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The Effect of Website Performance and Online Retailer Status on Consumer Purchase Intention: A Mediator Role of Buyer Perception

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Abstract

Purpose: The purpose of this research is to examine the effect of website performance and online seller status on consumer purchase intention. This study also aims to assess the mediation effect of buyer perception on the relationship between website performance and consumer purchase intention in the context of Internet shopping.

Design/Methodology/Approach: This study proposed a conceptual framework and collected a total of 255 samples in the Mainland China to test research hypothesis and investigate the relationship among different predictors. Both measurement model and construct model were established and evaluated using AMOS 21.

Findings: Results present that website performance and online seller status significantly affect consumer purchase intention. Buyers' perception partially mediates the relationship between the website performance and consumer purchase intention. The effect of website performance on purchase intention is greater than the effect of other constructs. There is a reciprocal relation between seller status and website performance.

Implication: Website managers should further enhance website quality, customer service, and well acknowledge consumers about the good performance of their website. Online vendors should devote to strengthen their online status. A partial influencing effect impacts on the relation between website performance and consumer purchase intention, thus the buyers' perception should not be considered as a 'standalone' concept.

Originality/Value: This study proposed a conceptual model to predict consumer purchase intention in the context of C2C E-Commerce. The primary value lies in a better understanding of consumer behavior and detailed examination of the critical determinants.

Keywords: C2C electronic commerce, online purchase intention, website

1. Introduction

Internet has created a massive paradigm shift of the way consumer purchase, indicating massive changes in consumer behavioral trends towards shopping. Consumers can be active at any time and place to purchase a product or services 24/7. In the past decade, China's C2C electronic market has grown dramatically. In 2014, Chinese E-commerce giant Alibaba found its way to the New York Stock Exchange. Alibaba is valued at $231.4bn, making it significantly larger than Amazon and Facebook (BBC News, September, 2014). In 2011, C2C transaction volume occupies 89% of the whole online shopping transaction (Kwahk et al., 2012). At the same time, consumers are getting more cautious about online transaction security, business ethics, safety, reliability, and honesty. These areas have attracted large attention from previous scholars (Eroglu et al., 2001, 2003; Ethier et al., 2006; Davis et al., 2008; Chang & Wang, 2008). However, certain concerns may be too narrow or too scatted in scope and not capturing much of the associated effects, thus may not serve the main stakeholders' interest efficiently.

Consumer purchasing intentions could be affected by website quality and performance (Corritore et al., 2003; McKnight et al., 2004; Ethier et al., 2006). However, good website operation and service may not be sufficient to motivate consumers to place order online (Cho, 2006). On one hand, consumers may not prefer to deal with unknown vendors (Lim, 2003). On the other hand, consumer's perception may mediate the effect of website performance towards their purchase intention. The dimensions of consumer's emotion may response as an

expected reaction to the objective stimuli (Eroglu et al., 2001, 2003). In this study, the objective stimulus is reflected by potential buyers' perception. In addition, online seller (vendor) status should also be considered as a critical determinant influencing consumer online purchase intention. This study focuses on a total of four constructs and investigates the associated interrelation among them within a context of C2C Ecommerce. First, a brief literature review discusses a total of four main constructs, including website performance, seller status, buyer perception, and consumer purchase intention. Next, methodology addresses the research design, data collection and analysis strategies, followed by research findings and implications.

2. Literature Review

2.1 Purchase Intention

Online purchase intention has been receiving much attention in the context of E-Commerce. Hsu et al. (2012) defined the online purchase intention as the strength of a consumer's intentions to perform a specified purchasing behavior via Internet. It has been used to predict consumer behavior and correlated with the actual behavior (Ajzen & Fishbein, 1980). Measuring the intention is an effective way to capture the buyer's mind due to constraints that exist during the real purchase (Day, 1969). The intention to purchase online transaction takes place when the activities involving retrieving information, transferring messages and purchasing product occur. The intentions of purchasing online through a particular website or platform can be determined by various factors, such as consumer's satisfaction (Kuo et al., 2011, 2013), website quality and website brand (Chang & Chen, 2008), and online vendors performance (Ling et al., 2011; Wang & Dai, 2013) and perceived ethics of online retailers (Limbu et al., 2011). This study explores the antecedents surrounding and investigates the associated determinants of consumer purchase intention.

