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The 8th STOU National Research Conference**Recommendation, Customer Satisfaction, Online Shopping Experience, Trust, and Word-of-mouth Affecting Consumer Online Shopping Decision in China**Liqin He ¹ Nittana Tamittanakorn ²**Abstract**

The purpose of this research study was to investigate recommendation, customer satisfaction, online shopping experience, trust, and word-of-mouth (WOM) affecting consumer online shopping decision China. The closed-end questionnaires were applied for collecting data from 150 online consumers in China. The majority of respondents were females with the age between 21-30 years old. Most of them completed high school or vocational colleges, worked as company employees, and had monthly income less than 8,000 RMB. More than 82% of the respondents had an online shopping experience in the past one month. The results revealed that online shopping WOM, online shopping trust, online shopping experience, and recommendation were the significant factors that affected customers' online shopping decision in China at the significant level of .05. On the other hand, customer satisfaction did not affect customers' online shopping decision in China.

Keywords: Online shopping decision, Recommendation, Customer satisfaction

Introduction

With the rapid development of the electronic commerce (e-commerce) as a new consumption mode arouses widely attention from every sector in the society. The era of internet economy, e-commerce has become an emerging mode of operation for enterprises. Through the Internet, enterprises build electronic platforms for transactions and services (Baidu, 2018). The definition of e-commerce is explained by communication, and it is used to transmit information, products, or services by means of telephone lines and internet (Baidu, 2018). In the meantime, e-



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commerce of China was continually expanding and growing as the development of the worldwide main force. According to China's consumers online shopping survey in 2018 published by China Internet Network Information Center (CNNIC), the population of China's online shopping users reached 772 million, representing an growth of 40.74 million from 2016, otherwise, the rate of internet utilization increased from 24.5% (2006) to 55.8% (2017), which indicated the Chinese e-commercial market still has the rising space (CNNIC, 2018).

As the expansion of population of online shopping users in China, the online shopping platform provides not only the opportunities for the online retailers who would like to engage in the e-commerce but also challenges. Because of the competition among e-commerce business will become intensely fierce since increasingly enterprises and individuals have been participating in this e-commerce market. Therefore, how to grasp the opportunities and how to stand out from a lot of competitors are the questions which have to be considered by those e-commerce entrepreneurs.

From the developmental features of Internet, there was a greatly difference between online consumer environment and traditional purchasing situation as the result of intangibility and virtuality of online network (Li, Jiang, & Wu, 2014). The online shopping was another alternative for both consumers and businessmen who were convenient consciousness and willing to have better livelihood. Thus, it was necessarily and significantly to research on the customers online shopping behavior and influence factors on consumer online shopping decision. For instance, Bao, Zhou, and Su (2003) observed that trust indicated the level of consumer perceived in the online shopping, different degrees of their trust aversion may have non-ignorable effected on the online shopping decision. Furthermore, Elliott and Speck (2005) showed that customer satisfaction was positively affected towards a website and appeared to increase the amount of online shopping and spending with online purchases. Moreover, Hostler, Yoon, and Guimaraes (2012) pointed out that consumers relied increasingly on online recommendation for their purchase decisions and they regularly consulted online consumer reviews or product ratings before making an important purchase. Chu and Kim (2011) also pointed that word-of-mouth (WOM) behavior was originated from the users' desire to maintain social relationships within their personal networks, the significance of WOM communications was influencing consumer decision making.

Regarding to these previous studied, it was very interesting for the present research to study the factors affecting consumer online shopping decision in China (Chen, Lu, & Wang, 2017). The



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research findings would contribute to online retailer business for establishing its competitive strategies to generate and facilitate the customer online shopping decision. Therefore, how to attract customers to enter the shop and being stood out from this competitive market for online retailers had to be taken into consideration in this study. This research helped to explore and explain more on factors affecting consumer online shopping decision in China. Therefore, it is important to understand how the factors affect the online shopping decision (Dabholkar & Sheng, 2012). The researcher would like to study recommendation, customer satisfaction, online shopping experience, online shopping trust, and online shopping word-of-mouth. Consequently, the researcher can understand the relationships among recommendation, customer satisfaction, online shopping experience, online shopping trust, and online shopping word-of-mouth and online shopping decision. Moreover, the research findings are also contributed to the e-commerce business for establishing its competitive strategies to generate the customer online shopping decision.

