

THE FACTORS INFLUENCING CONSUMER TRUST OF INTERNET SHOPPING IN THAILAND

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Abstract

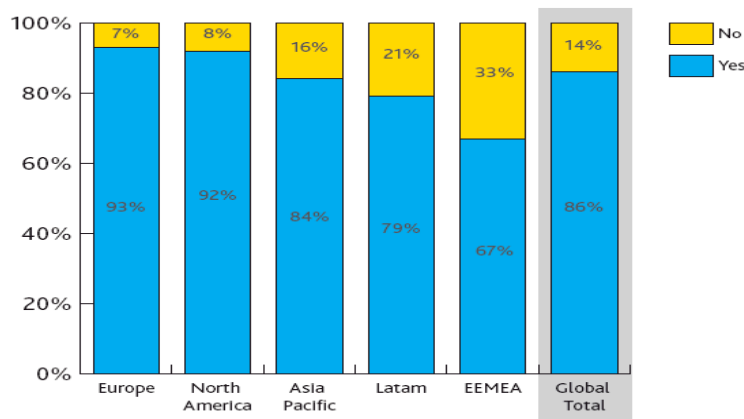
This study examines the factors influencing consumer trust in internet shopping in Thailand. Utilizing the models from three previous studies, a conceptual framework was developed to examine the relationship between six factors which influence trust in Internet shopping. The study concluded that consumer perception of reputation, security, privacy, ease of use, usefulness, and integrity impact trust in Internet shopping in Thailand. Recommendations are provided for Internet sellers to enable them to increase consumer trust.

INTRODUCTION

Since the mid 1990s the internet has created countless applications in virtually every aspect of modern human life. The Internet makes the world smaller. It benefits the people around the world to communicate and transact between each other. Moreover, they are able to searching for the information they needs in short time. There are now over 1.7 billion internet users in the world with the largest number being in Asia. In 2011 28 percent of the world's population is online with the percentage online in Asia now 22 percent.

According to the global survey conducted by the Nielsen company, 85% of the world's online population has used the internet to make a purchase (see Figure 1a). This is a 40% increase over the last two years. Online shoppers tend to exhibit repeat visits to the same online site based on the level trust.

Figure 1a: Global average of online shopping.



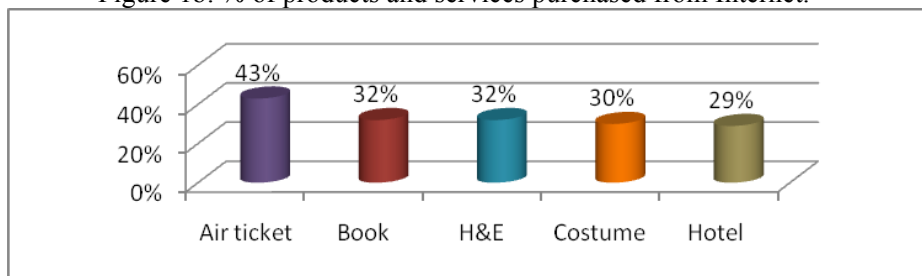
Source: *Global online shopping report (2008), Nielsen.*
 EEMEA =Eastern Europe, Middle East and, Africa

OVERVIEW OF ONLINE SHOPPING IN THAILAND

This study focuses on the factors influencing consumer trust in internet shopping in Thailand. Internet technology was introduced in Thailand 20 year ago. It has been improved and applied to many industries in both manufacturing and service. At the present, the number of internet users in Thailand has increased tremendously to over 14 million users. Master Card conducted a survey on the topic “Online Shopping” in 2009 and found that 92% of internet users in Thailand used it for sending email, 80% for updating news, 73% for searching for general information, 70% for entertaining, 60% for chatting, and 43% for online shopping.

An increasing number of businesses are offering to sell their products and services via the Internet. Online shopping provides convenience to Thai consumer by allowing them to select products and services by just clicking. Figure 1b (below) shows the percentage of products and services that Thais purchase via the Internet.

