

# Elements of Trust in E-Commerce Interaction

**Mohd Sazili Shahibi, Juwahir Ali & Muhamad Khairulnizam Zaini**

Faculty of Information Management

Universiti Teknologi MARA, MALAYSIA

*mohdsazili@salam.uitm.edu.my; juwahirali@salam.uitm.edu.my;*

*rudolphkzane@gmail.com*

**Abstract:** *Trust was often cited as the main reason why many customers are still sceptical about some online vendors. The purpose of this paper is to identify the elements of trust in e-commerce interactions and how far the element of trust has influence a business transactions electronically. A survey was conducted on information system personnel in Selangor State government office. The result revealed policy clearly stated on the website has been identified by the researcher as a dominant element to the Internet user to trust a certain website. 69.4 percent of the respondents considered the element of return policy in e-commerce website as significant and a core trust element in e-commerce applications.*

**Keywords:** *Trust, E-Commerce, Interaction, Information System Personnel*

## INTRODUCTION

E-commerce is a faceless business transaction. Lack of trust has always been identified as one of the most formidable barriers to people engaging in e-commerce use. According to Chawdhry et al., (2002), trust refers to the willingness to rely on recognized players, organizations and systems with which the e-commerce interaction occurs. Whereas Mayer et al., (1995), defined trust as “the willingness of a party to be vulnerable to the action of another party, based on the expectation that the other will perform a particular action important to the trustee, irrespective of the ability to monitor or control that other party”. This involves transactions in which both financial and personal information is submitted to unknown merchants by the Internet. Trust was often cited as the main reason why many customers are still sceptical about some online vendors (Nefti et al., 2005). Naturally, it is not easy to gain people’s trust as this particular trust is not an object that can be created and controlled easily. The future of e-commerce is, at best, tenuous without a general climate of online trust. Keen (1997), argues that the lack of trust amongst Internet users is the most significant long-term barrier for e-commerce. Understanding the nature of trust is a major issue for both Internet researchers and practitioners as Internet shopping is a relatively new phenomenon with enormous potential (Shan et al., 2007).

## LITERATURE REVIEW

Trust is a concept that has received attention in several different areas of social science, literature, psychology, sociology, political science, economy, anthropology, history and socio-biology (Lewicki and Bunnker, 1996). Trust is necessary for online relationship exchanges because it involves personal and financial information, which takes place in a virtual environment characterized by uncertainty, lack of control and potential opportunism (Hoffman et al, 1999; Bhattacharjee, 2002).

The Internet User Trust study conducted by Jarvenpaa and Tractinsky (1999) focused on the Internet user's initial development of trust in an Internet commercial store. The research was conducted across three countries: Australia, Finland and Israel. Finnish respondents that were involved in the study were older and a lot more experienced in web shopping than the participants from Australia and Israel. This study also found that the reputation of merchants had a significant effect on Internet users' trust. They provided five main characteristics that form the model: perceived size, perceived reputation, and trust in-store, attitude and risk perception.

Centeno (2002) identified consumer trust building factors in e-commerce are divided into several factors as follows:

- On Pre-interaction factors - consumers built their trust after looking at both the brand and merchants existing reputation. It's also related to their previous own experience in the off-line world and any advice or experience they received from trusted sources of information (word of mouth, traditional media).
- With regards to user interface factors – this involves the design, image, professionalism, usability, effectiveness and ease of navigation and if the website uses native languages, this makes people trust e-commerce.
- Site information factors - it was believed the transparency approach in describing company information, (including physical address and contact data), customer service contact numbers, link to trusted companies (for small or web based merchants), payment in relation to its security such as data protection and data privacy statements and also security policy statements.
- Purchase interaction factors - Trust in e-commerce influenced by elements such as contractual terms and conditions, clear pricing (including delivery costs, taxes, etc.), clearly stated return's policy (procedure, costs, reimbursement), ability to back-out of a transaction, security seals of approval (e.g. credit card logos, trust marks), provision of alternative payment methods with different risk levels for consumers (cash on delivery, credit card, etc.), use of up-to-date technology (encryption) and detailed step-by-step payment procedures.