This study contributes to the field of e-commerce, especially focusing on the factors affecting the customer online shopping decision in China. All consumers and business owner will have more understanding on online shopping and the factors affecting online shopping decision. Furthermore, it can be beneficial for generating advantages as marketing tools or strategies to increase market value of e-commerce for both domestic and foreign countries. Additional, the business owner can come to reasonable decisions about serving consumer, enhancing the online communities to give customer more trust and recommendation, and building the consumer involvement in order to keep pace with the growing high speed of e-commercial to raise the revenue. And this research might be useful for further development e-commerce business in the future.

Objectives

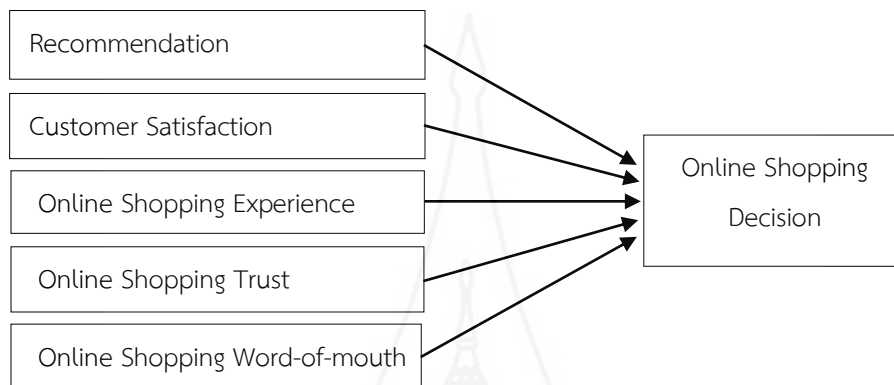
The overall purpose of this study is to explore and comprehend recommendation, customer satisfaction, online shopping experience, online shopping trust, and online shopping word-of-mouth affecting the customer online shopping decision in China. The conceptual framework of the study is illustrated as follows:



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Figure 1: The conceptual framework of factors affecting consumer online shopping decision in China



The conceptual framework in this study is portrayed the relationship between the independent variables: recommendation quality (Fang, Shao, & Wen, 2016; Yoon, Hostler, Guo, & Guimaraes, 2013), customer satisfaction (Fang, Shao, & Wen, 2016; Yoon, Hostler, Guo, & Guimaraes, 2013; Turk, Ekinici, & Martin, 2015), online shopping experience (Yoon, Hostler, Guo, & Guimaraes, 2013; Fang, Shao, & Wen, 2016; Pappas, Kourouthanassis, Giannakos, & Lekakos, 2017), online shopping trust, online shopping word-of-mouth (Fang, Shao, & Wen, 2016; Bilgihan, 2016), and the dependent variable of online shopping decision (Chen, Lu, & Wang, 2017).

Methodology

Sampling Group for this study are the Chinese consumers with all age ranges who used to shop online.

The sample size was calculated based on 40 sets of pilot test questionnaires Cohen (1977). Then G*Power version 3.1.9.2 (Erdfelder, Fraul, & Buchner, 1996) was applied with the Power ($1 - \beta$) of 0.95, Alpha (α) of 0.05, number of test predictor of 5, effect size of 0.1956291 and partial R^2 of 0.16362025, the obtained results revealed 107 of the total sample size for the field survey (Erdfelder, Faul & Buchner, 1996; Howell, 2010). However, in case of nondisposable questionnaires the totals of 150 samples were used in the field survey.



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The **sample selection** was implemented through the use of the online convenience sampling technique. The survey questionnaire was distributing via e-mails and posting the link of the questionnaires to various Chinese social media sites with the screening question to source for the right target samples.

Research instrument was a close-ended survey questionnaire which was constructed from related theories and previous studies. The questionnaires were translated into Chinese language, as the target population of the study was the Chinese consumers and passed the verification of content validity by three experts. Consequently, 40 sets of the questionnaires were applied for pilot test. The results of reliability test revealed that Cronbach's Alpha value of 0.829-0.957 was acceptable (Nunnally, 1978). In addition, the results from 150 sets of field survey were ranging between 0.849-0.939. Thus, all data from the questionnaires could be used for further analysis.

