# An Analytical Study of the Trust Concerns of Online Buyers in India

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**Abstract**

Trust is an important requisite for any online transaction to take place. This paper presents an overview of various trust factors which exist in Indian e-Commerce market place and the customers' inclination towards these factors. The study attempts to provide a tool to the e-vendors to understand what the customers expect from a website in order to make that initial purchase and hence, improve upon their online stores to attract more customers. In addition to this, the study aims at enhancing the knowledge base of the online customers by providing them a finer insight with a view to indulge in online shopping more advantageously. The study is based on the data collected through questionnaires and is conducted mainly on the experts in Indian e-Commerce market who have in depth knowledge about executing online transactions successfully. The study uses pair-wise comparisons to assess the significance of each of the trust factor within its class. Expert Choice software is used to perform sensitivity analysis on these factors.

**Keywords:** e-Commerce Trust, Indian Customers' Trust, Online Trust, Trust Factors

## 1. Introduction

Internet penetration is the most significant advancement in the technology of the last few years. It has changed the life of people drastically. It has changed the way people interact, socialize, search information, purchase products/services and do numerous other things. It has also changed the conventional ways of doing business. With the advent of e-Commerce, people have the option of buying products 24 X 7 sitting anywhere they want.

Uncertainty, anonymity, lack of control and potential opportunism exists very prominently in the e-Commerce environment. Customers have many concerns while shopping online. They fear about credit card frauds, misuse of their personal information, product quality, and product delivery, availability of returns or exchanges and authenticity of the products. These concerns are due to the intangible, unfamiliar and faceless nature of the online transactions. Given, this environment full of uncertainty and anonymity, trust in an online vendor becomes an extremely important antecedent for any online transaction to take place.

Study by Neilsen Global Online Survey suggests Indians are passive towards online shopping due to their concerns regarding payment fraud, product delivery and customer service. Indian customers are also hesitant to use internet banking or online shopping because they suspect that their bank/credit card details might get stolen. 'India: Country Report On E-Commerce Initiatives', a report on ecommerce initiatives in India by Department of Information Technology, Ministry of Communication and Information Technology quotes multiple issues of trust and lack of payment gateways (privacy of personal and business data connected over the Internet not assured; security and confidentiality of data not in place) as a major barrier to e-commerce adoption in India. Studies clearly indicate that Indian customer is still not decisive about which website to trust and which not to trust.

Lack of consumer trust often results in an unrecoverable loss of reputation and revenues. Lack of trust leads to financial losses of an e-business organization as the organization will not be able to generate the expected revenues with lesser number of customers in hand. They will lose upon their chance to strike a deal with prospective customers due to the customer's fear of shopping online. In case of existing customer also, if the customer looses trust in the online set-up of exchange due to any reason, he/she will not go for online shopping on any website. Ever more cautious consumer will restrict their behavior online. So, this will hamper the business continuity of a genuine e-marketer also. So, it is very important for the e-marketers to address the trust issues of their prospective and existing customers in order to make profits and also to keep their customers happy(Kaur & Madan 2012).

## 2. Literature Review

Man Kit Chang and Waiman Cheung(2005) discuss in their study about three trust building mechanisms i.e. third party certification, reputation and return policy and state that all the three trust building mechanisms together increase trust in the online vendor. In a study by Pawel Kossecki and Urszula Swierczynska- Kaczor(2006) , key factors which have an effect on building customers' trust are identified and categorized in two groups - Transactional (factors which are strictly connected with the process of making transactions like communication before purchase, security of payment, delivery costs, means of dealing with claims and returns); Non-Transactional (factors which are not related directly with the process of making transactions like law regulations, protection of consumer rights and privacy, technical infrastructure and transfer of external trust). They also suggest the elements of communication which build customers' trust are trust signs on the web site, certificates of website, information about company, information on connection with physical world, accuracy of products and service data, recommendations, information on privacy policy and ease of navigation.

