

ROLE OF WEB ASSURANCE MECHANISMS IN INCREASING CUSTOMER TRUST IN ONLINE BUYING ENVIRONMENT

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Abstract—Rapidly changing technological interface within online selling space and consumers, have resulted in shifting of shopping experiences either partially or completely to the digital mode.

Customer trust is an important determinant of satisfaction in online buying environment. Information asymmetry rendered by virtual interaction between sellers and buyers in online buying increases the doubts and uncertainties in customers. Privacy, information security and lack of trust are some major customer concerns in online buying. Managing or reducing these concerns is a challenge for various participants involved in e-commerce industry: Online sellers, buyers and many regulatory and legal bodies. Incidents of cyber frauds in e-commerce have increased significantly over years. To mitigate these concerns, several information assurance mechanisms (e.g., assurance statements and third-party certifications) have gained attention in practice. Despite the wide deployment of assurance mechanisms, it remains largely mechanisms and how their concerns affect their purchase decisions. Web assurance statements, 2nd and 3rd party seals, online reputation systems, seller ratings, customer reviews and feedback mechanisms are some of the main mechanisms used to entrust and protect the customer for information sharing across various digital platforms. Present study conceptualizes the role of some assurance mechanisms in increasing customer trust. The aim of the study is to consolidate the findings of previous literature and empirical studies with the aim to understand :

What are web assurance mechanisms?

What is the role of web assurance mechanisms on customer trust in online buying?

Four main assurance mechanisms are considered for the present study i.e Assurance statements, third party seals, online reviews and website infrastructure.

Keywords: Web assurance mechanisms, customer trust, online buying

1. INTRODUCTION

India has emerged as the fastest growing market for digital buying. Growth in revenue in this sector is expected to increase from US\$ 39 Billion in 2017 to US\$ 120 billion in 2020, witnessing an annual growth rate of 51%, highest in the

world. Internet user base in Indian online market is predicted to increase to 829 million from 560.01 million in September 2018.(ibef.org).Online retail sector has registered growth of 31% in the year 2017-18, led by Flipkart, Amazon and Paytm Mall. Consumer Electronics emerged as the biggest contributor to e-retail sale with 48% share in the market, closely followed by Apparel at 29%.(/www.ibef.org/industry/ecommerce.aspx).Increased options for products/services, delivery at door step, flexible payment options, affordability, convenience are some of the reasons attracting customers to online market spaces.(Greenstein, Marilyn and Todd M. Feinman, 2000).

Online purchases are constantly challenged by potential threats which include compromised vendors' security and breaches of customer privacy.(Workplace Privacy, Data Management & Security Report, Jackson Lewis P.C., White Plains, NY, 2014) Identity theft, fraud, phishing, spoofing, delivery of wrong products, undefined contracts and agreements between buyers and sellers are some of the other important concerns faced by online buyers. Miyazaki and Fernandes (2001) proposed three major concerns of online buyers-privacy concern, third party fraud behaviour, issues related to system security. Increasing incidents of compromise of consumer data and privacy have rendered more vulnerability to information access.

Legal intervention includes legislations like consumer protection bill 2018 that aims for consumer empowerment and to establish an effective system for handling customer grievances and complaints. The bill has made provisions to check the fraudulent practice of online retailers. Agencies like All India Online Vendors Association(ALOVA) have raised voice against sites such as Amazon, Flipkart selling fake products.

India's online buying is not in accordance with its internet expansion. In addition to the legal interventions, online sites have also devised mechanisms and procedures to check or

reduce the concerns faced by customers. unknown as to how online consumers interpret these assurance The main concerns of the consumers for online buying are centred around four main interaction points: Privacy, security, product (Dan.jKim; etal; 2016) and payment.

Previous studies on the topic have discussed the importance of assurance mechanisms adopted by websites in increasing the trust of consumers towards specific online transactions. These systems have been observed to help customers by mitigating or reducing the information based concerns related to product or services, transactions and privacy.(D.H. McKnight,etal,14 (2004).It is observed by various studies that abandonment rates of shopping cart have increased mainly because of lack of trust in information related to either products/service, transaction or payment gateways or personal details.17% of the dropout customers state concern for the payment as the main reason. Hence effective information systems are needed to convince current and prospective consumers about these concerns. McAfee secure, webtrust, Trust E, Sementic are some examples of trust seals used by online vendors such as Amazon, Flipkart, e-bay etc. While impact of these information assurance mechanisms on consumer behaviour have been proved by many studies but the how knowledgeable consumers are regarding these mechanisms, and what is the effect of the customer knowledge about these information systems on consumer behaviour. This study makes an attempt to study how various assurance mechanisms influence online buying behaviour through mitigating these focal concerns.

2. LITERATURE REVIEW

This aim of this section is to understand the theoretical frameworks for identifying the main constituents of consumer perception and consumer behaviour. It presents the findings of the previous researches in the field of web assurance and online information security concerns mainly to identify the research gaps in the field.

