features of OGB make the customer's revisit behavior become an essential issue, and the fierce competition in the market intensifies the importance of it. In order to obtain a deeper understanding of OGB consumer's revisit behavior, this paper attempts to identify the unique features of OGB and investigates the impacts of them from the shopping value perspective. The results of the online survey demonstrate that both the hedonic value and utilitarian value are salient in OGB context. What is more, the comparison of the visiting channel further presents the different emphasis of shopping value in terms of customer segments. The results imply that the hedonic value perspective of OGB is salient and its effect should be emphasized. Besides, the three identified unique OGB features significantly influence consumer's perceived shopping value. The results also provide implications to the design of OGB websites to improve their business.

Appendix I

Constructs	Items	Sources
Utilitarian value	The prices of the products and/or services I purchase from this OGB website are at low level, given the quality.	(Lee et al. 2009; Overby and Lee 2006)
	The products and/or services I purchased from this OGB website are good buy.	
	This OGB website offers a good economic value.	
	I accomplish what I want to at a good price on this OGB website.	
Hedonic value	While shopping on this OGB website, I feel a sense of adventure.	(Lee et al. 2009)
	The time spent on this OGB website is enjoyable.	
	While shopping on this OGB website, I feel the excitement of the hunt.	
	I enjoyed this OGB website for its own sake, not just for the item(s) I may have purchased.	
Richness	This OGB website provides many kinds of products and/or services.	(Bettencourt et al. 2001)
	I can buy many kinds of products and/or services on the OGB website.	
	The products and/or services provided by this OGB website are rich in type.	

		The products and/or services provided by this OGB website involve many categories.				
Timeliness	It is really a short time that from the sales of one product and/or service start to finish on this OGB website					(Wixom and Todd 2005)
	The sales of a certain products and/or services only last a short time period on this OGB website.					
	The sales of one product and/or service on this OGB website are always kept a short time period.					
	It is a very short time to me that a products and/or services sustain on the OGB website					
Variety	Every time the products and/or services provided on this OGB website are irrelevant to the previous ones					(Premkumar et al. 2003)
	Every time the products and/or services provided on this OGB website are different from the previous ones.					
	Every time the products and/or services provided on this OGB website are in different type compared to the previous ones.					
	The products and/or services provided on this OGB website do not repeat continually from one time to the next.					
Revisit intention	I am likely to revisit this OGB website in the near future					(Hausman and Siekpe 2009; Jones et al. 2006)
	I am encouraged to revisit this OGB website in the near future					
	I look forward to revisiting this OGB website in the near future					
	Developed: I intended to revisit this OGB website in the near future					
	I always look forward to visiting this OGB website again					

Appendix I.   Measurement items

Appendix II

	VARI	RICH	TIME	UTIV	HEDV	REVI
VARI1	**0.795**	-0.017	0.436	0.008	0.147	-0.138
VARI 2	**0.865**	0.034	0.424	0.067	0.203	-0.095
VARI 3	**0.896**	-0.023	0.430	0.037	0.216	-0.116
VARI 4	**0.794**	-0.019	0.455	0.014	0.198	-0.071
RICH1	-0.149	**0.801**	-0.103	0.400	0.328	0.505
RICH2	-0.039	**0.793**	-0.118	0.393	0.336	0.501
RICH3	0.007	**0.860**	-0.007	0.423	0.407	0.483
RICH4	0.137	**0.827**	0.115	0.392	0.457	0.475
TIME1	0.461	0.014	**0.917**	0.127	0.232	-0.058
TIME2	0.413	-0.034	**0.914**	0.097	0.208	-0.061
TIME3	0.505	-0.042	**0.933**	0.127	0.243	-0.023
TIME4	0.521	-0.040	**0.916**	0.080	0.220	-0.087
UTIV1	0.099	0.434	0.118	**0.796**	0.406	0.422
UTIV2	0.005	0.397	0.000	**0.787**	0.404	0.456
UTIV3	-0.034	0.389	0.092	**0.845**	0.437	0.477
UTIV4	0.063	0.335	0.177	**0.755**	0.461	0.386
HEDV1	0.333	0.215	0.332	0.334	**0.781**	0.229
HEDV2	0.135	0.421	0.142	0.457	**0.831**	0.508
HEDV3	0.195	0.438	0.219	0.429	**0.866**	0.480
HEDV4	0.130	0.371	0.144	0.460	**0.849**	0.522
REVI1	-0.204	0.470	-0.122	0.419	0.397	**0.810**
REVI2	-0.065	0.492	-0.052	0.443	0.447	**0.845**
REVI3	-0.077	0.474	0.017	0.455	0.508	**0.820**
REVI4	-0.128	0.500	-0.106	0.479	0.481	**0.854**
REVI5	-0.053	0.552	-0.002	0.485	0.523	**0.847**

Appendix II.   Loading-Cross loadings

Appendix III

Following the approach in (Sun et al. 2012; Zhou et al. 2007), we estimated three models:

1. M1 was a method-only model in which all items were loaded on one factor ($\chi 2$ (299) = 2583.644, RMSEA =.172).

2. M2 was a trait-only model in which each item was loaded on its respective scale ($\chi 2$ (260) =435.484, RMSEA=0.051).

3. M3 was a trait and method model in which a common factor linking to all the measurement items was added into M2 ($\chi 2$ (259) =417.061, RMSEA=0.049.)

Because M2 is highly better than M1, while M3 is no significant different with M2, the trait rather than the common-method factor explains most of the variance. Therefore, CMB did not pose a major threat to the study.

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