2.2 Seller Status

Online seller status significantly influences the consumer purchase intention (Jun & Jaafar, 2011). In order to increase sale volume and maximize profit, online vendors tend to establish good reputations or enhance positive status that can differentiate themselves from other competitors. The existence of uncertainty, ambiguity, and other concerns of Internet shopping might hinder consumer buying activities. But these concerns can be reduced or partially eliminated via a positive seller status that acts as an important trust-building mechanism in the context of E-Commerce. The seller status is normally gained by word of mouth in terms of service quality, delivery efficiency, responsiveness, product warranty, return policy, and honesty of vendors (Zeithaml et al., 2002; Yen & Lu, 2008). Consumers are induced to rate seller's performance (Awad & Ragowsky, 2008), feedback their own experience, or review the purchased products (Park et al., 2007). All these initiatives build up a seller's online status. Several studies stress that higher seller status can result increased sale volume, whereas a weak status sounds non-attractive to potential buyers (Bente et al., 2012; Wang & Dai, 2013).

Normally, the seller status only have an impact on existing sellers in terms of revenue, prices and transaction volume, while the new sellers are unable to acquire such benefits (Xiao et al., 2013). Thus, new online vendors tend to establish their reputations and brand identities through encompassing various activities, such as sales promotion and switching product categories, or even involving in scam and increasing their status artificially (Zhang et al., 2013). Wee et al. (2004) point out that seller status is unreliable in the Chinese E-Commerce context, such as TaoBao. However, the above statement may not precisely reflect the majority online sellers' practice as most vendors adopt the honest methods to improve their status, and further attract consumers' attention. Therefore, seller status is worthy to be re-emphasized in this research. It could be an important predictor for consumer online purchase intention.

H1: Seller status positively influences consumer online purchase intention.

2.3 Website Performance

Consumer interaction with online vendors is mainly facilitated by websites (Luo et al., 2012). Hence, website is crucial in attracting and motivating the customer purchase intention (Hsu et al., 2012). Well-designed and comfortable atmosphere of websites enhance consumer purchase intention, purchase actions, and repeat purchase (Bai et al., 2008; Chen & Cheng, 2008), especially through positive perception of website features, such as ease of use, website design, web pattern, hyperlinks, icons, and display (Everard & Gallatte, 2006; Zhang et al., 2011). Website should be designed to increase the usefulness and informativeness, and avoid irritations to the buyers (Hausman & Siekpe, 2009). A good website performance can be reflected by several perspectives, for example communication, privacy policies, customer service, security of transactions, flexibility of payment mechanism, etc. Furthermore, level of communication and website involvement could ultimately affect consumer online purchase intention (Jiang et al., 2010). Certain communication tools such as live chat or video chat are developed

to enhance online interaction. Online privacy policies are also presented in detailed manner as part of their practice. However, most information policies are not clearly displayed in website, which may increase consumer perception of ambiguity and uncertainty. In contrast, a website that displays this information compactly increases the website quality, and consequently attributes to higher purchasing intention (Tsia et al., 2011). In addition, with increased online purchase, the demand for better payment mechanisms becomes more critical. A secured and flexible payment mechanism can clue to better website image thus increasing the likelihood of online purchase (Kuo & Chen, 2011). Therefore, higher website performance may attribute higher purchase intention.

H2: Website performance positively influences consumer online purchase intention.