2.1. ASSURANCE DEFINED

Assurance is defined “as expectation of benign behaviour for various reasons and not just the goodwill of the partner.” (Yamagishi, T., Yamagishi, 129-166 (1994).This is even more important in situations of increased uncertainty in which one partner has no control over. To gain this perceived control, individuals need access to sources that can fill this information gap. These sources can be self proclaimed (using one’s judgment of the environment based on cues such as reputation, price, promotion, etc),or they can be proxy measures such as thgird party seals and policy statements.(Lang, M.; Wiesche, M.; Krcmar, H. (2017).

2.2. WEB ASSURANCE MECHANISMS

Trust and control over the shared information is all the more important in e-market place as the feeling of touch and feel is missing. To reduce this uncertainty and risk, many online

mechanisms like well-designed websites, online forums, feedback systems, third party guarantees and seals etc, have been developed to assure the customers by providing information about products or services, transactions, sellers(Yi Liu, Xinlin Tang, (2018). Prior research on web assurance mechanisms have categorized assurance on various bases like information sources(Yi Liu, Xinlin Tang, (2018), customer needs and executing platforms. Web assurance mechanisms help in building trust in electronic buying and selling environments as they certify and express some form of guarantee that online retailers have formulated the required policy framework for exchange elements like payment systems, information security, and other transaction delivery related issues.(Bansal &Fatemah Mariam, Zahidi,2015).Assurance mechanisms can be direct and indirect. Direct mechanisms include policy statements and assurance seals Indirect mechanisms consist of website features that implicitly assure customers about their privacy (Kim & Benbasat, 2003; Lowry et al, 2012).They a are different than privacy policy statements that explicitly assure the protection of customers’ privacy.

2.3. SOURCES OF WEB ASSURANCE MECHANISMS

Based on various sources of information required to assure customers’ trust in online transactions assurance mechanisms can be classified into three categories:

- i) SELF PROCLAIMED (Noteberg et al,2003; BahmanZiari,Odom and Uglin,2009): These are the assurance mechanisms devised by online retailers themselves; E.g Amazon trust and Flipkart assured.
- ii) CUSTOMER FEEDBACK (Pavlou and Dimoka,2006) : These assurance mechanisms are based on customer feedback and reviews about their online shopping experience. This can be related to product or service, website quality, transaction related issues.
- iii)THIRD PARTY ORGANIZATIONS (Noteberg et al,2003;Kim and Benbasat,2010): These are independent organizations that are not directly involved in online buying but mediate the buying or exchange process to mitigate consumer risk, uncertainty and insecurity.

2.5. ASSURANCE MECHANISMS USED IN THE STUDY

Assurance statements, third party seals, website infrastructure and online reviews are the main assurance mechanisms considered for the present study and their impact is studied on customer trust and three main customer concerns i.e product and service concerns, privacy and transaction concern. This relationship between assurance mechanisms, customer trust and customer concerns finally influence customer purchase intention. Following section of literature review describes the prior studies conducted on these research variables.

2.5.1. ASSURANCE STATEMENTS

Prior researches have include assurance statements as framed by the sellers themselves as on of the commonly used assurance mechanisms used to influence customer purchase intention. Online sellers publish assurance statements in the form of privacy policies, security notices, product or service guarantee documents. These statements serve as the guidelines to consumers to resolve any issue in the process of online buying such as unexpected product quality, wrong delivery, payment issues, return of products etc.(M. Arcand, J. Nantel, M. Arles-Dufour, A. Vincent, 31 (2007).These kind of instruments are effective in ensuring consumer confidence in sharing or disclosing their personal information. Prior studies indicate that these assurance statements increase customers' perceived control over information made available through these websites.(E.g Amazon uses privacy statements.)This increased level of trust increase the probability of positive outcomes of buying experiences.(H.R. Nemati, T.V. Dyke(2009) 45-64.Influence of web assurance statements is studied with respect to customer trust in many prior researches

2.5.2. THIRD PARTY ASSURANCE SEALS

Literature related to web seals used in online market place and cloud based web assurance models is also considered for gaining insights into practical aspects of information assurance in the online buying space.

Some prior studies (Wu et al 2000) describe web assurance mechanisms specifically web seals as the step to increase customer trust and Online sellers devise various strategies to address information security concerns. Third party seals are created to reduce the customers' insecurities related to their online buying options.(H.Zhang,2005).Example of third party seals are trust seals, these are the logos used by the external a creditors who assure safe shopping experience at various shopping websites.

E-commerce assurance seals have been developed by various companies, such as the American Institute of Certified Public Accountants (AICPA). Some of the well-known e-commerce assurance models that companies have developed are:

- Verisign(Daigle and lampe,2005):These are the kind of digital certificates that assures customers of the reliable and satisfactory transaction with the related seller. They also guarantee protection of customer information such as credit card number, personal details etc.
- BBB (The better business bureau program website,2012): Is a reliability seal that validates the performance standards of the online seller regarding product features, fair advertising and other kind of promotion tools used. BBB is useful in resolving customer disputes that take place because of product/service related issues.
- Trust-e(Trusted cloud, 2012): Services of Trust-e began in 1996 one year after the introduction of world wide web. It

is supported by firms like Microsoft and IBM.Its functioning is based on two premises:

- Customers have right to informed consent
- No single principle of privacy is applicable in all situations.

