

FACTORS INFLUENCING ONLINE SHOPPING BEHAVIOR INTENTION: A STUDY OF THAI CONSUMERS

by

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Abstract

This research is aimed at contributing to the literature on factors influencing Thai online shoppers' purchasing intention, particularly on shoppers in Bangkok. The Theory of Planned Behavior is adapted as the theoretical foundation for the conceptual model used in the research. Descriptive research and an anonymous questionnaire are designed as the data collection methodology and are used in the survey fieldwork conducted at central shopping malls in Bangkok during November and December, 2005 covering 384 sample participants aged 25 years old and older, with Internet competency. The One-way analysis of variance (ANOVA) and Multiple Regression are used for inferential statistics. The findings show that the most important factor is positive attitude toward online shopping followed by trust and subjective norm.

INTRODUCTION

Electronic Commerce is a relatively new business channel, which entails selling and buying goods and services using a technology channel, namely, the World Wide Web or Internet. It is a state-of-art technology that is comprised of hardware, software and network equipment whereby each of the components work as a single system bringing people closer together. This new technology has been used and implemented worldwide so that people can be connected to each other, in both personal and business matters, by just clicking a mouse anywhere and at any time. Being easy to use and inexpensive, Electronic Commerce has been rapidly growing each year (Chang, Cheung, & Lai, 2004, and Yang & Lester, 2004) and is currently utilized for shopping, information search, bills payment, news, weather reports, and online games.

The use of the Internet has been growing tremendously in Thailand since 1998. There were 1.1 million, 2.4 million, 3.7 million, 5.6 million, 7.7 million, 10.4 million, and 11.9 million users in 1998, 1999, 2000, 2001, 2002, 2003, and 2004, respectively (National Electronics and Computer Technology Center, 2005). The numbers of Internet users are relevant to the numbers of online shoppers advised by So, Wong, and Sculli (2005), in that the Internet users are likely to also become online buyers. This also

indicates that any business that is conducted via the Internet channel, such as Electronic Commerce, and online games tend to have a good opportunity for business success since potential consumers are already there. In addition, there are approximately 11.9 million Thai users at present who use the Internet, 20 percent of whom have had experience of buying online (National Electronics and Computer Technology Center, 2005). Given that the large majority of Thais have not yet made any actual purchase on the Internet, Gunawardana and Avatchanakorn (2000); Yawai (2004) argue that Thai online businesses have not been successful in boosting their selling volumes so far whereas other foreign online businesses have. In contrast, the number of Thai Internet users has grown tremendously since 1998 and continues to do so (National Electronics and Computer Technology Center, 2005). For these reasons, there needs to be research on what factors drive Thai consumers toward online shopping.

The major objective of this research is to examine Thai consumers' behavioral intentions toward online shopping. The study also surveys the factors that influence them to shop online. As suggested by the National Statistical Office report (2004) the majority of Internet users are located in Bangkok; therefore, the target survey location was in Bangkok. The Theory of Planned Behavior (TPB) was adapted and

used as the conceptual model throughout the study. The TPB was selected as the theoretical base because it has been validated by prior studies (Cook, Kerr, and Moore, 2002; George, 2004; Hansen, Jensen, and Solgaard, 2004; Limayem, Khalifa., and Frini 2000; Zhang, Chan, and Fang, 2004) as being suited for predicting consumers' behavioral intention, especially in terms of adoption of technology.