Results

Analysis of Demographic Data

From the study of 150 samples, all respondents' personal information in terms of gender, age, occupation, monthly income, and educational level were presented in frequencies and percentage as follows:

Table 1: Demographic Profile of Respondents (n = 150)

Demographic Profile		Frequency	Percent
Gender	Male	36	24.0
	Female	114	76.0
Age	<20 years old	3	7.4
	21-30 years old	122	50.4
	31-40 years old	21	24.4
	41-50 years old	4	11.9
	More than 51 years old	0	0
Occupation	Student	20	13.3



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Government employee	14	9.3
Company employee	78	52.0
Self-employment	11	7.3
Retiree	0	0.0
Other	27	18.0

(Continued)

Table 1 (Continued): Demographic Profile of Respondents (n = 150)

Demographic Profile		Frequency	Percent
Income	Below 4,000 RMB	64	42.7
	4,000-8,000 RMB	71	47.3
	8,000-12,000 RMB	9	6.0
	Above 12,000 RMB	6	4.0
Education	High school /vocational	78	52.0
	Bachelor's degree	51	34.0
	Master's degree	21	14.0
	Doctor's degree	0	0.0
Shopping online in the past one month	Yes	123	82.0
	No	27	18.0
Frequency of shopping online	Daily	5	3.3
	Once a week	50	33.3
	Once a month	69	46.1
	Other	26	17.3
Total		150	100.0

According to Table 1, the majority of the respondents were female (76%) out of 150 respondents while the rest of respondent were male (24%). The results showed that female had more awareness and interested in online shopping than male. Additionally, most of respondents in this survey were 21-30 years old. This showed that consumer attitudes affecting online shopping



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decision of new generation consumers more than middle age consumers. Furthermore, the majority of the respondents were company employee (78 people with 52%) and the income group was divided into 4 groups. Interestingly, the highest income group account for 4% (6 people), the smallest percentage compared to other groups. The biggest group was the respondents having income monthly from 4,000 RMB to 8,000 RMB taking 47.3% (71 people) of total, and the next group is under 4,000 RMB taking 42.7% (64 people) of total. Most of them completed a high school or vocational degree (78 people with 52%), and followed by a bachelor's degree (51 people with 34%).

Moreover, most of the respondents had online shopping experiences in the past one month accounting for 80% (123 people) and 46.1% of the respondents had an online shopping once a month, while 33.3% of the respondents shop online once a week and only 3.3% respondents shop online as daily. In additional to this, there were about 17.3% who might have an online shopping as occasionally.

Results of Hypothesis Testing

The research findings in this part presented relationship of consumer attitudes in terms of recommendation, customer satisfaction, online shopping experience, online shopping trust, and online shopping word-of-mouth affecting consumer online shopping decision in China. The results of multiple regression analysis showed that the factors affecting consumer online shopping decision in China with significant level at .05 were online shopping word-of-mouth ($p = .000$), both online shopping experience and online shopping trust are the same significant ($p = .002$), and recommendation ($p = .004$) were affected consumer online shopping decision in China. In addition, the results showed that online shopping word-of-mouth ($\beta = .283$) accounted for the strongest weights affecting consumer online shopping decision in China, followed by the online shopping trust ($\beta = .247$). On the other hand, customer satisfaction ($p = .501$), did not affect consumer online shopping decision in China. In addition, the R-square in this study was .781 which explained that recommendation, customer satisfaction, online shopping experience, online shopping trust, and online shopping word-of-mouth had 78.1% of the influence toward consumer online shopping decision in China as shown in Table 2.



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Table 2: Multiple Regression Analysis of the Online Shopping Decision

Factor	S.D.	Online Shopping Decision						
		B	S.E.	β	t	Sig.	Tolerance	VIF
Constant	-	-.191	.148	-	-1.287	.200	-	-
Recommendation	.8306	.215	.073	.196	2.935	.004*	.340	2.941
Customer satisfaction	.8080	.068	.101	.061	.674	.501	.187	5.355
Online shopping experience	.8591	.240	.078	.227	3.082	.002*	.280	3.573
Online shopping trust	.8148	.276	.089	.247	3.088	.002*	.237	4.226
Online shopping WOM	.9013	.285	.069	.283	4.144	.000*	.327	3.061

$R^2 = .781$, $AR^2 = .774$, $F = 102.922$, $*p < .05$

According to recommendation of Hair, Black, Babin, Anderson, and Tatham (2013), a large VIF value (Variance Inflation Factor) which is 10 or above means high collinearity (also multicollinearity). However, the results of the study found that all VIF value of independent variables including recommendation, customer satisfaction, online shopping experience, online shopping trust, and online shopping word-of-mouth met the criteria. Hence, there were no multicollinearity problems among those variables.