Study by Thaw et al., (2009) found that security, privacy and trustworthiness of web vendors play an important role to the trust building in e-commerce adoption. On the security factor, the participants of the study do not feel safe providing information over the web, and they do not believe there is adequate control to ensure security of information. In terms of privacy, the respondents believe the web merchant will misuse their personal information by revealing that information to other parties. On the trustworthiness of web vendors' factor, only 22.4% of the respondents believe that online companies are trustworthy and 36.5% believe that online companies will act with high business standards. Although security and privacy appear to be the top main concerns for consumers' trust in e-commerce adoption, the empirical results indicate that there is a poor correlation between perceived security and perceived privacy.

Research by Kolsaker and Payne (2003) investigated on engendering trust in e-commerce, it was found that the overall respondents showed concern about security, confidentiality of information and integrity (return and refund) in trust building. In terms of gender differences, the research also revealed that men are more concerned about security, especially when involving electronic payments. On the other hand, women are very particular about the confidentiality of information and integrity to trust a certain online merchant.

Patokorpi and Kimppa (2006) defined that online trust success is a combination of four basic elements, which are: reputation, technology, expertise and relationship.

- Reputation – It seemed to be the first matter that e-businesses and customers alike have to consider. Presumably, reputation is the most important trust-creating factor for first-time customers. E-businesses, which have a strong brand or reputation, have a head-start in comparison to other commercial sites. In Malaysia strong brands like Maybank, Celcom and Air Asia are considered trustworthy and present a standing invitation to visit a web site and do business. Reputation as a trust building tool is by nature impersonal and unidirectional.
- Technology - It is the perception of the credibility of technology, which also changes over time and from one individual to another, making it an extremely volatile trust building element. Web design is seen here as part of the technology of the online outlet. Web design also includes matters of image and perception (thus partially belonging to reputation), but many technological matters are those of perception.

- Expertise - Can be connected with any of the three other elements. A well done product, service, transaction, delivery and Web site will all instil trust in the given company as a trading partner. The service and delivery should be in time and the time itself should be acceptable to the user. The web site must provide the customers with timely and accurate information and should be easy to navigate to enable customers to easily and quickly find the products they seek.
- Relationship building - In e-commerce relationship is unclear between merchants and customers as well as with other business partners. Incidentally, a close relationship is not necessarily a good relationship. When an offline customer first uses the services of a company online, he or she has an understanding of the company, its products and their relationship. The customer may change his or her mind about the company and about their mutual relationship if the company's online presence differs considerably from its offline image. After the relationship is built, typically over some time, the customer can start to rationally believe that the trustee is worthy of his or her trust.

A study by Hong-Youl (2004) on factors influencing Internet users' perception of brand trust online, found that online web stores must address the issues of security and privacy in order to gain Internet users trust in online business. There is a strong and positive correlation between brand web stores with a perceived level of brand trust. Most of the Internet users are aware that favourable brands provide comfort, familiarity and trust for them both off and online. Good online experiences and communication through word-of-mouth significantly affects brand trust.

The review of the literature has described the most of important element on trust in e-commerce interaction that influenced Internet user's perception in doing e-commerce transaction and Table 1 described the elements.

**Table 1: Elements of Trust Factors**

AUTHOR	TRUST ELEMENTS
<b>By Jarvenpaa and Tractinsky (1999)</b>	Well known -bad/good reputation -business size in the market -person responsible
<b>Centeno (2002)</b>	-Pre-interaction -Purchase interaction -Transparency of information
<b>Hong-Youl (2004)</b>	-Brand -Experience
<b>Patokopo and Kimmpa (2006)</b>	-Reputation -Technology -Merchants experts -Relationship building
<b>Thaw et al (2009)</b>	-Misuse personal information -Information security

## METHODOLOGY

A study was carried out with the objective of examining the elements that contribute to the trust buildings in e-commerce interactions. Respondents of this research are Information System Personnel (ISP) in the Selangor state government whole offices. This study applied survey as a research methodology, as a vehicle for measuring attitudes and orientation in a large population (Babbie, 2004). It was identified that there are 158 ISP in Selangor state government office. 158 structured questionnaires using likert scale (1 strongly agree – 5 strongly disagree) were distributed to the all the respondents. They were required to respond within one month. However only 151 of 158 ISP responded according to the time frame. The data gathered was analysed by using Statistical Package for Social Science software (SPSS).

## RESULTS OF THE SURVEY

This section provides description of the main findings of the research. Table 1 depicts that most of the respondents used Internet for reading email. The results revealed that 93.4 percent of the respondents' strongly agreed that they used the Internet to read their email. About 0.8 percent disagreed while 5.8 percent of the respondents were neutral.

