

**Role of Security, Privacy, 3rd Party Assurance, Perceived Risk in
Online Shopping: A Literature Review**

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ABSTARCT

With each passing day technology is changing exponentially. The retailing sector has undergone a big change. Customers have started preferring online shopping over a period of time. Online shopping refers to buying goods and services from a seller over internet. A shopper can visit different seller (shopping sites) to buy a good or service with comfort of any place, any time. Online shopping is emerging as alternate mode of shopping to conventional shopping. This study presents an overview of role of security, privacy, 3rd party assurance and perceived risk in building customers trust towards this new mode of shopping full of uncertainties. By reviewing the available literature these four factors seems to have significant role in developing customers trust towards e-retailers.

Keywords: Trust, security, privacy, 3rd party assurance, perceived risk, online shopping.

INTRODUCTION

Online shopping has become the third most popular internet activity, immediately following e-mail using/ internet messaging & web browsing (UCLA centre for communication Policy, 2001). Online shopping is the gift of internet. Along with other numbers of advantages, advancements, innovations brought by internet, online shopping has changed the way people shop across the world. The rise of internet era has changed the way people shop. Products and services are now just a click away. Online shopping becomes popular during the internet boom in 1999-2000.

Internet has converted the global market into a local marketplace, where one can buy or sell anything from anywhere. Internet has vanished the boundaries between buyer and seller. Despite various advantages, it brings new challenges for the buyers like trust, security, privacy and various risk concern attached with online shopping.

Online retail sales in India were 3.8 billion USD in 2009 which it becomes 6.3 billion USD in 2011 (around double) and it is expected to surpass 38 billion USD by year 2016 (www.statista.com). Today, approximately 40 million Indians are online every day, spending around 40-45 hours over the Internet per month.

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This figure shows that there is a huge opportunity in this market segment. So to bloom in this electronic market one has to know what are the reasons that hindering the growth rate of online shopping despite huge internet penetration. Reports shows, the increasing usage of internet service has lead to jump in cyber crime. In 2012, 2876 cases of cyber crime were committed under the IT act of India. These cases create a hesitation in customers mind whether to shop online or not. As, it involves various kind of risk associated with product quality, price, security, privacy, & information etc.

As per report 'Online and Upcoming: The Internet's Impact on India', internet related contribution is 1.6% Indian GDP or about USD 30 billion in 2011 which could lead to around 3% by 2015 (PTI, 2012).

Trust is the vital pillar for any relation either personal or commercial (Deutsch, 1960; Moorman et al., 1992; 1993; Ganesan, 1994). In an uncertain and risky online environment where customer even cannot touch & see product prior buying it, trust become the most important antecedent. Hoffman et.al. 1999, consider it as one of the most important prerequisites for the success of e-commerce.

So, the purpose of the current paper is to study the literature available for examining the role of security, privacy, 3rd party assurance and perceived risk in developing consumer's trust in online shopping.

LITERATURE REVIEW

Online shopping is totally different from conventional shopping as it uses internet, network and web based technologies for creating interaction between seller and consumer while in the counterpart has face to face interaction (Moftah A.A.A. & et.al., 2012).

Trust in general is something related to a person's ability or attitude to believe other. In management literature, trust is a belief about certain traits of the trustee, or as an attitude towards the trustee (Mayer et al. 1995; Mcknight et al. 1998).

Trust is an important factor whose absence hinder consumer to shop online (Merrilees B. & Fry M. L., 2003 & Koufaris M. & Sosa W. H., 2004; Wen I., 2009). One of the most cited reason for reluctance towards e-commerce is lack of basic trust. Trust become the more important in an environment where consumers neither have direct physical contact with seller nor can examine the product prior to buy it (Walczuch R. & Lundgren H. 2003).

Hoffman & et al. (1999) & Papadopoulou P. & et al. (2001) support the fact that reason people hesitate to build exchange relationship that involve money & personal information with web is lack of basic faith or trust on web.

In online shopping payment for a product or service is done by different ways, for example, by cash on delivery, invoice, digital wallets, credit/debit card and online banking. Credit/debit card method was considered as most simple and fast payment mode as in this consumer feeds their card number on an online form and company receives amount from credit institute. But, this payment mode is linked with huge anxiety about safety. Consumers are worried about exposure of their card number to unauthorised persons. This is the main reason why cash on delivery

concept is specially started for Indian consumers because of their insecurity concern while using credit/debit card or online banking

Security is major factor that encourage people to buy product/service online (Walczuch R. & Lundgren H. 2003; Azadavar R. & et al. 2011; Reddy A. 2012) & absence of security is the vital reason for not opting online shopping (Saprikis V. & et al. 2010). Privacy is related to user data & their right to control over their data (Mekovec R. & Hutinski Z. 2012; Reddy A. 2012). Privacy is the main consumer's concern in terms of trust and internet technology (So M.W.C. & Domenic Sculli 2002; Pennanen K. & et al. 2006).