LITERATURE REVIEW

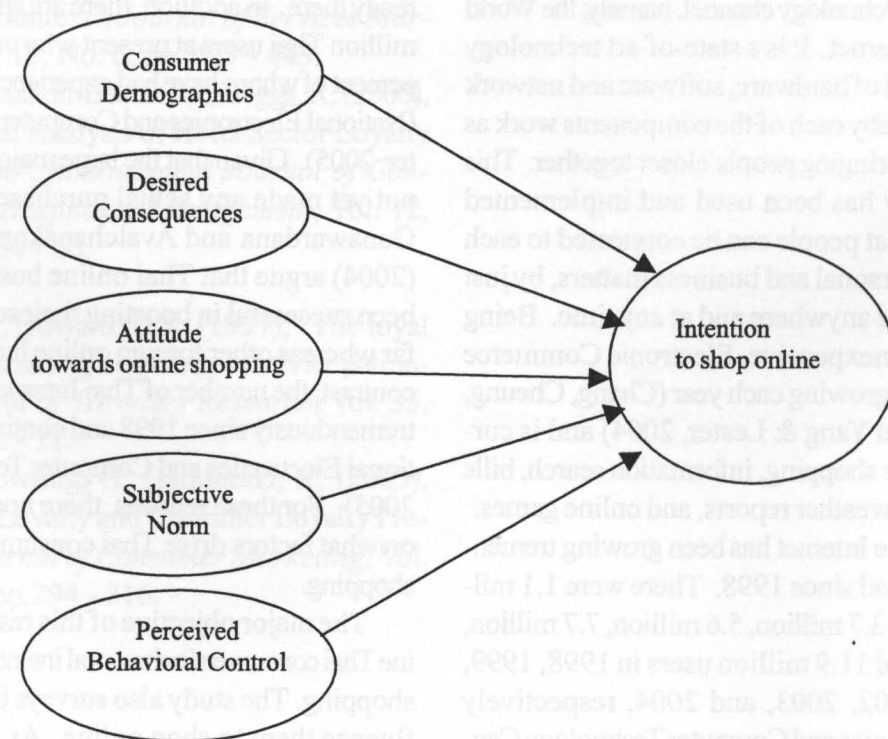
The most influential factors for online shopping from prior studies are convenience, and time saving (Bellman, Lohse, and Johnson, 1999; Bhatnagar, Misra, and Rao, 2000; Chang et al, 2004; Limayem et al, 2000; Sim and Koi, 2002) for online shoppers. Moreover, online technology is simple to operate (Ahn, Ryu, and Han, 2004; Chang et al, 2004; Liu and Wei, 2003; O'Cass and Fenech, 2003). Some specific products, such as books, CDs, and computer software (Bhatnagar et al, 2000; Chang et al, 2004; Sim and Koi, 2002) are usually cheaper than at other

stores. That is, they can offer a competitive price to the shoppers. Trust in the online shop is another factor which directly affects the online business as revealed in the literature (Bhatnagar et al, 2000; Chang et al, 2004; Hoffman, Novak, and Peralta, 1999; Limayem et al, 2000; Martinez-Lopez, Luna, and Martinez, 2005). Bhatnagar et al (2000); Chang et al, 2004; Corbitt, Thanasankit, and Yi (2003); Mahmood, Bagchi, and Ford (2004); Monsuwe, Dellaert, and Ruyter (2004). Wu (2003) found that not only will those factors influence online shoppers but demographic data also do. Thus, the influencing factors advised by previous studies in online shopping are convenience, time saving, pricing, trust, and consumer demographics. These additional factors are added into the model as the variables of this research to test whether they are factors influencing Thai online shoppers' purchasing intentions.

Conceptual Model

The conceptual model is adapted from the Theory of Planned Behavior (Ajzen, 1991), see Figure 1.

Figure 1: The Conceptual Model: Factors Affecting Online Shopping Behavior



Source: adopted from Ajzen (1991)

For all of the five constructs indicated in the conceptual model, each independent variable (Consumer Demographics, Desired Consequences, Attitude towards online shopping, Subjective Norm, Perceived Behavioral Control) has influence on the dependent variable (Intention to shop online) which indicates whether shoppers are more likely to buy products online or not. There is no behavioral construct in the framework since this research intends to find the intention to shop online, not the actual shopping behavior.

Hypotheses

H1 Men will have a higher online buying intention than women.

H2 Those with a higher level of education will have a higher online buying intention than those with a lower level of education.