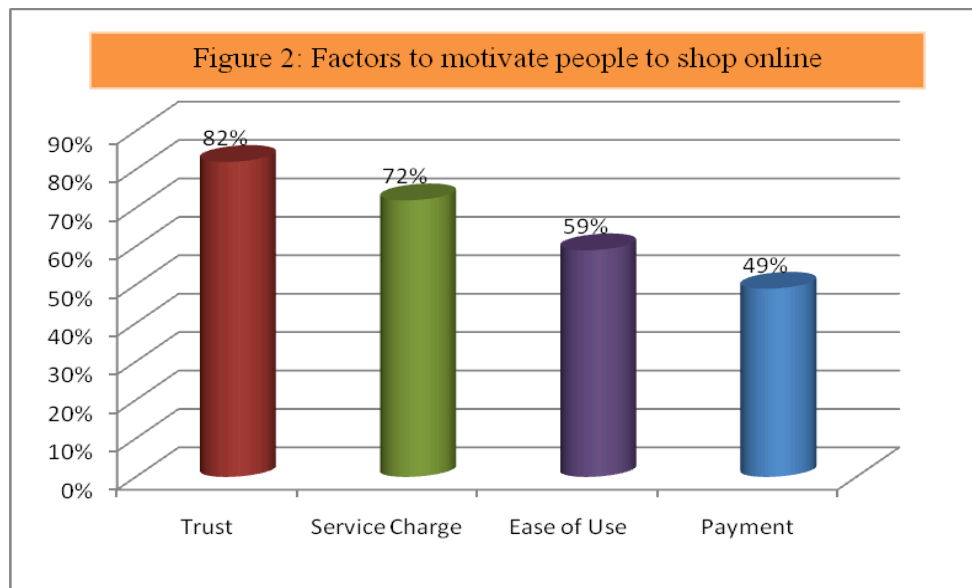
Figure 1b: % of products and services purchased from Internet.



note: H&E = Home accessories and Electronic appliances

Source: *“Online Shopping Survey” (2009), MasterCard Worldwide*

From the survey, the percentage of online is less than a half of the whole Thai internet users. Even as the internet has improved, some online users are still not confident in shopping there. Respondents have reported the most critical factor to motivate them to shop online is trust, as illustrated in Figure 2 below:



Source: "Online Shopping Survey" (2009), MasterCard Worldwide

RESEARCH OBJECTIVE

This research aims to study the consumers’ perception affecting to the consumers’ trust in internet shopping before making the purchase decision in both product and service. Trust is the most crucial factor for online shopping. The organizations those are interesting to enhance the business channel by internet shopping are need to study the influence of consumers’ trust, and how it depends on to other independent variable. Additional, they have to learn the cause of unreliability, how to eliminate it and what function have to be improved and maintained in order to attract consumer. This will allow organizations understand the existing internet shopping situation and the consumers’ decision. This study has been conducted under these following objectives:-

- To analyze the relationship between consumers’ perception of reputation and consumers’ trust in internet shopping.
- To analyze the relationship between consumers’ perception of security and consumers’ trust in internet shopping.
- To analyze the relationship between consumers’ perception of privacy and consumers’ trust in internet shopping.
- To analyze the relationship between consumers’ perception of ease of use and consumers’ trust in internet shopping.
- To analyze the relationship between consumers’ perception of usefulness and consumers’ trust in internet shopping.
- To analyze the relationship between consumers’ perception of integrity and consumers’ trust in internet shopping.

LITERATURE REVIEW

Trust is a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviors of another (Rousseau, Sitkin, Burt and Camerer 1998). Intrinsically, trust implies a willingness to accept vulnerability, but with an expectation or confidence that one can rely on the other party. In the marketing literature, trust has been studied primarily in the context of relationship marketing (Doney and Cannon 1997; Dwyer, Schurr and Oh 1987; Ganesan 1994; Ganesan and Hess 1997; Morgan and Hunt 1994). In studies of buyer-seller relationships, trust in a sales agent evolves over time and is based on a buyer’s observation of a sales representative’s honesty, reliability, consistency and trustworthiness (Anderson and Narus 1990; Doney and Cannon 1997;

Ganesan 1994). This view of trust is consistent with behavioral trust suggested by Schlosser, White, and Lloyd (2003).