Trust is build up not only via customer's own personal experience but also by opinions of other parties. In online environment seals of approval from trusted third parties such as Visa, TRUSTe (www.truste.com), and verisign (www.verisign.com) have been found to restore confidence for a site. These seals are usually small graphics that signifies that this particular online site fulfil certified standards (Daignault M. & et al.2002).

Trust and risk are related to each other as online environment is a risky environment and in such risky environment trust brings positive attitude (Daignault M. & et al. 2002). It's human nature to avoid activities which involve risk. As online shopping is totally different from traditional mode of shopping where one can interact with seller directly and here internet connection is interaction mode between seller and buyer. One has to buy any product or service without seeing, touching and examine it and even after buying it they have to wait till the product being delivered to them. So, in such an uncertain environment of shopping a consumer perceived certain degree of risk. As per Suresh A.M & Shashikal R (2011) despite being new easy and convenient mode of shopping, consumer perceive online shopping more risky as compare to traditional one.

RESEARCH METHODOLOGY

Objective of the study

The primary objective of the study seeks to investigate the role of security, privacy, 3rd party assurance & perceived risk in developing consumer's trust in online shopping.

Research Design

The present study is a descriptive study based on review of literature on trust in online shopping. For this purpose, an extensive literature review was conducted. Firstly, the review of literature was to determine the relevant source material. Later on, the relevant articles in e-commerce, trust, security, privacy, 3rd party assurance & perceived risk in online shopping were reviewed. Around 100 research articles were reviewed.

ANALYSIS

After reviewing the available literature, significant role of security, privacy, 3rd party assurance and perceived risk has been found in building fundamental trust in consumers towards online shopping.

Security

Security is protection of data against disclosure to unwanted person (Reddy A. 2012). Security is major factor that encourage people to buy product/service online (Walczuch R. & Lundgren H. 2003; Azadavar R. & et al. 2011; Reddy A. 2012) & absence of security is the vital reason for not opting online shopping (Saprikis V. & et al. 2010). Security and trust are main issues on which success of e-commerce depends (Srinivasan S. 2004).

Security is among the important antecedents of initial trust (Chellappa R. 2002; Koufaris M & Sosa W.H. 2004; Pennanen K. & et al 2006). Web security has considerable influence on web trust. Customer shares their credit cards details only if they feel comfortable. So web security plays a critical role on web trust.

Privacy

Privacy is a significant issues for consumer while opting online shopping & absence of it become the vital reason for not adopting the online purchase (Saprikis V. & et al. 2010). Privacy is main concern of consumers while making online transactions (Walczuch R. & Lundgren H. 2003; Kamari F. & Kamari S. 2012).

Privacy is the main consumer's concern in terms of trust and internet technology (So M.W.C. & Domenic Sculli 2002; Pennanen K. & et al. 2006). Perceived privacy protection has positive influence on trust in online shopping (Chellappa R.K. 2002; Hussin A.R.C. & et al. 2007; Kim D.J. & et al. 2008; Mekovec R. & Z. Hutinski 2012).

3rd Party Assurance

Third party assurance is defined as a declaration given by third party certifying body such as bank, accountant, consumer union, or computer company assuring trustworthiness of an internet vendor (Cheung & Lee 2000; Kim D.J. & et al 2008).

Consumer trust building in e-commerce is dependent on attributes third party recommendation (Daignault M. & et al. 2002; Kim D.J. & et al. 2008).

Trusted third party is a factor influencing online trust (S.Srinivasan 2004; Hsu C.J. 2008). Third party rating plays an important role in developing trust (Cheung & Lee 2000; Daignault M. & et al. 2002).

Perceived Risk

Trust and risk are related to each other as online environment is a risky environment and in such risky environment trust brings positive attitude (Daignault M. & et al. 2002). Pennanen K. et al. (2006) consumers' perception of the trustworthiness of the e-vendor is related to perceived risk. Perceived risk associated in online transactions significantly influence consumer's trust (Mukherjee A. & Nath P. 2003; Thaw Y.Y. & et al. 2009). Trust can be build by reducing consumer's risk perceptions (So M.W.C. & Sculli D. 2002).