Discussion

The research results showed that recommendation affected consumer online shopping decision in China. This was because most of the respondents believed that recommendation could help them to decide what to buy and they were interested in an online shopping after it was suggested by the website. The results of this study were matched with previous study of Jabr and Zheng (2014) which revealed that the recommendation from the websites was the experience of consumers which based on their previous personal experience with the product. In addition, the results were aligned with the consumers' perceived attributes in online shopping decisions (Tsao, 2013) which showed that online recommendation was important factor influencing customers to do online shopping decision and had improved customer decision making quality and increased



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customer trust in decisions. In addition, the research result showed that online shopping experience were affected consumer online shopping decision in China. As the online shopping experience was the enjoyment, pleasure, and value for the customers, it could affect the attitude of the customers to purchase through the internet; the result confirmed the previous study of Khalifa and Liu (2007) that the customers were more liked to shopping online as the growth of online purchasing experience.

Furthermore, the research result showed that online shopping trust affected consumer online shopping decision in China. This result was supported because the respondents might believe the information, products, or promised which provided by the website. The results confirmed the previous study of Harris and Goode (2010) that online shopping trust in an online retailer was a predictor of purchase intentions. Furthermore, (Hong, & Cha, 2013; Dabholkar, & Sheng, 2012) also confirmed that online shopping trust in a seller was positively associated with online shopping intention, which showed that online shopping trust was important factor influencing customers to make the online shopping purchase decision. Additionally, the research result showed that online shopping word-of-mouth affected consumer online shopping decision in China with significant level .05. In China, many online consumer discussion forums supported online shopping word-of-mouth. And the previous research of Dzian, Triznova, Kaputa, and Supin (2010) showed that online shopping word-of-mouth provided indirect purchasing knowledge to readers, the recommendations on these forums could significantly affect their attitudes towards various kinds of consuming targets. In addition, the recommendation from reliable friends and familiars had strong influence on consumer buying decision. The result was aligned with the study of Chang et al. (2014), they found that customers could very easily share and look for experiences with products and they often used online shopping word-of-mouth as the important source of information in buying decisions.

However, the research results showed that customer satisfaction did not affect consumer online shopping decision in China. The result of this study was contrast with previous study of Chen, Yan, Fan, and Gordon (2015) which revealed that customer satisfaction was positively affected consumer's online shopping intention. This hypothesis was not supported because the respondents would not be able to accomplish what they wanted on online shopping or they might not content with the outcomes of their shopping on the websites. In addition, they might be dissatisfied with the products/services offered by the website.



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Suggestion

According to the results of study, there were four primary factors would affect customer's online shopping decisions, which were recommendation, online shopping experience, online shopping trust, online shopping word-of-mouth. As this study illustrated the example of recommendation from customers, friends and families would impact customers on online shopping decision, the merchants should specifically display in the recommendation from people has a reference value for online clients to make shopping decision. In addition, online shopping experience and online shopping trust were the factors included within the aspect of risk perception. The business owners should drive clients pay more attention to product or service information research and to promote the products for customer awareness and then increase the customer online shopping experience to boost the online shopper's level of acceptance, trust, and loyalty. Hence, customers purchase decision for the virtual shops and products would be succeed.

Additionally, more and more consumers carefully ensured on the product quality especially the product with high quality and good value. If customer got a good experience with a product for the first time, they would do in trust with the retail and might be changed to the next repeat customers. The customers know more about the online products' information; it would increase the understanding and willingness for customers to shop online. Furthermore, online shopping word-of-mouth was the factor that had strongest weight of relative contribution on consumer online shopping decision in China. Hence, the marketers and business owners who conducted business associating with online retails or online stores should place an emphasis on maintaining a good relationship with customers by reviewing the online consumer shopping word-of-mouth to improve their products or services to meet the consumer needs. Then, the content online consumers might refer positive things about the website with other people or recommend the website to other consumers who sought for advice before making purchase decisions. This also was a good chance that the online retailers could use the online word-of-mouth to promote their products and increased consumer awareness to choose the products.

This research study is conducted in the context of the Chinese consumers only. Therefore, there is more chance for future research, the wider area in different regions, countries or ASEAN should be conducted in order to gain more reliable results. The researchers or academicians who are



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interested in this topic might add other relevant external influence factor, such as economic status, cultural difference, corporate image, and religious faith for future study. Improving with deeper study of consumer behaviors and feedback after sales, the target sample could be based on different ranges of age, educational backgrounds, and average income. As the different criteria, factors and different environments could generate different perspectives and research results.

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