For online trust or trust on the Internet which differs from offline trust in important ways. Unlike offline trust, the object of online trust is the Web site, the Internet, or the technology. A firm's Web site could be viewed as a store from the standpoint of building customer trust, extending the salesperson metaphor of Jarvenpaa et al. (2000). A customer's interaction with a store is somewhat similar to his/her interaction with a Web site, and consumers do develop perceptions of trust in a Web site based on their interactions with the site. To the extent that a consumer has positive impressions about a site and accepts vulnerability, she develops trust with that site. A consumer's perception of a site's competence to perform the required functions, and perception of the good intention of the firm behind the online storefront, contributes to his/her perception of trust in that site. Online trust thus includes consumer perceptions of how the site would deliver on expectations, how believable the site's information is, and the level of confidence in the site.

Online shopping, different from traditional shopping behavior, is characterized with uncertainty, anonymity, and lack of control and potential opportunism. Therefore, trust is an important factor to facilitate online transactions.

Online shopping is the process where the consumers can buy goods and services directly from a seller interactively in real-time without an intermediary service over the internet. For an intermediary service is present the process is called electronic commerce or e-commerce. An online shop, internet shop, webshop or virtual store evokes the physical analogy of buying products or services at a bricks-and-mortar retailer or shopping mall. Online shopping has involved to consumer's life and link people's life in daily ways more than 20 years. The consumer can buy what they want, when they want at their convenience, and help to imagine themselves buying, owning, and having positive outcomes by the goods available out there on web (Davis, 2001)

In present, online shopping is a channel for buying products and services for everyone. The idea of online shopping pre-dates the world-wide web for there were earlier experiments involving real-time transaction processing from television.

The definition of privacy is "the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others". From a privacy standpoint, trust can be viewed as the customer's expectation that an online business will treat the customer's information fairly Internet privacy is mostly information privacy. Information privacy means the ability of the individual to control information about one's self. Intrusion of privacy occurs when individuals cannot maintain a degree of control over their personal information and its use.

Perceived security was defined as a threat that creates a circumstance, condition, or event with the potential to cause economic hardship to data or network resources in the form of destruction, disclosures, modification of data, denial of service, and/or fraud, waste and abuse (Kalakota and Whinston, 1997). Security, which involves the use of technical advancements like cryptography, digital signatures and certificates aimed at protecting users from the risk of fraud, hacking or "phishing", has a positive influence on the intention to purchase online. But what is relevant for the acceptance of e-commerce is not the objective security of the electronic channel as transaction medium but the subjective risk perception of the consumer (Klang, 2001; Grabner-Kräuter and Kaluscha, 2003). Thus, when online vendors have implemented security mechanisms, consumers tend to believe that online purchasing is safe.

For security, there are different threats in e-commerce, like data transaction attacks and abuse of financial and personal information, generate security threats. The security is protection against such threats. Information security consists of three main parts: confidentiality, integrity, and availability.

- 1) *Confidentiality* refers to limitations of information access and disclosure to authorized users and preventing access by or disclosure to unauthorized users. In other words, confidentiality is an assurance that information is shared only among authorized persons or organizations. By using Authentication methods, like user IDs and passwords that identify users, can help to reach the

goal of confidentiality. Other control methods support confidentiality, such as limiting each identified user's access to the data system's resources. Additionally, critical to confidentiality (also to integrity and availability) are protection against malware, spyware, spam and other attacks. Confidentiality is related to the broader concept of information privacy: limiting access to individuals' personal information.

- 2) The concept of *integrity* relates to the trustworthiness of information resources. It is used to ensure that information is sufficiently accurate for its purposes. The information should be authentic and complete. For example, forwarding copies of sensitive e-mail threatens both the confidentiality and integrity of the information. *Availability* refers to the availability of information resources. The system is responsible for delivering, processing, and storing information that is accessible when needed, by those who need it. An information system that is not available when you need it is at least as bad as no system at all. It may be much worse if the system is the only way to take care of a certain matter.