2.4 Buyer Perceptions

The online shopping experience is different from those of the brick and mortar mode due to the temporal distance between the buyers and sellers (Tan, 1999). The online buyers may have several concerns prior to their purchase action. These concerns create or impede consumer perception towards the particular product or website. Buyer perception can be determined by past experiences, perceived safety or risk of Internet security (Wiesberg et al., 2011). Previous purchase experiences serves as an indicator that either reduce or increase consumer's anxiety and uncertainty (Ranganathan & Jha, 2007; Ling et al., 2011), and consequently influences their online purchase intention. Ranganathan and Jha (2007) further emphasized that buyer's experience is more important than website quality, security and privacy. However, not every online buyer can assess their perception based on past experiences, for example first time or impulse buyers. Therefore, other concerns, such as consumer's tolerance of risk and perceived safety of online website may emerge. Some individuals may accept ambiguous situation and tolerating uncertainty of Internet, whereas certain customers are keen to avoid any mistakes during online purchasing rather than maximizing their own utility (Mitchell, 1999). Risk tolerance may motive or deterrent consumer purchase intention, which normally coincides with psychological and situational characteristics (Cho & Lee, 2006). Perceived safety of particular website can be reflected by the degree of information transparency (Kotler & Armstrong, 2010). All the information obtained by consumers creates their own perceived dimension in relation to particular website. Previous studies indicate that a positive effect of a specific or an individual measurement of website performance (such as privacy, security, display, communication) certainly impacts on general expertise, word of mouth testimonials (Roman & Cuestas, 2008, cited in Limbu et al., 2011), and perceived trust of website (Yang et al., 2009). Therefore, buyer perception may not play a 'stand-alone' role, but a mediator impacting on the relation between website performance and consumer purchase intention:

H3: Buyer perception mediates the relation between website performance and purchase intention.

Numerous studies investigate similar areas from a dispersed dimensions by addressing the effect of each distinct factor (such as, trust, risk, privacy, ethics, experience, payment security, attitude, variety of products, website design, efficiency, communication, service quality, word of mouth), but overlooked the integration or interrelation among them. New insights may emerge when the measurements and constructs are combined or re-structured. Next, certain factors are too narrow or too specific in terms of prediction of purchase intention. Certain existing studies were lack of validation of empirical evidence due to absence of cross-validation in data analysis and interpretation. Besides that, many literatures explore the effects of customer satisfaction as it is based on past experience or a holistic evolution of all aspects of consumption (Kuo et al., 2012). However, as a subjective concept, consumer satisfaction may not have a primary impact on consumer purchase intention, although numerous studies do mention it as an important predictor. In fact, most consumers purchase decisions are based on more objective fact rather than their emotional perception. A conceptual model is presented in Figure 1, where 'Website' represents the website performance; 'Buyer' indicates buyer perception towards internet shopping; 'Seller' reflects individual vendor's online status; 'Intention' specifies the likelihood of consumer online purchase intention.

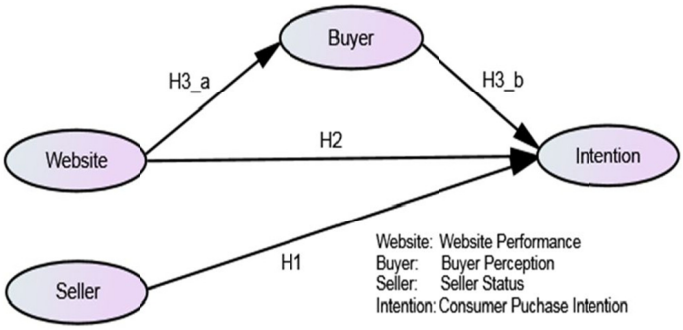

Figure 1. Conceptual model

3. Methodology

This study gathered empirical data using a self-designed questionnaire among 400 Chinese consumers from four provinces of Mainland China in a period of two months. Full questionnaire is presented in Appendix 1. A total of 324 surveys was returned with 255 valid questionnaires (response rate, 63.75%). A 7-point Likert scale was adopted to measure each item from 'strongly disagree (1)' to 'strongly agree (7)'. The hypothesized relation (H1 to H3) were estimated using structural equation modeling (SEM), AMOS 21. Researchers first evaluate the measurement model before assessing the structural model as "it makes little sense to relate construct within an SEM model if the factors specified as part of the model are not worthy of further attention" (Thompson, 2004, cited in Jackson et al., 2009, p. 6). Although maximum likelihood (ML) is set as a default estimation procedures in SEM, it is necessary to assess the data distribution as failure to meet the assumption of normality may lead to an overestimation of the chi-square statistics, consequently enhance an inflated Type I error (Curran et al., 1996; Powell & Schafer, 2001) and downward biased standard errors (Nevitte & Hancock, 2001; Bandalos, 2002; Jackson et al., 2009). The univariate normality is achieved in this study as kurtosis of each item is between 0.013 and 1.561 within acceptable range [-2 and 2]; skewness of each item is between 0.087 and 1.512 within the acceptable range [-7 and 7] (Pallant, 2011). Multivariate critical ratio is 22.64, which indicates a slight violation of multivariate normality (MVN). However ML estimation is still robust with mild departures from multivariate normality (MVN) (Fan & Wang, 1998, Hu et al., 1992), thus research result of this study should be reliable with maximum likelihood (ML).

