The effect of satisfaction, website quality, financial security, trust, and attitude on online re-purchase.

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Abstract

Internet has fundamentally changed the way of businesses, consumers communicate, interact and consumer transactions in worldwide. Vendors also must face reality of the complex behavior of consumers and should consider using data and information in the online market. The objective of this research is to examine a conceptual model for analyzing customers’ perceptions of online re-purchase intention. This research identified factors influence online re-purchase intention, paying the special attention to the satisfaction with online purchase, website quality, financial security, trust, and attitude toward online purchase. The survey was done via online channel, respondents of this survey are the internet users who have experiences on online shopping. There were 437 respondents who participate in this survey 245 were female and 192 were male. The results show that attitude toward online purchase is a major factor influence customer’s intentions to become online re-purchaser.

The research model was analyzed by using the structural equation model. The result of the analysis revealed that the research model was a good fit. Base upon the threshold of the goodness-of-fit measure, the result indicated that the model was a good fit with chi-square ($\chi^2$) = 12.27 and degree of freedom (df) of 19 (p = 0.88); goodness of fit index (GFI) = 0.99; root mean square residual (RMR) = 0.0052;

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Standardized RMR (RMSR) = 0.0063. All results of goodness of fit statistic measure have found in line with the acceptable level. In the same direction with the incremental fit measurements as AGFI, NNFI, NFI, and CFI have the value greater than 0.95. For the result above indicated that the incremental fit and parsimonious fit measure the model was a good fit.

**Keywords:** Satisfaction, website quality, trust, financial security, attitude toward online purchase, online re-purchase intention.

**Introduction**

Online shopping has become a popular way for consumers. This new innovative pattern of shopping not only brings a great number and wide range of merchandise to consumers, it also offers a huge and numerous business opportunities. The working efficiency, information transmission, and even cultural exchange have been unprecedentedly improved. The E-commerce market is growing rapidly (Fang et al., 2011) and has become one of the most interesting developments in E-commerce because of its facilitation through unlimited information, instantaneous price comparison and 24/7 services, as a relatively new medium for business, customers start and get used to E-commerce website instead of a physical store (Chiu et al., 2011).

Online re-purchase intention is an important issue for E-commerce. The focus is increasingly on developing models to explain various aspects of online re-purchase intention, re-purchase is critical to the success of online stores (Abdul-Muhmin, 2011). It is important for online vendors to understand how to improve the customers’ continued use of an E-commerce website. Internet World Stats (2011) shows that the internet users in Thailand were 8,465,800 users in 2007, 16,100,000 users in 2009, and 18,310,000 users in 2011. Since the internet users are increasing year by year, the values of E-commerce also increase, the statistic information from
National Thai Chamber of Commerce Statistical Office Thailand (2011) showed that the values of E-commerce in Thailand from year 2008 increased from 305,159 million baht to 629,615 million baht in year 2011.

The study was examining re-purchase intention of consumers who have previously made online purchase. Several researchers have studies a factor of antecedent and also examined the several variables that is the criteria in order to increase customer re-purchase intention (Zhou et al., 2009; Abdul-Muhmin, 2011; Fang et al., 2011). This research investigates to develop online re-purchase model. Base on researcher studied on literatures and academic journals and experiences on online shopping, researcher had conclude that satisfaction (Abdul-Muhmin, 2011; Wen et al., 2011) include encounters satisfaction (Gounaris et al., 2010), and processes satisfaction (Gounaris et al., 2010), website quality (Al-Maghrabi and Dennis, 2011) composed of information quality system quality and services quality (DeLone and McLean, 2003), financial security (Lloyd and Mark, 2010), trust (Zhou et al., 2009), attitude toward online purchase (Abdul-Muhmin, 2011) composed of perceived usefulness (Chiu et al., 2009) and perceived ease of use (Chiu et al., 2009), those variables have effect on online re-purchase intention.

Literature review

Financial security

Financial security was measured via gauges of ease of payment and perceived security (Lloyd and Mark, 2010). Ease of payment means how efficient that payment procedure has. Whether it takes long time, easy to use, or involves a lot of details for entering (Lloyd and Mark, 2010). While perceived security means how concerns consumer has when buying products from the website. Whether the security systems seem rigorous, or can reassure of security procedures (Lloyd and Mark, 2010). Online financial security refers to the level to which consumers
perceive the processes of payment and policies as secure or safe. Ease with which payments are processed, forms a key dimension used by consumers to evaluate websites. Similarly, the joint second most powerful that drive the online satisfaction is the perceived security of a site (Szymanski and Hise, 2000). The later work of (Montoya-Weiss et al., 2003) also finds the links between security perceptions and both satisfaction and usage. In this sense reflecting the centrality of trust to online exchange and the importance of perceived security has been stressed by theorists (Szymanski and Hise, 2000). Therefore, there is enough evidence to suggest the following hypotheses.