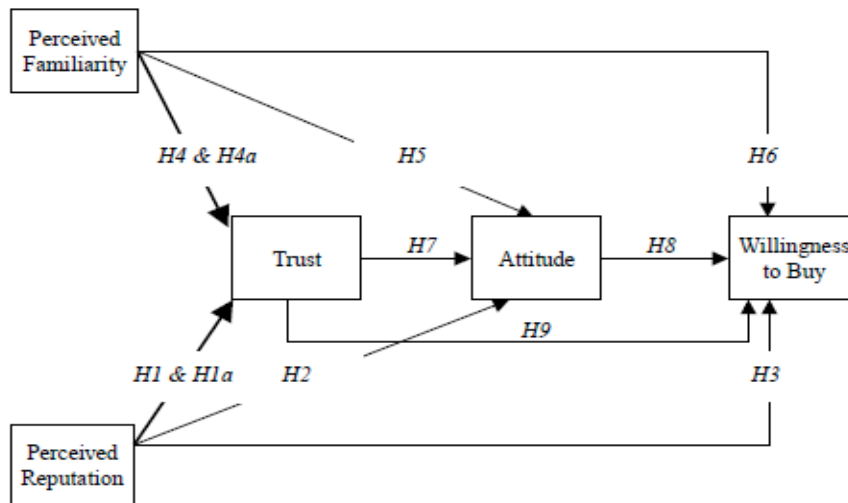
The power to attract online shoppers lies in the technology's usability and usefulness. This is in line with Davis (1989) who defines the latter as perceived usefulness for example, the belief that using the application would increase one's performance. The performance would be centered in the benefits of purchasing a product through Internet retailing minus the tradeoff of a physical retailing.

The theoretical framework is from three models. The first model was from the study of the role of culture in e-commerce use for the Egyptian consumers (El Said and Galal Edeen, 2009). The second model is from the study of the factors influencing Irish consumers' trust in internet shopping (Connolly and Bannister (2008). The third model is from the study on the role of trust in customer online shopping behavior: perspective of technology acceptance (Tzy-Wen Tang, 2005).

Model 1: The role of culture in e-commerce use for the Egyptian consumers

This study was designed to test the relationship between perceived familiarity and perceived reputation to trust on online store. The relationships proposed in this model have been hypothesized that both store familiarity and store reputation will have a stronger relationship with trust. The result of the research provides support for the model that there is strongly significant role of the store reputation and store familiarity in building online trust (see Figure 3).

Figure 3: the research model proposed by El Said and Galal Edeen in 2009



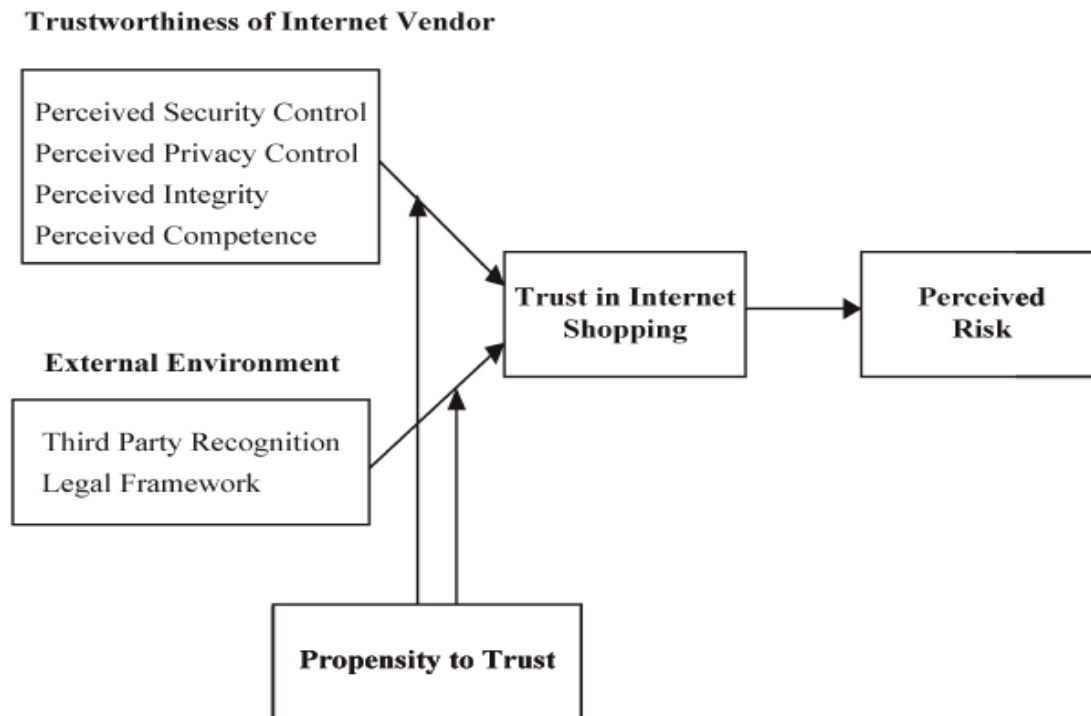
Note: Paths in are hypothesized to be culturally sensitive