According to Anderson and Gerbing (1988), two-step approach, a confirmatory factor analysis (CFA) is conducted first in order to establish confidence in the measurement model, which specifies the posited relation of the observed variables to the underlying constructs. One of the primary objectives of CFA/SEM is to assess the extent to which a set of measured items actually reflects the theoretical latent construct (Hair et al., 2009). Thus, this research assesses the adequacy of each multi-item scale in capturing constructs validity and discriminant validity in measurement models (see Table 1).

Table 1. CFA and convergent validity (n=255)

			UNSTD	S.E.	T-value	P	STD	SMC	1-SMC	CR	AVE
WOM	<---	Seller	1				0.656	0.430	0.570	0.824	0.541
Feedback	<---	Seller	1.016	0.100	10.160	***	0.773	0.598	0.402		
Credit	<---	Seller	1.106	0.105	10.543	***	0.817	0.667	0.333		
SQ	<---	Seller	1.092	0.118	9.249	***	0.685	0.469	0.531		
Communication	<---	Website	1				0.716	0.513	0.487	0.819	0.534
Payment	<---	Website	1.095	0.088	12.393	***	0.825	0.681	0.319		
Variety	<---	Website	1.064	0.091	11.670	***	0.774	0.599	0.401		
Privacy	<---	Website	0.726	0.082	8.855	***	0.586	0.343	0.657		
Safety	<---	Buyer	1				0.844	0.712	0.288	0.819	0.614
Risk	<---	Buyer	0.776	0.090	8.603	***	0.521	0.271	0.729		
Experience	<---	Buyer	1.155	0.066	17.560	***	0.927	0.859	0.141		
Likelihood	<---	Intention	1				0.905	0.819	0.181	0.904	0.825
Possibility	<---	Intention	0.900	0.043	20.943	***	0.911	0.830	0.170		

The standardized loading estimates of all items are significant ($p<0.001$) and higher than 0.5 (Anderson & Gerbin, 1988; Hair et al., 2009). The average variance extracted (AVE) estimates are between 0.534 and 0.825 (above 0.5, Bagozzi & Yi, 1988; Ping, 2004) and construct reliability (CR) of each construct is between 0.819 and 0.904 (above 0.7, Fornell & Larcker, 1981), which indicates that the convergent validity is achieved.

Discriminant validity assesses the extent to which a construct is truly distinct from other constructs (Hair at al., 2009). Although the correlation (Pearson's R) among constructs can be used to detect the issue of muticollinearity, there is no firm rule that a correlation with other measurements below absolute 0.85 is a cut point. With Anderson and Gerbin's first step approach (1988), the correlations among four latent variables (seller, buyer, website, and intention) are between 0.596 and 0.868. Larger correlations should be tested by examining the confidence interval of correlation to examine if they include '1' (Anderson & Gerbing, 1988; Ping, 2004). In addition, parameter estimate method also can be adopted to further confirm the distinctness among constructs (Bagozzi et al., 1988; Hooper et al., 2008). The discriminant test is presented in Table 2. The Bias-Corrected confidence interval (95%) does not include '1'; so do Percentile CI and the Parameter Estimate Interval. Thus, discriminant validity among four latent constructs is supported.

Table 2. Discriminant validity

				Bias-Corrected		**Percentile**		**Ø±∂*1.96**		
Parameter			Estimate	Lower	Upper	Lower	Upper	SE	Lower	Upper
Website	<-->	Seller	0.758	0.645	0.855	0.641	0.852	0.053	0.651	0.859
Website	<-->	Buyer	0.830	0.763	0.886	0.767	0.892	0.031	0.771	0.893
Intention	<-->	Buyer	0.779	0.699	0.844	0.697	0.843	0.036	0.704	0.846
Website	<-->	Intention	0.868	0.794	0.930	0.793	0.928	0.034	0.799	0.933
Seller	<-->	Intention	0.754	0.640	0.845	0.641	0.845	0.052	0.649	0.853
Seller	<-->	Buyer	0.596	0.473	0.692	0.475	0.693	0.056	0.485	0.705