Jui-Chin Jiang, Chun-An Chen and Chih-Chien Wang(2008), focused on the role of knowledge and trust in online shopping behavior of the consumers in their study. The study also revealed that trust in online shopping is positively associated with online shopping activities. In their study, Spitz and York Tuchelmann(2009) discussed various aspects of time on the ecommerce trust. Their study focused mainly on aging (the impact of good and bad experiences from both the present and the past on a trust decision) and inactivity which describes the influence on the trustworthiness of a member which is currently not actively participating in the trust group.

In his study Waghmare G.T(2011) predicts that in next 3 to 5 years, India will have 30 to 70 million Internet users, significant enough to have meaningful impact on growth of ecommerce. While Rajesh Math, et al(2012) indicated in their study that the main reason for Indian people to shop online is to save time, whereas, on the other hand the Indians who do not shop online cite lack of trust as the prime argument for their behavior.

## 3. Trust Antecedents In Indian Ecommerce

There are various factors which affect customer's trust in Indian e-commerce market space. These factors can be broadly classified into three major categories (Kaur & Madan 2012), (Beldad et al. 2010): Organizational Factors(brand recognition, money back guarantee/ return and exchange policy, order fulfillment, offline presence, competence, perceived size of organization), Website Factors(website look and feel, navigation, payment related issues, privacy policy, third party trust seals, security protocol and SSL certification, product description/ information content, terms and conditions/ FAQ page, absence of pop-up ads/ third party ads, customer reviews on home page, website download time, domain name, customization and personalization capacity, social presence, information about E-vendor) and Customer Factors( past site experience, knowledge and experience in Internet usage, sociodemographics, social awareness level, propensity to trust and perceived ease of use).

## 4. Methodology Of Research

Thorough study of literature is done to collect various parameters of trust which exist in e-commerce market space. After that, many other factors of trust specific to Indian e-commerce market were gathered by interviewing various Indian customers who indulge highly in online shopping.  A hierarchy of trust factors was created as in Figure 1. Subsequent to that, ecommerce experts were investigated and were asked to report the preference of one factor over the other. Results were synthesized and analyzed.
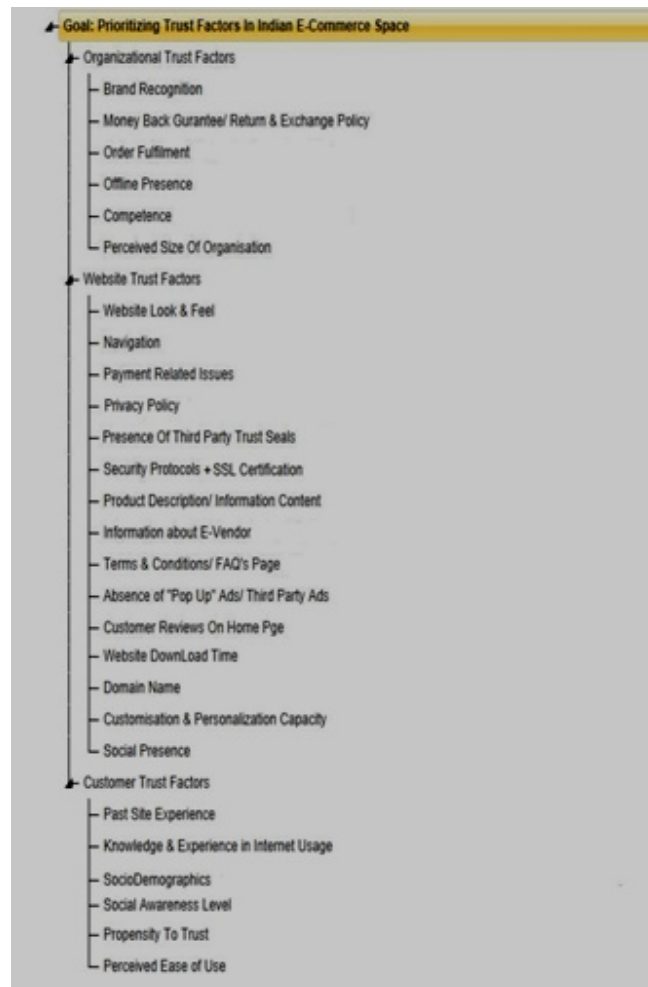
Fig 1: Trust Factor Hierarchy

## 5. Data Collection and Analysis

The study used data collected through interviews in the first round. 237 people were interviewed and were asked about various trust factors which exist in Indian e-commerce market. The factors were then classified in three major categories(Kaur & Madan 2012), as discussed in the previous sections.