The Internet today is not merely a source of information and a social network. It is also a source of knowledge and important for study purposes. Most of the ISPs depended on the Internet for knowledge. This is proven by 82.7 percent ISPs who strongly agreed that they used the internet to gain information for studies. Only 0.8 percent disagreed while 15.7 percent remained neutral. Table 2 demonstrates that Internet is very important in the ISPs' daily work. This is clear when 92.5 percent of the respondents strongly agreed that information from the internet is needed to perform their work. When asked about the use of the Internet to get information about online products and services, only 2.5 percent of the ISP respondents disagreed, compared to 82.5 percent who strongly agreed. In terms of performing Internet banking transaction, majority of the respondents, i.e. 71.1 percent, agreed while 22.3 percent were on the neutral side and 6.6 percent of the respondents disagreed with Internet banking. Next, the respondents were asked about the Internet usage for buying products or services online. Less than 50.0 percent (about 34.7 percent) of the respondents have experienced in buying products and services online.

**Table 2: Internet Usage Frequency**

Elements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Read email	62.8	30.6	5.8	0.8	0.00	100.0
Gain information for my studies	46.3	36.4	15.7	0.8	0.8	100.0
Gain information for office work	53.7	38.8	7.4	0.00	0.00	100.0
Get information about products/ services	38.0	44.6	14.9	2.5	0.00	100.0
Perform Internet banking transaction	48.8	22.3	22.3	6.6	0.00	100.0
Buy product or service online	7.4	27.3	40.5	19.8	5.0	100.0

Table 3 shows that 64.5 percent of the respondents agreed and strongly agreed in the importance of guaranteed information confidentiality for trust building in online transactions. In addition, 32.2 percent of the respondents were neutral and 3.3 percent of the respondents did not consider confidentiality of information as important. The table also shows that 18.2 percent and 51.2 percent of the

respondents agreed and strongly agreed that return policy affected consumer trust and performing online transactions. 3.3 percent of the respondents did not treat the factor as significant, whereas the rest of them were neutral (27.3 percent). About 61.5 percent of the respondents strongly agreed and agreed that payments made online is safe. Less than 6.0 percent of the respondents disagreed with the statement while 32.2 percents were neutral. The majority of the respondents (58.6 percent) agreed that the facility for virus transmission protection while performing transaction online is very important in trust building. 36.4 percent of the respondents were neutral while 5.0 percent disagreed with the statement. The respondents were also asked about the importance of an official body to handle complaints when transactions go wrong. More than 55.0 percent agreed and strongly agreed about the statement that there is a need for a special body as reference whenever needed. 34.3 percent of the respondents were neutral and 9.5 percent disagreed with the idea.

**Table 3: The Elements of Security Factor Frequency**

Elements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Confidentiality of my information is guaranteed	20.7	43.8	32.2	3.3	0.00	100.0
Return policy is clearly stated	18.2	51.2	27.3	3.3	0.00	100.0
Payment can be made safely online	21.5	39.7	32.2	6.6	0.00	100.0
There is protection virus transmission while performing transaction online.	23.1	35.5	36.4	5.0	0.00	100.0
There is official body to complain if transaction goes wrong.	24.0	35.5	31.4	9.1	0.00	100.0

In Table 4, the respondents were asked about the abuse of personal information in e-commerce transaction by irresponsible merchants. The results show that 68.6 percent of the respondents agreed and strongly agreed in total that they would trust e-commerce transactions if the Internet merchants did not abuse their personal information. About 22.3 percent of the responses were neutral and 9.1 percent did not consider these factors as important. Next, the respondents were asked

about consumers' personal information being sold to third parties. The majority of the respondents (70.2 percent) agreed and strongly agreed in total that they did not trust carrying out e-commerce transactions if their personal information was sold to other people. 7.4 percent of the respondents were not affected if their personal information was obtained by other people, while 22.3 percent of the respondents were neutral on the matter. More than 70 percent of the respondents agreed that they felt their privacy were violated if they are bothered by unsolicited/junk email later on after the online business transaction had taken place. 17.4 percent of the respondents' responses were neutral and the rest of the respondents did not take the junk mail factor seriously. In the last question in the privacy section, respondents were asked if their messages were interrupted by any third party during the business transaction. 70 percent of the respondents agreed that they were confident in carrying out electronic transactions if there were no interruptions to their messages while performing the online transaction. 24.8 percent of the respondents were neutral.