4. Research Result and Discussion

Following the proposed measurement model, a conceptual structural equation model is established to test the hypothesized relations among constructs. The construct model includes two exogenous latent variables ('website' and 'seller') and two endogenous variables ('buyer' and 'intention'). The goodness-of-fit indices of this model are within an acceptable range (chi-square = 112.699, df = 60, $p<0.001$, chi-square/df = 1.878, GFI = 0.936, AGFI = 0.903, RMSEA = 0.059, SRMR = 0.037, TLI = 0.965, IFI = 0.973, CFI = 0.973, NFI = 0.944). As a result, there is no negative error variance of variables or 'Heywood Case' occurs (Rindskopf, 1984; Kolenikov & Bollen, 2012). The standard errors of variance are relatively small between 0.058 and 0.223.

Hypotheses are tested by examining 'the sign, size, and statistical significance of the structural coefficients' (Baumgartner & Homburg, 1996, p. 146). All hypotheses tests are statistically significant among latent variables

in structural model and also consistent with the proposed direction (see Table 3 and Figure 2). All the path coefficients from website performance to buyer perception (H3_a) and purchase intention (H2) are significant ($p < 0.001$). The parameter estimates for the relationships of purchase intention with buyer perception (H3_b) and seller status (H1) are also statistical significant ($p < 0.05$) and consistent with the proposed assumptions. Comparing the effects of website performance and seller status on purchase intention, website performance (0.648, $t = 3.966$, $p < 0.001$) has greater impact than seller status does (0.334, $t = 3.190$, $p = 0.001$). When website performance goes up by 1, purchase intention goes up by 0.648, while when seller status goes up by 1, purchase intention just goes up by 0.334. The exogenous variable of website performance can explain 67.8% of the variation in buyer perception. For consumer online purchase intention, this model explains 78.9% of its variation with website performance, buyer perception, and seller status.

Table 3. Structural regression weight

			UNSTD	S.E.	T-value	P	STD	SMC	
Buyer	<---	Website	0.898	0.085	10.541	***	0.824	0.678	H3_a
Intention	<---	Buyer	0.262	0.111	2.363	0.018	0.219		H3_b
Intention	<---	Website	0.648	0.163	3.966	***	0.497	0.789	H2
Intention	<---	Seller	0.334	0.105	3.190	0.001	0.250		H1

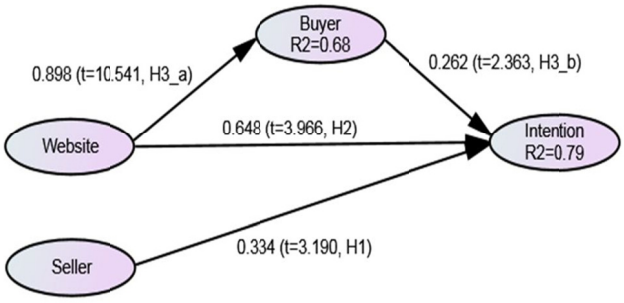

Figure 2. Path coefficients

In addition, partial influence of website performance on purchase intention is distributed through buyer perception (mediator). The relation between website performance and buyer perception is significant (0.824, p<0.001, H3_a). Buyer perception is also positively associated with purchase intention (0.219, p=0.018, H3_b). Based on Baron and Kenny's (1986) causal steps approach, the intervening variable effect (buyer perception) exists between website performance and consumer purchase intention. However, Baron and Kenny's causal steps approach is among the lowest in power (MacKinnon et al., 2002; Fritz & Mackinnon; 2007). It is not based on a quantification to test the mediation effect. Although Sobel test (Sobel, 1982, 1986) can overcome the above weakness and is often used as a supplement to Baron and Kenny's approach, Sobel test assumes the normality of sampling distribution of indirect effect is met. Actually, it is less possible to get a normal distributed indirect effect sampling distribution (Bollen & Stine, 1990; Stone & Sobel, 1990). Bootstrap uses computer intensive resampling to make inferences rather than making assumptions about the population (Lockwood & Mackinnon, 1998). The standard error based on the bootstrap distribution of the mediation effect can be reduced. Therefore, bootstrap (2000 samples with 95% PC confidence level) is adopted in this research to test the intervening effect of buyer perception between website performance and purchase intention (see Table 4).