Whenever Trust-e mark is displayed on a website it means that customers can rest assure that the information shared by them will not be misused by the online seller as it communicates clearly as to who all are gathering, using and disseminating the information.

Prior researches indicate contradictory results regarding influence of third party seals on purchase intention and purchase decision making(Kimery, K. and M. McCord,2002)Web seal designers are unable to provide for appropriate measure to address customer concerns of online buying .There is no connect between the customers' requirement of information security assurance and customers' perception of assurance services, referring to incomplete knowledge of customers regarding these web seals(Thembekile Mayayise Isaac Olusegun Osunmakinde , (2014),Vol. 22 Iss 1 pp. 76 – 96).

2.5.3. WEBSITE INFRASTRUCTURE

A website is the only medium of interaction between online buyers and sellers(Chen & Dhillon 2003).There is wide literature available on impact of website quality on purchase intention. various aspects of website quality from customers' perspective have been mentioned in prior researches. Four main attributes of website quality that have been explored are content quality, layout and technical adequacy(Hsin Hsin Chang and Su Wen Chen 2008).Technical adequacy refers to level of ease with which customers can use the technological features. These features include navigation through webpage, web page loading, speed of opening content link etc. Content quality includes features such as perceived usefulness of the website features, privacy, accuracy etc. Layout denotes the overall design of the website such as colors, fonts and other multimedia attributes(Hsin Hsin Chang and Su Wen Chen 2008).Website quality constitute the store atmosphere for online buying(Ethier et al ,2006)A well-structured web site increase the chances of positive impression of the website on online customers.(Albert et al 2007).McKnight et al (2014) concluded the positive relation between the website quality and purchase intention. If the technical feature(deign attributes, page loading etc) of the shopping website are liked by the customers, they will develop a willingness to purchase. Customers like a simple design of the website that is easy and convenient to use because it reduces the feeling of uncertainty in potential customers. Technological complexities of using certain websites increase perceived risk of wasting time and lead to customer frustration.

2.5.4. ONLINE REVIEWS

Information quality has been considered as an important factor for customer trust and mitigating customer concerns. Information cues such as price, product description affects customer perception of online vendor trust (Chenn & Dibb, 2010). Online reviews are an important factor influencing customer buyer online interface. (Karinov et al, 2011). Information created by buyers is trusted more as compared to the information created by the sellers. (Utz et al 2012). Researchers such as Park et al 2007, concluded that reviews generated by online platforms influence purchase intention. Researchers such as Xu and Rao (2015) have empirically supported that quantity and quality of information in online reviews influence their adoption and use in framing product or website related perceptions. Some researches point out the relevance of valence (negative or positive) of online reviews in framing customer perceptions (Utz et al, 2012), Seckler et al (2015). Online reviews comprise important feedback mechanism that in an indirect manner penalize online retailers for their fraudulent behaviour and thus lead to an initial feeling of security and trust in customers. These reviews are framed from customers' perspective only and they lack the seller generated information which include added information on products and services such as technical details and other assurances like guarantees, warranties, return policies.

2.6. CUSTOMER TRUST:

Trust in online buying is defined as customers' acceptance of vulnerability in virtual transactions based on positive outcomes related to online sellers performance (Kimery, K. and M. McCord, et al 2002). The importance of trust as determinant of satisfied customers can be found in many prior researches and has been described as the most precious asset of business. (Benassi & Zucker 1986).

Bases for developing trust in buyer seller with respect to electronic commerce environment:

i) Knowledge based trust: (Lewicki & Bunker 2001): Knowledge about the e-sellers' performance standards, organizational capabilities influence the expectation of buyers in future. Such knowledge can be obtained from informal or formal third party sources. former includes & industry reviews and feedback, audit reports etc, latter sources include general reputation, website quality, etc.

ii) Institution based trust: Based on the concept of trust infrastructure (Lao 2002, p117). Trust of third party institutions certify the trustworthiness of buyers and sellers involved in online buying transactions. These third party institutions are mere facilitators of the exchange process, their function is to authenticate and validate sellers capability in maintaining desired quality standards of conducting business. Third party seals are used to assure the customers of desired positive outcomes related to online buying. According to Zucker (2005)

creation of trust infrastructure is essential to check the prevalence of frauds and insecurity concerns in e-commerce environments.

CONCLUSION

Ubiquitous and omnichannel enabled online buying environment is both attractive and fearsome for the users. Convenience and ease of access and use make it attractive on one hand. Lack of trust, privacy and security concerns make consumers sceptic of using online shopping sites. Thus this study attempts to establish the conceptual framework for using web assurance mechanisms for increasing customer trust in online transactions. Review of previous studies exploring the role of assurance services in increasing trust would help to identify the gaps between the services required by customers and information provided by e-retailers. Systematic review will pave a clear way for further exploring ways to increase trust and satisfaction in online buying.

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