H3 Those with a higher income will have a higher online buying intention than those with a lower income.

H4 Those who are older will have a higher online buying intention than those who are younger.

H5 Those who have a career in a computer-related field will have a higher online buying intention than those who have not.

H6 Those who have previously shopped online will have a higher online buying intention than those who have not.

H7 Convenience of purchase significantly predicts online buying intentions.

H8 Time saving significantly predicts online buying intentions.

H9 Price significantly predicts online buying intentions.

H10 Trust significantly predicts online buying intentions.

H11 Attitude towards online shopping significantly predicts online buying intentions.

H12 Subjective Norm significantly predicts online buying intentions.

H13 Perceived Behavioral Control significantly predicts online buying intentions.

RESEARCH METHODOLOGY

This cross-sectional study was conducted using self-administered questionnaires, and convenient sampling method.

Target population

As there was evidence that working adults aged 25 years old and older were recorded in the National Statistical Office (2004) as those who were the greatest users of the Internet in Bangkok, therefore, the target respondents in this research were Thai citizens, working adults aged 25 years and older, who had access and were capable of using the Internet and who visited the shopping malls in the central Bangkok area (Bangkok.com, 2005; Wikitravel, 2005), for example, the Emporium, Siam Square Center, Gasorn Plaza, Siam Discovery, The Mall Department Stores, and Central Department Stores, during the month of November and December, 2005. These were selected as the data collection venues. The sample size for this research was determined at 384. A total of 462 questionnaires were distributed and 384 were collected during the survey time. The response rate was 83 percent.

Questionnaire

There were two sections in the survey questionnaire. The questions in section 1 were to classify the demographic data related to age, gender, education level, income level, occupation level, and whether the sample had purchased goods online in a multiple-choice format. Questions in section 2 were to ascertain whether convenience, time saving, price, trust, attitude towards online shopping, opinion leader/influential persons (Subjective Norm), and Perceived Behavioural Control influenced the online shoppers' purchasing intent in Bangkok which used a Likert type scale with 7 levels.

Method of Analysis

The One-way analysis of variance (ANOVA) method was used to examine whether there is a significant mean difference in a nominal independent variable (Convenience, Time saving, Price, Trust, Subjective Norm, attitude, and Perceived Behavioral Control) on a single interval dependent variable (intention to shop online). Multiple Regression method was used to analyze the variance in the interval dependent variable (intention to shop online) when the interval independent variables (Convenience, Time saving, Price, Trust, Subjective Norm, attitude, and Perceived Behavioral Control) are used.

RESULTS

Table 1: Respondents' Demographic Profile

Demographics' Profile	Frequency	Percentage
Gender		
Male	188	49.0
Female	196	51.0
Total	384	100.0
Education level.		
High school or below	29	7.6
Diploma	48	12.5
Bachelor degree	251	65.4
Master degree or higher	56	14.6
Total	384	100.0
Salary		
less than 10,000 Baht	89	23.2
10,000 - 29,999.99 Baht	204	53.1
30,000 - 49,999.99 Baht	62	16.1
more than 49,999.99 Baht	29	7.6
Total	384	100.0
Age		
25 - 28 year	187	48.7
over 28 - 35 year	133	34.6
over 35 - 45 year	47	12.2
over 45 year	17	4.4
Total	384	100.0
Occupation		
Accounting related	41	10.7
Computer related	44	11.5
Education related	19	4.9
Engineering related	33	8.6
Management related	42	10.9
Marketing related	59	15.4
Other	146	38.0
Total	384	100.0

Consequently, five out of thirteen hypotheses are supported. They are as follows:

- a. H1: Men will have a higher online buying intention than women.
- b. H6: Experienced online shoppers will tend to have a higher online buying intention than non-experienced ones.
- c. H10: Trust significantly predicts online buying intentions.
- d. H11: Attitude towards online shopping significantly predicts online buying intentions.
- e. H12: Subjective Norm significantly predicts online buying intentions.