In the second round of study, a web based survey was used to investigate 74 experts from Indian e-commerce market. The experts investigated were asked to perform pair-wise comparisons on various trust factors which exist in Indian E-commerce market space. Matrices illustrated in Figure 2, 3 and 4 were used for pair-wise comparisons. Experts were asked to fill in the cells of the matrices with values ranging from 1 (equal importance) to 9 (extreme importance).

The data gathered from the above discussed survey was analyzed using Analytic Hierarchy Process(Saaty 1980).The Analytic Hierarchy Process, often called AHP, is a mathematical technique designed to solve complex problems involving multi criteria. The technique was developed by Thomas L. Saaty[10] for multi criteria

|  | Brand Recognition | Money Back Gurantee/ Return & Exchange Policy | Order Fulfilment | Offline Presence | Competence | Perceived Size Of Organisation |
|---|---|---|---|---|---|---|
| Brand Recognition | 1 |  |  |  |  |  |
| Money Back Gurantee/ Return & Exchange Policy |  | 1 |  |  |  |  |
| Order Fulfilment |  |  | 1 |  |  |  |
| Offline Presence |  |  |  | 1 |  |  |
| Competence |  |  |  |  | 1 |  |
| Perceived Size Of Organisation |  |  |  |  |  | 1 |

decision making. Instead of giving one correct decision, it provides ratio scales of relative magnitudes. Expert choice software was used to synthesize the results.

Fig 2: Matrix Used For Organizational Factors

|  | Past Site Experience | Knowledge & Experience in Internet Usage | SocioDemographics | Social Awareness Level | Propensity To Trust | Perceived Ease of Use |
|---|---|---|---|---|---|---|
| Past Site Experience | 1 |  |  |  |  |  |
| Knowledge & Experience in Internet Usage |  | 1 |  |  |  |  |
| SocioDemographics |  |  | 1 |  |  |  |
| Social Awareness Level |  |  |  | 1 |  |  |
| Propensity To Trust |  |  |  |  | 1 |  |
| Perceived Ease of Use |  |  |  |  |  | 1 |

Fig 3: Matrix Used For Customer Factors

| | Website Look & Feel | Navigation | Payment Related Issues | Privacy Policy | Presence of Third Party Trust Seals | Security Protocols + SSL Certification | Product Description/ Information Content | Information about E-Vendor | Terms & Conditions/ FAQ's Page | Absence Of "Pop Up" Ads/ Third Party Ads | Customer Reviews On Home Pge | Website DownLoad Time | Domain Name | Customisation & Personalization Capacity | Social Presence |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Website Look & Feel | 1 | | | | | | | | | | | | | | |
| Navigation | | 1 | | | | | | | | | | | | | |
| Payment Related Issues | | | 1 | | | | | | | | | | | | |
| Privacy Policy | | | | 1 | | | | | | | | | | | |
| Presence of Third Party Trust Seals | | | | | 1 | | | | | | | | | | |
| Security Protocols+SSL Certification | | | | | | 1 | | | | | | | | | |
| Product Description/ Information Content | | | | | | | 1 | | | | | | | | |
| Information about E-Vendor | | | | | | | | 1 | | | | | | | |
| Terms & Conditions/ FAQ's Page | | | | | | | | | 1 | | | | | | |
| Absence of "Pop Up" Ads/ Third Party Ads | | | | | | | | | | 1 | | | | | |
| Customer Reviews On Home Pge | | | | | | | | | | | 1 | | | | |
| Website DownLoad Time | | | | | | | | | | | | 1 | | | |
| Domain Name | | | | | | | | | | | | | 1 | | |
| Customisation & Personalization Capacity | | | | | | | | | | | | | | 1 | |
| Social Presence | | | | | | | | | | | | | | | 1 |

Fig 4: Matrix Used For Website Factors

The results of the synthesis give relative weights of all the sub-factors in the three categories. Figure 5 shows the relative weights of the sub-factors in the category of organizational factors.