Source: Ghada Refaat El Said and Galal H. Galal-Edeen (2009), "The role of culture in e-commerce use for the Egyptian consumers", Emerald, Vol. 15 No. 1, pp. 34-47.

MODEL 2: The model of trust in internet shopping

This model (see Figure 4) has measured the relationship between consumers’ trust in online shopping and the predicted two set of antecedents – trustworthiness of internet vendor and related external environment. The trustworthiness of internet vendor consists of perceived of security control, perceived privacy control, perceived integrity, and perceived competence. The related external environment consists of third party recognition and legal framework. The study provides evidence that the result of both antecedent factors is positively moderated by propensity to trust. The negative perception of factor has effected to the trust in internet shopping. Once the negative outcome, the consumers are likely to avoid from using online shopping.

Figure 4: Model of trust in internet shopping by Connolly and Bannister (2008)

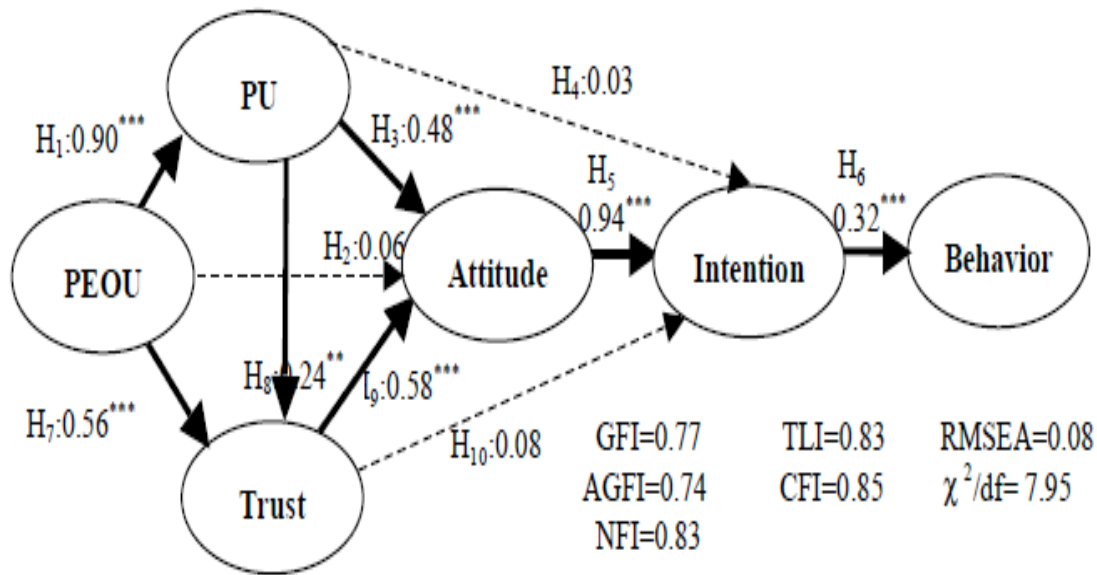


Source: Regina Connolly and Frank Bannister (2008), “Factors influencing Irish consumers’ trust in internet shopping”, *Emerald*, Vol. 31, No.5, pp. 339-358