H2, H3, H4, H5, H7, H8, H9, and H13 are rejected; all of these variables have a relatively weak influence on online shoppers' intentions. From these findings, men tend to have a stronger purchasing intention than women. Also, the more experience with online shopping, the more likely were shoppers to shop online. Attitude towards online shopping is found to be the most influential factor in online buying intentions from the findings. Subjective Norm and Trust follow.

CONCLUSIONS

This research examined the factors influencing Thai online shoppers' purchasing intentions. The findings will be valuable in providing new knowledge to business-to-consumer investors in the following areas: improving their businesses and setting their marketing strategies by analyzing online shoppers' behavior, staying competitive in the market and increasing business value. By utilizing these findings, marketers can also offer online shoppers a greater variety of products, better price offerings, and the opportunities to buy things whenever they are available since the online shop will be open 24 hours every day. These are obviously significant benefits to both online sellers and shoppers. Online sellers may increase their sales, expand their customer bases through the Internet channel, and make their customers feel more satisfied with having an alternative way of buying products. Other parties, such as corporate management, marketing executives, web developers, web designers, and government agencies, can also obtain benefits from the findings of this research.

LIMITATIONS

There are three limitations. First, the limitation on research timing, this research was a cross-sectional study. It was a one time study from November to December 2005; the results might change as respondents' evaluative criteria change. Second, there is a possibility of having biased answers since most respondents were not alone; they came with friends, families, or spouses. Finally, the results only offer a partial contribution to knowledge of the actual shopping behavior since the research focused on the purchasing intentions of Thai online shoppers rather than their actual purchasing behavior.

FUTURE RESEARCH

Future research can be in three areas of shopper behavior. First, future research should study what products are most frequently purchased in the Thai online market in order to identify these along with shoppers' behavior which will be beneficial to online businesspersons, and other interested parties. Second, this study focused on online consumers in Bangkok, future research could expand the study to Thai people in other provinces. Studies should also be repeated at regular intervals to monitor changes in online shopping behavior. Lastly, most studies on online shopping behavior have been quantitative. In order to gain a deeper understanding, there is a need for qualitative research studies that will provide richer details on perception, attitude and online purchasing behavior in the Thai context.

REFERENCES

- Ahn, T., Ryu, S., and Han, I. (2004) "The impact of the online and offline features on the user acceptance of Internet shopping malls", *Electronic Commerce Research and Applications* volume, May 19, 2004, pp. 1-16, <http://www.elsevier.com/locate/ecra>.
- Ajzen, I (1991) "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, vol. 50, pp. 179-211.
- Bangkok.com [online], Available from; <http://www.bangkok.com/area-guide/ploenchit.html>, [Accessed: May 19, 2005].