Table 4. Bootstrap mediation effect

				Product of Coefficients		Bias-Corrected 95% CI			Percentile 95% CI		
			Estimate	SE	T-Value	Lower	Upper	P (2-tailed)	Lower	Upper	P (2-tailed)
					Total Effect						
Intention	<--	Website	0.883	0.148	5.966	0.591	1.187	0.001	0.588	1.184	0.001
					Indirect Effect						
Intention	<--	Website	0.235	0.118	1.992	0.031	0.494	0.025	0.013	0.472	0.038
					Direct Effect						
Intention	<--	Website	0.648	0.187	3.465	0.300	1.029	0.002	0.307	1.032	0.001

The indirect (mediated) effect of website performance on purchase intention is 0.235 (t = 1.992, $p < 0.05$). Both Bias-Corrected 95% confidence interval (CI) and Percentile 95% confidence interval (CI) do not include zero, which indicate the intervening effect of buyer perception between website performance and consumer purchase intention is significantly different from zero; so do the total effect (0.883, t = 5.966, $p < 0.001$) and direct effect (0.648, t = 3.465, $p < 0.001$). Both total effect and direct effect are statistically significant. It implies that there is a partial medication impact exists. The effect of website performance towards purchase intention is partially medicated by buyer perception with an effect size of 26.61%.

Cross-validation has been employed extensively in order to examine the predictive validity of model (Cudeck & Brown, 1983). The objective is to identify the model from a set of competing alternative that replicates best across different population. According to Cudeck and Browne (1983), a random sample can be assumed by splitting the data samples randomly into two subsamples (50:50): calibration sample and validation sample. The former is used to develop the model, while the latter is used to test the derived model. As presented in Table 5, this research has a good model stability (ΔTLI <0.01, $\Delta CFI < 0.05$, $p > 0.05$). It indicates that the prediction validity of this model can be generalized to other distribution samples.

Table 5. Cross validation

Model	NPAR	CMIN	DF	ΔDF	ΔCMIN	P	ΔTLI	ΔCFI
Unconstrained	62	226.169	120					
Measurement weights	53	237.402	129	9	11.233	0.260	-0.003	-0.002
Structural weights	49	238.392	133	4	0.990	0.911	-0.004	0.002
Structural covariances	46	244.581	136	3	6.188	0.103	0.000	-0.002
Structural residuals	44	247.456	138	2	2.876	0.237	0.000	0.000
Measurement residuals	31	263.468	151	13	16.012	0.249	-0.004	-0.002

5. Conclusion and Implications

The findings of this research present how website performance and seller status influence consumer online purchase intention. Buyer perception mediates the relationship between the website performance and consumer purchase intention. Research results indicate several implications. Firstly, theoretical implication demonstrates that the structural model with an acceptable model fit and all the proposed hypotheses are supported. Approximately 79% variation of consumer online purchase intention can be explained by three predictors: website performance, seller status, and buyer perception. The confirmed measurement model and examined reliability and validity indicators attest that the proposed instrument validly and reliably measure the constructs in this model. Acceptable discriminant validity proves that the constructs are truly distinct from each other. The cross-validation further examines stability and predictive validity of the construct model, thus enhances the generalizability and managerial implications in practice. Next, research result confirms that there is a partial mediation effect between website performance and consumer purchase intention, thus the buyer perception is not a 'standalone' concept. This mediator partially distributes the effect of website performance (objective-oriented entity) towards the consumer's subjective purchase decision. The estimate of indirect effect is 0.235 ($p < 0.05$, see Table 4), occupying 26.61% of total effect from website performance to consumer purchase intention. While, the estimate of direct effect is 0.648 ($p < 0.001$) employing 73.39% of total effect. Compared with indirect effect, the direct effect has greater impacts on purchase intention, which implies that the fact of website performance is a primary index for consumer's decision of online purchase. Consumer purchase intention mainly stems from