Model 3: The Role of trust in customer online using behavior

The purpose of this study (see Figure 5) was to explore the role of trust in online shopping mechanism. Tzy-Wen Tang (2005) hypothesized the trust is the consequence of perceived ease of use and perceived usefulness. The result indicates that trust and perceived usefulness are similar role as they are the consequence of perceived ease of use. However, the perceived ease of use still is the antecedent factor of trust. Nevertheless, trust is affected from perceived ease of use and perceived usefulness.

Figure 5: The role of trust in customer online using behavior by Tang (2005)



Note: PU = Perceived usefulness.
PEOU = Perceived ease of use.

Source: Tzy-Wen Tang (2005),

http://www.casos.cs.cmu.edu/events/conferences/2005/2005_proceedings/Tang.pdf

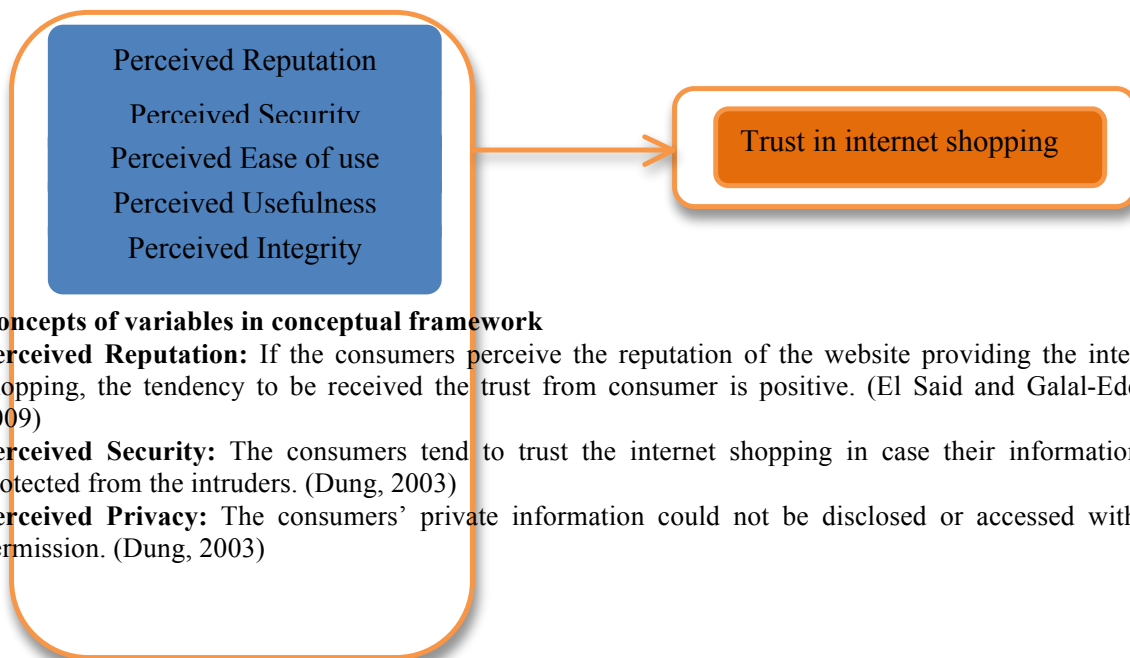
CONCEPTUAL FRAMEWORK

Based on the previous three models this study developed the following conceptual framework for this study (see Figure 6 below).