**Table 4: Frequency Element of Privacy**

<b>Elements</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
There is no abuse of my personal information by the Internet merchant	27.3	41.3	22.3	9.1	0.00	100.0
My personal information will be sold to other people	31.4	38.8	22.3	7.4	0.00	100.0
I don't want to be bothered by unsolicited/junk email later on.	29.8	48.8	17.4	3.3	0.8	100.0
No third party interrupts my message	28.1	43.0	24.8	3.3	0.8	100.0

## **DISCUSSION AND CONCLUSION**

The elements investigated were confidentiality of information, return policy, online payment, virus transmission and role of official body. Majority of the respondents agreed with all elements that were asked. They admitted the

importance of the elements in trust building in e-commerce transaction. All the respondents responded highly positive and consistent to this particular element in the survey and interview conducted. The research found that respondents were concerned with how their personal information is collected and used through online transactions. They also refused to shop online if their personal information is abused by the Internet merchant. They did not want their personal information to be sold to other people and bothered by unsolicited/junk email later on. All respondents disliked third parties interrupting their messages either during or after the online transactions. The research found that respondents treated the element of unsolicited/junk email as one of the elements to support trust in e-commerce application. However, a return policy clearly stated on the website has been identified by the researcher as a dominant element to the Internet user to trust a certain website. 69.4 percent of the respondents considered the element of return policy in e-commerce website as significant and a core trust element in e-commerce applications.

In summary, the research findings described the most important elements that should be taken care of, to gain trust in e-commerce transactions. The entire element should be considered by online merchants when engaged website as a business channel for information dissemination or marketing tool. The Internet users' trust on e-commerce transaction is much depending on their perceptions towards the trust elements.

## BIBLIOGRAPHY

- Babbie, E. (2004). *The practice of social research*. Belmont, United States: Thompson Wardsworth.
- Bhattacharjee (2002). Individual trust in online firm: Scale development and initial test. *Journal of Management Information System*, 19 (1): 211-241.
- Centeno, C. (2002). *Building security and consumer trust in internet payments*. Seville: Institute for Prospective Technological Studies.
- Chawdhry P., Masera, M., & Wilikiens, M. (2002). Strategies for trust and confidence in B2C E-Commerce. *Journal of Communication and Strategies*, 45 (1): 81-110.
- Hoffman, D. L., Novak, T. P., & Peralta, M. (1999). Building consumer trust online, *Communication of the ACM*, 42 (4): 80-85.
- Hong-Youl, H. (2004). Factor influencing consumer perception of brand trust online. *Journal of Product & Brand Management*, 13 (3): 329-342.

- Javernpaa S., L. & Tractinsky, N. (1999). Consumer trusts in an Internet store: a cross-cultural validation, *Journal of Computer Mediated Communication*. Retrieved on 23 July 2006, from <http://www.ascusc.org.jcmc/vol5/issue2/jarvenpaa.htm>.
- Keen, P. G. W. (1997). Are you ready for trust economy? *Computer World Magazine*, 31: 80.
- Kolsaker, A. & Payne, C. (2003). Engendering trust in e-commerce: a study of gender-based concern. *Journal Marketing Intelligence & Planning*, 20 (2): 206-214.
- Lewicki, R. J. & Bunker, B. (1996). *Developing and maintaining trust in work relationship*. CA: Sage.
- Mayer, R. C., Davis, & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy Management Review*, 20 (3): 709-734.
- Nefti, S., Meziane, F. & Kasiran, K. (2005). A fussy trust model for e-commerce. *The Seventh IEEE International Conference*. Korea, 21-23 February.
- Patokorpi, E. & Kimppa, K. (2006). Dynamics of the key elements of consumer trust building online. *Journal of Info. Comm. & Ethics in Society*. 1 (4): 17-26.
- Shan-Yan Huang, Ci-Rong Li, & Chen-Ju Lin (2007). A literature review of online trust in business to consumer e-commerce transaction, 2001-2006. *Journal of Issues in Information Systems*, 8 (2): 63-69.
- Thaw, Y., Kamil, M. A. & Dominic, P. D. (2009). A Study on the factors that influence the consumers' trust on e-commerce adoption. *International Journal of Computer Science and Information Security*, 4 (1 & 2): 153-158.