objective entities of website performance. It implies that the electric marketers should emphasize more on their own performance as the consumer perception (mediator) is subjective and out of their reach. Thus, website managers need to allocate more resources and efforts to improve customer services as customer service in an online context reflects the performance of website itself (Limbu et al., 2012). The website administrators should ensure that consumers are well acknowledged about the good performance of website, such as efficient communication, transparent payment, privacy protection, variety of products, ease use, clear instruction, and be aware of vague statements. Today, the traditional Chinese proverb "Doing well and not wanting others to know it" is not suitable in this context. The website managers need to demonstrate how well they performance to convince consumers to place order online. Finally, online seller status also significantly influences consumer purchase intention. It implies that it is important for vendors to develop or strengthen their own status, for instance gaining more positive reviewer comments, gaining high ranking position, providing flexible channels of payment, prompt delivery service, and product warranty, etc. Online vendors should be more explicit when describing the product information and additional charges, return policies or situation in which item/product are non-refundable.

6. Limitation and Further Research

Some limitations to the present study are specific whereas others are common to survey research. Although 79% variation of consumer online purchase intention can be explained by three key determinants presented in this study, other predictors, such as price, competition (Pan et al., 2002), website brand (Chang & Chen, 2008) and value creation (Garicano & Kaplan, 2002; Bakker et al., 2008) may also have specific impacts on consumers' purchase intention. Next, the scope of this research was in China Mainland; therefore, caution might be advised when generalizing the research finding to different countries or regions. In addition, there is lack of evidence that similar research results can be discerned in other contexts or different industries, such as Internet Banking, B2B E-Commerce or retailing sectors. Therefore, further research aims to generalize the conceptual model and compare the results in relatively broader scopes. Finally, the speed of change in the study context as consumers' increasing experience with the E-commerce developments may certainly affect their decision making in future.

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Appendix

Appendix 1. Questionnaire and factor loading

Questionnaires	Items	Factor Loading	P
Website Performance			
The payment transaction on that particular website is reliable and flexible.	Payment	0.825	***
The websites (e.g. Taobao, Alibaba, Ebay) offer a wide variety of products.	Variety	0.774	***
The websites protect my privacy and personal information.	Privacy	0.586	***
The communication medium and tools in websites are efficient and helpful.	Communication	0.716	***
Seller Status			
I use word of mouth to evaluate seller's practice and honesty.	WOM	0.656	***
I check customer feedbacks and reviews of particular vendors before placing order.	Feedback	0.773	***
I check vendor's reputation and online ranking status before purchasing.	Credit	0.817	***
I prefer vendors who provide good quality of service.	SQ	0.685	***
Buyer Perception			
Internet shopping is safe and secured.	Safety	0.844	***
I can tolerate certain risk when shopping online.	Risk	0.521	***
I have a pleasant experience of Internet shopping.	Experience	0.927	***
Customer Purchase Intention			
I intend to place order online in near future.	Likelihood	0.905	***
There is a high possibility for me to shop online.	Possibility	0.911	***

Appendix 2. Covariance matrix

rowtype_	varname_	experience	risk	safety	privacy	variety	payment	SQ	credit	possibility	likelihood	WOM	feedback	communication
cov	experience	2.32												
cov	risk	1.31	3.32											
cov	safety	1.72	1.24	2.10										
cov	privacy	0.99	0.57	0.80	1.91									
cov	variety	1.40	0.93	1.17	1.01	2.35								
cov	payment	1.39	1.07	1.34	1.01	1.42	2.20							
cov	SQ	1.24	0.65	0.90	0.90	1.33	1.22	3.04						
cov	credit	1.07	0.75	0.86	0.55	1.06	1.18	1.36	2.19					
cov	possibility	1.37	0.92	1.12	0.79	1.38	1.40	1.34	1.28	2.08				
cov	likelihood	1.74	1.02	1.46	0.94	1.51	1.58	1.34	1.27	1.92	2.60			
cov	WOM	0.90	0.59	0.73	0.68	1.12	1.01	1.16	1.36	1.15	1.20	2.78		
cov	feedback	0.82	0.60	0.70	0.58	0.95	1.00	1.37	1.38	1.13	0.99	1.24	2.07	
cov	communication	1.33	0.73	1.05	1.03	1.32	1.34	1.24	0.95	1.39	1.37	0.72	0.81	2.43
n		255	255	255	255	255	255	255	255	255	255	255	255	255