Figure 6: The modified Conceptual Framework of this study

Independent Variable (x)

Dependent Variable (y)



Concepts of variables in conceptual framework

Perceived Reputation: If the consumers perceive the reputation of the website providing the internet shopping, the tendency to be received the trust from consumer is positive. (El Said and Galal-Edeen, 2009)

Perceived Security: The consumers tend to trust the internet shopping in case their information is protected from the intruders. (Dung, 2003)

Perceived Privacy: The consumers' private information could not be disclosed or accessed without permission. (Dung, 2003)

Perceived Ease of use: The websites that tailor the web for general skill consumers or friendly to consumers, the trust will rise. (Yusniza Kamarulzaman, 2007)

Perceived Usefulness: If the consumers perceived the usefulness from online shopping, it will impact on their trust effectively. (Tzy-Wen Tang, 2005)

Perceived Integrity: The consumers perceived the integrity in website if they offer the reasonable price, and do not fraud. The trust tends to be increased. (Dung, 2003)

Trust in internet shopping: Majority of people have tried online shopping which they expect to receive the convenient and safe from the providers. (Dung, 2003)

RESEARCH HYPOTHESES

H1o : There is no relationship between consumers' perception of reputation and consumers' trust in internet shopping.

H1a : There is a relationship between consumers' perception of reputation and consumers' trust in internet shopping.

H1o : There is no relationship between consumers' perception of security and consumers' trust in internet shopping.

H2a : There is a relationship between consumers' perception of security and consumers' trust in internet shopping.

H3o : There is no relationship between consumers' perception of privacy and consumers' trust in internet shopping.

H3a : There is a relationship between consumers' perception of privacy and consumers' trust in internet shopping.

H4o : There is no relationship between consumers' perception of ease of use and consumers' trust in internet shopping.

H4a : There is a relationship between consumers' perception of ease of use and consumers' trust in internet shopping.

H5o : There is no relationship between consumers' perception of usefulness and consumers' trust in internet shopping.

H5a : There is a relationship between consumers' perception of usefulness and consumers' trust in internet shopping.

H6o : There is no relationship between consumers' perception of integrity and consumers' trust in internet shopping.

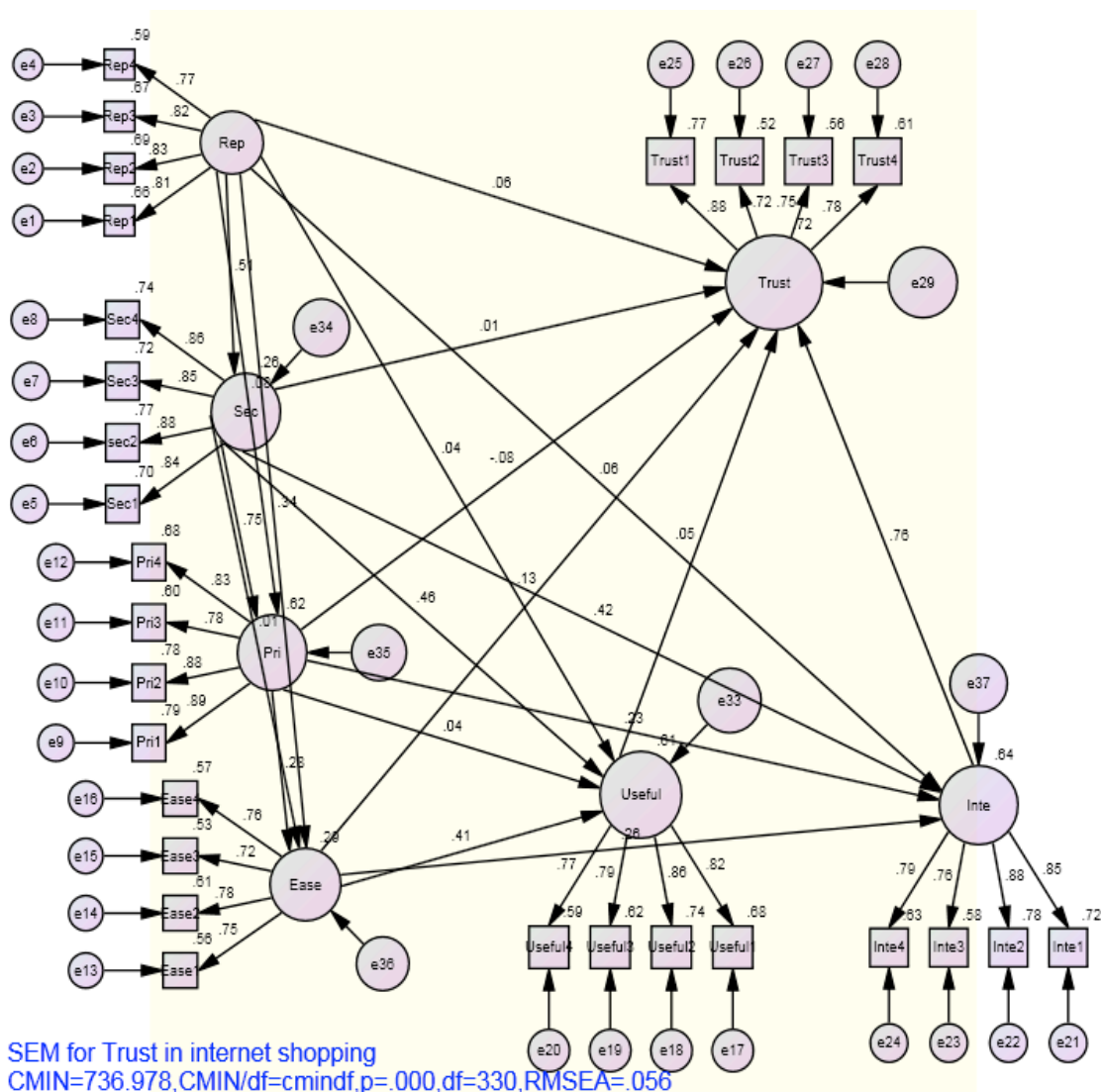
H6a : There is a relationship between consumers' perception of integrity and consumers' trust in internet shopping.