Fig 5: Priority of sub-factors in Organizational Trust Factors

| | |
|---|---|
| Brand Recognition | 0.272 |
| Order Fulfilment | 0.175 |
| Money Back Guarantee/Return & Exchange Policy | 0.164 |
| Competence | 0.145 |
| Perceived Size Of Organisation | 0.13 |
| Offline Presence | 0.114 |

As can be seen in Figure 5, Brand Recognition is the most important trust factor amongst the organizational factors. It is weighted 0.272 and hence it is of the top most priority. Order fulfillment, money back guarantee/ return & exchange policy and competence occupy second, third and fourth position and are weighted 0.175, 0.164 and 0.145 respectively. Last two positions are occupied by perceived size of organization and the offline presence which are weighted at 0.13 and 0.114 respectively. Inconsistency rate of this set of pair-wise comparisons is 0.04 and it is acceptable as the value is less than 0.10.

Next Figure 6 shows the relative weights of the sub-factors in the category of website factors.
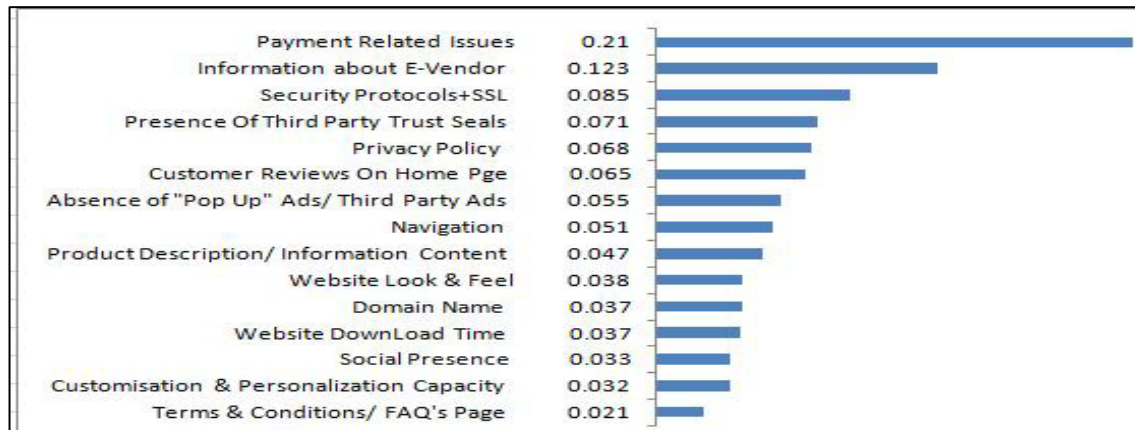


Fig 6: Priority of sub-factors in Website Trust Factors

According to the results of the synthesis, payment related matters like availability of secure gateway, cash on delivery option, second level authentication and choice of various payment options possess highest weightage at 0.21. Subsequent priorities are of information about e-vendor (weighted 0.123), security protocols(weighted 0.085), presence of third party trust seals(weighted 0.071), privacy policy(weighted 0.068), customer reviews on home page( weighted 0.065), absence of pop up ads or third party ads(weighted 0.055), navigation(weighted 0.051), product description and information content(weighted 0.047), website look and feel(weighted 0.038), domain name(weighted 0.037), website download time(weighted 0.037), social presence(weighted 0.033), customization and personalization capacity(weighted 0.032) and terms and condition or presence of FAQ's page(weighted 0.021) occupying the last position.