**H1**: Financial security had effect on trust.

**Satisfaction with online purchase**

Satisfaction with online purchase has been defined and measured in different ways (Oliver, 1997). It has been defined as customer’s overall experiences as cumulative satisfaction (Olsen, 2002). Satisfaction is a person’s feelings of contentment or disappointment from the comparison of a product’s perceived performance to consumer expectation. Several researchers distinct a difference between satisfactions with encounters satisfaction and satisfaction with processes satisfaction (Dube and Morgan, 1998). Encounters satisfaction describes the interactions between the customer and the online vender, while processes satisfaction describes the consumer’s experiences during the purchasing transaction. In the E-shopping environment, encounter satisfaction is considered as the interaction experience with the electronic system (e.g. site function, information, content and photo, site appearance and decoration) (Gounaris et al., 2010). While process satisfaction is the experience with services after purchasing (e.g. process of purchasing, delivery, product operation, after sale services) (Gounaris et al., 2010). Therefore, there is enough evidence to suggest the following hypotheses.
$H2$: Satisfaction with online purchase had effect on attitude toward online purchase.

$H3$: Satisfaction with online purchase had effect on online re-purchase intention.

**Website quality**

Website quality has become essential for improving customer satisfaction and creating customer trust. Initial trust forms quickly on the basis of available information. If consumers perceive a website as high quality and user-friendly, they are more likely to trust. Website qualities also influence consumer evaluation and drive re-purchase intention. Factors include customization, interactivity, care, community, convenience, content, infrastructure quality, novelty, free services, individualization, technical integration, information quality, playfulness, appearance, technical adequacy, order fulfillment, merchandising, security, privacy, promotion, transaction speed, and user-friendliness.

The three quality dimensions of DeLone and McLean’s IS success model covers all the characteristics of the consumer’s online interaction with the online vendor on website. Information quality relates to their semantic level (success of product information on the website in passing on intended meaning) and captures customers’ desired attributes of product content provided by online vendor. While System quality corresponds to the technical level, its captures the customers’ desired characteristics of an E-commerce system such as ease of navigation and download delay to reflect the success of online peripheral support (e.g. feedback, frequently asked questions (FAQ)) (DeLone and McLean, 2003). Accordingly, in this research define website quality as consisting of three dimensions: system quality, information quality and service quality (DeLone and McLean, 2003), and examine the impact of these three website quality dimensions on intention of purchase in the context of E-commerce. Thus, research proposes the hypotheses as following.
**H4**: Website quality had effect on satisfaction with online purchase.

**Trust**

Trust is a set of specific beliefs dealing primarily with the benevolence, competence and integrity of another party (Chiu et al. 2009). According to (Ajzen and Fishbein, 1980), trust can be viewed as a behavioral belief that online vendor will behave fairly (benevolence), capably (competence), and ethically (integrity), that can creates a positive attitude toward the transaction behavior (Pavlou and Gefen, 2004), which leads to customer purchase intentions. When a consumer trusts in vendor, feelings of confidence and security occur towards vendor. The consumer is assured and willing to involve in purchasing process (Moorman, et al., 1992). In an online transaction, there is no physical interaction between consumer and vendor, and the payment is usually paid by credit card, which increases the probability that consumer’s financial data may be exposed or used incorrectly. There is also the risk that the product received is not originally ordered (Monsuwe et al., 2004). Thus, the online transaction can create a sense of powerlessness among online shoppers (Monsuwe, et al., 2004). Trust plays a crucial role in driving perceived usefulness (Gefen et al., 2003; Pavlou, 2003) and customer re-purchase intention (Weisberg et al., 2011) Identifying the importance of retaining customers’ trust in online business and retaining re-purchase customers, and have found that it absolutely vital for online business (Liao et al., 2006). Therefore, the following hypothesis is proposed.

**H5**: Trust had effect on attitude toward online purchase.

**Attitude toward online purchase**

Attitude is a directly influenced factor that affects the consumers’ positive or negative purchasing willingness. Technology Accepted Model (TAM) is a key was initially developed to study the adoption of technologies for utilitarian purposes.
whereby perceived usefulness (PU) and perceived ease of use (PEOU) appears to be the strongest predictor in most cases (Davis, 1989). PU is defined as the extent to which a consumer believes that online shopping will enhance their transaction performance (Chiu et al., 2009), and also influences customer attitudes. PEOU is defined as the extent to which a consumer perceives the ease of interaction and receives the product information that they need. When consumers find it easy to interact with the websites, they will consider online shopping more useful. Customers who have accomplished the online shopping in an efficient manner will be more likely to exhibit stronger re-purchase intentions (Chiu et al., 2009). Therefore, the following hypothesis is proposed.