RESULTS AND FINDINGS

The collected data from the questionnaire are analyzed with the statistical method by using SPSS program. Initially, the researchers have to code the collected data into symbolic form for SPSS program.

The researchers used AMOS (Analysis of Moment Structures). It implements the general approach to data analysis known as structural equation modeling (SEM), also known as analysis of covariance structure, or causal modeling (see Figure 7).

Figure 7: Structural equation model



RESULTS OF HYPOTHESES TESTS

A total of 400 questionnaires were distributed to consumers who live in Bangkok and have experience with internet shopping. This research applied the structural equation model (SEM) to test the hypotheses which brought AMOS program to analyze. The results of the hypotheses are shown in Table 1.

Table 1: Summary of hypotheses test results

Hypothesis	Result
Hypothesis 1	There is no relationship between consumers' perception of reputation and consumers' trust in internet shopping. (The significant value is 0.197)
Hypothesis 2	There is no relationship between consumers' perception of security and consumers' trust in internet shopping. (The significant value is 0.944)
Hypothesis 3	There is no relationship between consumers' perception of privacy and consumers' trust in internet shopping. (The significant value is 0.236)
Hypothesis 4	There is no relationship between consumers' perception of ease of use and

	consumers' trust in internet shopping. (The significant value is 0.040)
Hypothesis 5	There is no relationship between consumers' perception of usefulness and consumers' trust in internet shopping. (The significant value is 0.498)
Hypothesis 6	There is a relationship between consumers' perception of integrity and consumers' trust in internet shopping. (The significant value is less than 0.001)

From Table 1 it can be concluded that the most influence affecting to consumer trust in internet shopping is the integrity of the website. The other factors have less influence on consumer trust in internet shopping.

RECOMMENDATION FOR WEBSITE

This results of this study show that there is relationship between perception of integrity and consumer trust before making a decision to buy from a website. In order to build trust in consumers' minds, websites should provide valid information to users. The statement that consumers should recognize or be advised has to be announced clearly without vagueness before visiting the website. The agreement between the website and the consumer should be provided without any request. In case the consumers are doubtful about the agreement, the website should be willing to clarify all details. If there is any changing in the agreement, statement, or other elements, the website should inform the consumers as soon as possible. Finally, the consumer hopefully wishes the website would deal straightly and faithfully with them. If any trick exist before, during, or after, the dealing, the consumer won't trusted anymore.

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