- Bhatnagar, A., Misra, S., and Rao, H. (2000) "On Risk, Convenience, and Internet Shopping Behavior", *Communications of the ACM*, vol. 43, no. 11, pp. 98-105.
- Bellman, S., Lohse, G., and Johnson, E. (1999) "Predictors of Online buying Behavior", *Communications of the ACM*, vol. 42, no.12, pp. 32-38.
- Chang, M.K., Cheung, W. & Lai, V. (2004) "Literature derived reference models for the adoption of online shopping", *Information & Management*, February 2, 2004, pp. 1-17, <http://www.elsevier.com/locate/dsw> (Accessed 6 June, 2005).
- Corbitt, B.J., Thanasankit, T., and Yi, H. (2003) "Trust and c-commerce: a study of consumer perceptions", *Electronic Commerce Research and Applications*, vol.2, pp. 203-215.
- Cook, A.J., Kerr, G.N., and Moore, K. (2002) "Attitude and intentions towards purchasing GM food", *Journal of Economic Psychology*, vol. 23, pp 557-572.
- Electronic Commerce Section, (2004) "An exploratory study project on Electronic Commerce business", Thailand: Electronic Commerce Section, Department of Business Development, Ministry of Commerce, Thailand, September 2004, pp. 1-147.
- George, J.F. (2004) "The theory of planned behavior and Internet purchasing", *Internet Research*, vol. 14, no. 3, pp. 198-212.
- Gunawardana, K.D., Avatchanakorn, V. (2000), "The Measures of E-Commerce Awareness in Thailand Industries: Survey and Analysis Perspectives", ICMIT, pp. 653-658.
- Hansen, T., Jensen, J.M., and Solgaard, H.S., (2004) "Predicting online grocery buying intention: a comparison of the theory of reasoned action and the theory of planned behavior", *International Journal of Information Management*, vol. 24, pp. 539-550.
- Hoffman, D.L., Novak, T.P., and Peralta, M. (1999) "Building consumer trust online", *Communications of the ACM*, vol. 42, no. 4, pp. 80-85.
- Limayem, M., Khalifa, M., and Frini, A. (2000) "What makes Consumers Buy from Internet? A Longitudinal Study of Online Shopping", *IEEE Transactions on Systems, Man, And Cybernetics*, vol. 30, no.4, pp. 421-432.
- Liu, X. and Wei, K.K. (2003) "An empirical study of product differences in consumers' E-commerce adoption behavior", *Electronic Commerce Research and Applications*, vol. 2, pp. 229-239.
- Martinez-Lopez, F.J., Luna, P., and Martinez, F.J. (2005) "Online shopping, the standard learning hierarchy, and consumers' interest expertise", *Internet Research*, vol. 15, no.3, pp. 312-334.
- Mahmood, M.A., Bagchi, K., and Ford, T.C. (2004) "On-line Shopping Behavior: Cross-Country Empirical Research", *International Journal of Electronic Commerce*, vol. 9, no. 1, pp 9-30.
- Monuwe, T.P., Dellaert, B.G.C., and Ruyter, K. (2004) "What drives consumers to shop online? A Literature Review", *International Journal of Service Industry Management*, vol.15, no.1, pp 102-121.
- National Electronics and Computer Technology Center, (2005), "Thailand ICT Indicators 2005", February 2005, NECTEC, Thailand www.nectec.or.th/pub/book/ICTIndicators.pdf.
- National Statistical Office [online], Available from: <http://www.nso.go.th>, [Accessed:December 4, 2005].
- O'Casey, A. and Fenech, T. (2003) "Web retailing adoption: exploring the nature of Internet users Web retailing behaviour", *Journal of Retailing and Consumer Services*, vol. 10, pp.81-94.
- Sim, L.L. and Koi, S.M. (2002) "Singapore's Internet shoppers and their impact on traditional shopping patterns", *Journal of Retailing and Consumer Services*, vol. 9, pp. 115-124.
- So, W.C.M., Wong, T.N.D., Sculli, D. (2005) "Factors affecting intentions to purchase via the internet", *Industrial Management & Data System*, vol. 105, no. 9, pp. 1225-1244.
- Wikitravel [online], Available from: <http://wikitravel.org/en/Bangkok/Sukhumvit>, [Accessed: May 19, 2005].
- Wu, S. (2003) "The relationship between consumer characteristics and attitude toward online shopping", *Marketing Intelligence & Planning*, vol. 21, pp. 37-44.
- Yang, B. & Lester, D. (2004) "Attitudes Toward Buying Online", *CyberPsychology & Behavior*, vol. 7, no. 1, pp 85-91.
- Yawai, W. (2004) "E-Commerce: Cover Story", *The Magazine for e-Commerce & e-Business*, vol.6, no. 70, pp. 72-73.
- Zhang, J., Chan, S. and Fang, X. (2004) "Enterprise User Adoption of VoIP", *New Media Age*, April 29, 2004, <http://facweb.cti.depaul.edu/ctiphd/ctirs04/submissions/camera-ready/Zhang.doc>.