**H6: Attitude toward online purchase had effect on online re-purchase intention.**

**Online re-purchase intention**

By examining online re-purchase intentions of consumers who have previously made online purchase, the conceptualization simply as the likelihood that that consumer will buy online again at specific vendor. This conceptualization views intentions as “expectations,” in contrast to other sights of intentions as “aims” or “plans” (Soderlund and Ohman, 2003). The perceptions of re-purchase intention and satisfaction are always linked together. A direct and positive effect between re-purchase intention and customer satisfaction has been supported in general of product and service. Re-purchase intention is influence by customer satisfaction. In higher level of customer satisfaction, the greater shows in their re-purchase intention.

**Conceptual framework**

According to the researcher was reviewed the journals or academic literature the conceptual framework of the study was developed and is shown in the figure 1. The focal construct is online re-purchase intention. The study proposition
is that this is directly determined by five constructs, satisfaction with online purchases, website quality, financial security, trust, and attitude toward online purchase. In turn, satisfaction is determined by two factors encounter satisfaction and process satisfaction, besides website quality consisted of information quality, system quality, and services quality, furthermore financial comprised of security perceived security and ease of payment, in addition attitude is composed of perceived ease of use and perceived usefulness.

![Figure 1 Conceptual framework of the research](image_url)

**Methodology**

The data collection was done via online survey research with structured questionnaires. In order to conduct the research, the information was collected from the internet users who had experiences on online purchase, there are 437 respondents who participated to answer the questionnaires.

**Research Instrument**

The questionnaire consists of two sections. The first section is demographic personal information, it consists of gender, age, occupation, monthly income, frequencies of online purchases, time spent on a web site when purchasing a products and services, number of online shops patronized, and online repurchase experience. The second section solicits responses on the key constructs of the
conceptual framework namely, satisfaction with online purchase composed of encounter satisfaction and process satisfaction were adapted from (Gounaris et al., 2010), website quality composed of information quality, system quality and services quality adapted from (Kuan et al., 2008), financial security consists of ease of payment and perceived security adopted by (Lloyd and Mark, 2008), trust were adapted from (Chiu et al., 2009), attitude toward online purchase consists with perceived usefulness and perceived ease of use were adapted from (Davis, 1989; Chiu et al., 2009), and online re-purchase intention adopted by (Chiu et al., 2009; Zhang et al., 2011).

Since in the second section of this survey, the five-point Likert Scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) (Kolodinsky et al., 2004) was used as instrument to measure the questionnaire items.

The reliability of the questionnaires was measured by using the Cronbach's Alpha coefficient, it indicates the level of the items are correlated to each another. The reliability as the consistency and stability of the score form the measurement scale was defined by (Hair et al., 2006) that the score of 0.70 or higher will be reliable enough used in the data collection. Cronbach’s Alpha of this study is ranked from 0.73 to 0.93. It can imply that the data were acceptable.

**Data analysis**

Structural Equation Model was used to examine the postulated hypothesis. The structural relationship both group between satisfaction with online purchase, website quality, financial security, trust, attitude toward online purchase and online re-purchase intention were analyzed by using LISREL 8.8. The purpose is to evaluate the goodness of fit, as the absolute fit indices like $\chi^2$, minimum fit the function test, GFI, AGFI, and (RMSEA) were used. Furthermore, the goodness of
fit also used the increment and decrement indices such as (NFI), (NNFI), (CFI), and norm chi-square was used to assess the goodness of fit.

Result

The result shows that the study sample exposed that female are the most participated in the survey by 56.10% (n=245), while male participated by 43.90% (n=192). The most respondents for age category are between 18 - 24 years old being 45.10%. The occupation shows that 33.6% are private company officer. In part of monthly income (Baht), there is 29.70% earn 10,001 - 20,000. Frequency of online purchases, less than once a month is the largest group of responded sample responding by 61.30%. There is 44.90% that compared 2 - 4 shops.

GFI is 0.99, AGFI of this study was 0.98. The RMR of this study was 0.0052, and the RMSEA was 0.00. All the measures are within the acceptable level. In the same way as incremental fit measurements like AGFI, NNFI, NFI, and CFI have value greater than threshold acceptance level of 0.9500 regarding to the table 1.