Dimensions of perceived risk:

Based on literature review, it was found that online-consumer's perceived risk have the following dimensions:

- *Financial risk:* Financial risk has been observed all over in trust research as it plays a vital part and has a very important influence on online trust (Naiyi Y. 2004; Ur J.B. & Winfield C. 2006; Laohapensang O. 2009; Suresh A.M & Shashikala R. 2012; Zheng L. et al. 2012; Javadi M.H. M. & et al. 2012).
- *Privacy risk:* Privacy risk is associated with misuse of personal information (Zheng L. et al. 2012). Customer is most bothered about their personal information. They don't want to leak their privacy to unwanted person. Privacy is the most vital element that stops customer's to trust online site and hinder their online shopping intentions (Naiyi Y. 2004; Laohapensang O. 2009; Zheng L. et al. 2012).
- *Source risk:* Source risk is related to credibility & reliability of website. (Zheng L. et al. 2012). Online trust is influenced by retailer's credibility & how much they are reliable (Naiyi Y. 2004; Suresh A.M & Shashikala R. 2011; Zheng L. et al. 2012).
- *Psychological risk:* Psychological risk is ego loss after not meeting expected outcomes from product purchased (Zheng L. et al. 2012). Psychological risk also influences trusting intention of customer (Laohapensang O. 2009; Suresh A.M & Shashikala R. 2011; Zheng L. et al. 2012).
- *Performance risk:* Performance risk is risk about product not performing as expected (Zheng L. et al. 2012). It also hampers trust in online shopping (Naiyi Y. 2004; Ur J.B. & Winfield C. 2006; Laohapensang O. 2009; Suresh A.M & Shashikala R. 2012; Zheng L. et al. 2012).
- *Social risk:* Social risk is potential loss of status in society (Zheng L. et al. 2012). Social risk is an important antecedent of perceived risk in online shopping (Ur J.B. & Winfield C. 2006; Suresh A.M & Shashikala R. 2012; Zheng L. et al. 2012).
- *Time risk:* Time risk is chances of wasting time in searching & purchasing product, when product results as bad (Zheng L. et al. 2012). Time risk influence consumer's perceived risk of online shopping (Naiyi Y. 2004; Ur J.B. & Winfield C. 2006; Suresh A.M & Shashikala R. 2012; Zheng L. et al. 2012; Zhang L. & et al. 2012).
- *Deliver risk:* Deliver risk is associated with not getting product on time (very long delivery time) or getting damaged product (Zheng L. et al. 2012). Consumer remains in anxiety after ordering product online till the time they receive that product. (Zheng L. et al. 2012; Zhang L. & et al. 2012; Naiyi Y. 2004; Javadi M.H.M. and et al. 2012).

MANGIERIAL IMPLICATIONS

In India, online shopping was introduced in late 1990's. Internet population has increased around 10 folds (60 million in 2009 to appox. 580 million in 2018 (projected figure) (www.iamwire.com). It shows increasing consumer's fondness towards internet and e-commerce (online shopping)

becoming preferred mode of shopping. E-commerce market is blooming exponentially and expects to continue the same trend. It is providing huge opportunities to e-retailers.

In order to grab this emerging market sector, e-retailers must be aware of issues like security, privacy, 3rd party assurance and perceived risk perception of consumer's for constructing basic trust towards them. Literature shows these four dimensions plays a key role in building online trust.

E-retailer can win trust of their customers by focusing on security, privacy, & risk issues and also by getting approvals from reputed 3rd party ensuring their trustworthiness. Secured online transaction environment boosts customer online trust by abridging customers concerns about transaction security, information security. Customers opt to choose an e-retailer that has a third party assurance seal. E-marketer/retailer should show the trust seals of certified 3rd party to build customer trust. A sound privacy policy along with reports of effective enforcement will help e-marketer/retailer to distinguish their website and also improve online customer trust. E-marketer/retailer should have a clear privacy policy about what data is to be collected and how it is used. Structural assurance like increase in security & providing detailed terms & conditions can reduce customers risk perception.

CONCLUSION

Through literature review it is found that security, privacy, 3rd party assurance and perceived risk have significant role in building consumer trust in online shopping. Consumers are ready to adopt uncertain online shopping environment only if an e-retailer win their trust. In order to survive in uncertain online environment and to flourish their online business, e-retailer should focus on these trust factors to enhance customer's trust towards their e-shop. When the consumer feels secure and finds fewer uncertainties then ultimately their trust towards online shopping increase.

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