As shown in Figure 7, past site experience of most importance in customer trust factors. It is weighted at 0.339, hence it is at the top priority followed by propensity to trust (weighted at 0.165), knowledge and experience in Internet usage (weighted at 0.153), social awareness level (weighted at 0.123), perceived ease of use (weighted at 0.113). Sociodemographics is of least importance in this category weighted at 0.107.
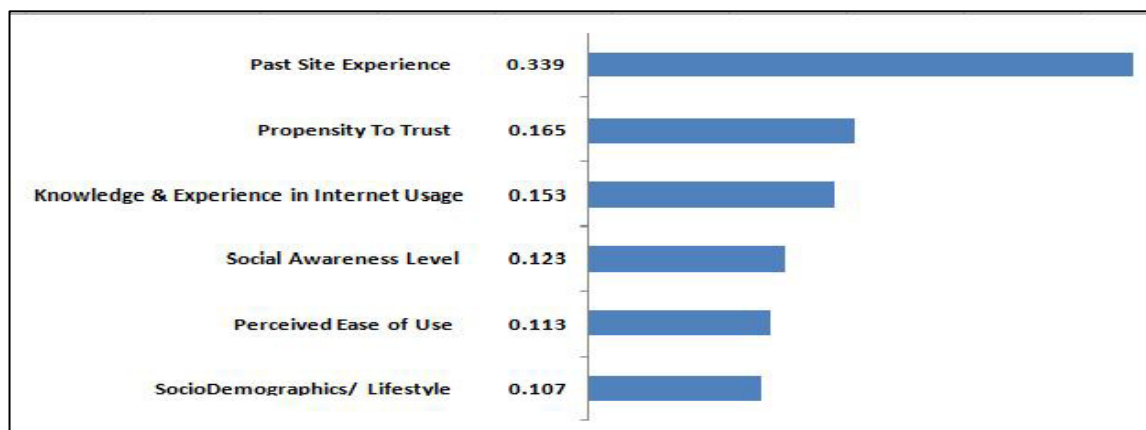


Fig 7: Priority of sub-factors in Customer Trust Factors

So, the final contribution of trust sub-factors to the e-commerce trust in Indian market is, as can be seen in Figure 8.
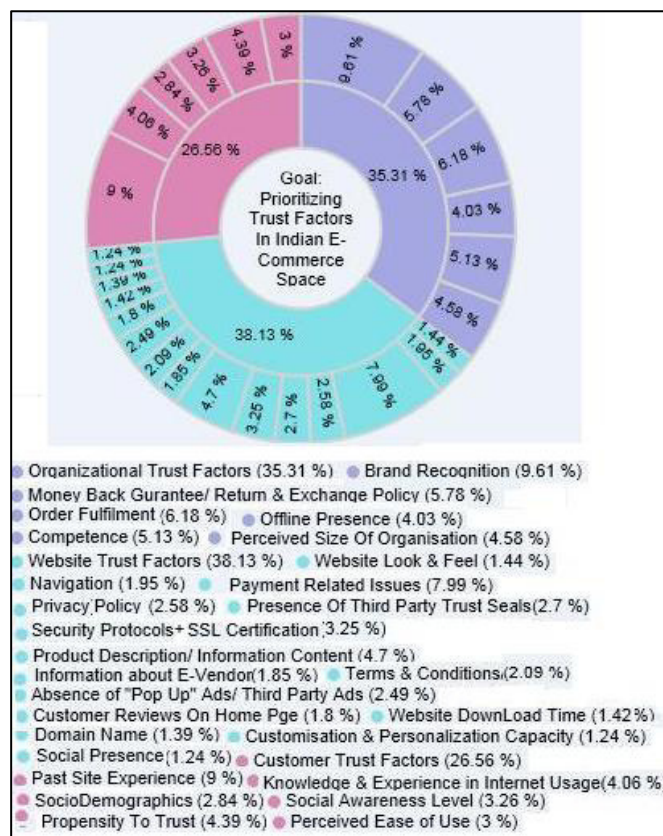
Fig 8: Final contribution of sub-factors to trust in Indian E-Commerce Market

## 6. Conclusion

The study discussed the contribution of the sub-factors of trust in the organizational, website and customer factors categories. The results indicate website factors are the most important contributors' to trust in a B2C website. Organizational factors occupy the second position followed by the customer factors.

The revelations of the study can be used by e-marketers to enhance their websites by giving due importance to the factors which contribute more to generating customers' trust as compared to others with lesser importance. The study can also be used by Indian online customers to increase their knowledge base in order to make more intelligent purchases.

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