Table 1 Goodness of fit Statistic

<table>
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<tr>
<th>Absolute Fit Measure</th>
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<tr>
<td>Degree of Freedom (df)</td>
<td>19</td>
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<tr>
<td>Minimum Fit Function Chi-Square ($\chi^2$)</td>
<td>12.27 (P = 0.87)</td>
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<tr>
<td>Normal Theory Weighted Least Squares Chi-Square</td>
<td>12.17 (P = 0.88)</td>
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<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>0.9900</td>
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<tr>
<td>Root Mean Square Residual (RMR)</td>
<td>0.0052</td>
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<tr>
<td>Standardized RMR</td>
<td>0.0063</td>
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<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
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<th>Incremental Fit Measure</th>
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<tr>
<td>Adjusted Goodness of Fit Index (AGFI)</td>
<td>0.9800</td>
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<td>Normed Fit Index (NFI)</td>
<td>1.0000</td>
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All hypotheses were supported. Financial security had effect on trust (Ha1), satisfaction with online purchase had effect on attitude toward online purchase (Ha2), trust and website quality had effect on attitude toward online purchase and satisfaction with online purchase (Ha3), attitude toward online purchase and satisfaction with online purchase had effect on online re-purchase intention (Ha4), as the data show in table 2.

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<td>0.42</td>
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**Table 2** Summary of path analysis for hypothesis testing

Figure 2 presents the full structural model. The standardized path coefficient reflected in Figure 2 represents for the final model of online re-purchase intention model: the factor of satisfaction with online purchase, website quality, financial security, trust, and attitude toward online purchase. Which shows all the path are significant and the model product overall fit $\chi^2$ of 12.17 with $p = 0.88$. Since the proposed measurement relationships were consistent with the data.
Figure 2 the full structural model

Discussion

This research aimed to develop the model of online re-purchase intention, in order to contribute customers to become online re-purchaser, to enhance the potential future development of online vendor to maximize the customer satisfaction, quality of website, financial security, trust and attitude to increase re-purchase rate. Data from the survey support the online re-purchase intention model. Results indicate that online re-purchase intention is most dominantly influenced by attitude toward online purchase. Trust have significant effect on attitude, and is a critical aspect of online shopping that can creates a positive attitude toward the transaction behavior which leads to customer purchase intentions. Financial security also has significant effect on trust. Online service settings are evaluated on consumer’s interpretations and perceptions of website and payment security systems, this links between assessments of online financial security and website trust. This can confirmed that consumers are more concerned with security issues in the online service environment.
Implication

Develop customer-oriented strategies at the post-purchase stage to increase customer satisfaction. Online vendor should pay close attention to the service encounter incidents. Develop an interesting and fancy interface design, which can increase online users’ tendency to use the website again. Furthermore, the interactions with customers can effect to the customer satisfaction on online shopping re-purchase intention.

Focusing the marketing strategies more on establishing the awareness and image of the website. For example, retailers could be either exclusively online or have both online and brick-and-mortar presence. The company name should be leveraged to generate awareness of their online presence since customers with cognitive and affective bonds with the online vendor will tend to make a purchase decision even though the website is less superior to other retailers. E-commerce lacks of face-to-face contact. Easy-to-use navigation and real-time online communication will improve customers’ long-term satisfaction. In order to provide adequate information and accurate completion of online transactions, search engines, information agents, and information customization software should be implemented to avoid information overload to customers.

Financial security is linked with trust that in turn is associated with loyalty intentions. The loyalty intentions of customers are strongly linked to the extent to which they trust the online vendor. Online vendor should critically evaluate their own security provision to enhance customers’ perceptions of website trustworthiness. Putting an address, E-mail and telephone number on every web page is the easy way to increase trust. Pay attention to four ways of forming psychological, contract, violation and increase consumers’ trust. An important way is to treat consumers with respect, sincerity, friendliness, and politeness during the
interaction. Enhance the perceived ability and integrity of the members in website and to increase the number of members who are willing to recommend products to others. Consumers would trust the information that experienced users provide.

Making consumer have trust and feel usefulness and ease of used while making purchase can directly increase the attitude towards online purchase intention, which has strong relationship with re-purchase intention. The efficiently demonstrate the ease of used of the website will in turn of positively affect attitude of consumers towards online shopping and increased online re-purchase intentions. Perceived usefulness will make customer feel useful of visiting the website which will affect positive attitude that will lead to online re-purchase intention.

**Conclusion**

An examination of the standardized path coefficients among variables showed that the paths have statistically significant direct effects for financial security has significant direct effect on trust. Website quality has significant direct effect on satisfaction with online purchase. Trust has significant direct effect on attitude toward online purchase. Satisfaction with online purchase has significant direct effect on attitude toward online purchase. In addition, the paths significant on online re-purchase intention were satisfaction with online purchase and attitude toward online purchase have significant direct effect. The major variable that effect online re-purchase intention and lead customers to increase re-purchase rate is attitude toward online purchase that influence by trust and financial security. The significant, positive signs of all structural paths also supported all hypotheses.

**Reference**


