# <u>Determinants Of Online Trust: A Study of University Students of Uttrakhand</u>

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## **ABSTRACT**

Inferable from the quick improvement of the Internet and data innovation in India, the development of Internet shopping has been really wonderful as of late. But In spite of such phenomenal growth in online shopping in India, a large majority of online shoppers abandon the shopping cart, at a rate of over 70%, which leads to trillions of dollars in lost sales. The principle motivation behind why online customers desert their shopping cart is trust.

Thus, the motivation behind this paper is to recognize and create an understanding about different determinants of trust in an online environment. This study aims to provide useful implications to online marketers related to online trust.

Keywords: Web based business Trust, Online Trust, Trust, Trust Factors, Trust Determinants.

#### Introduction

Web based shopping in India is picking up ubiquity in relatively every field. According to the statistical surveying firm Forester Research, the present size of the Indian electronic business exhibit is \$1.6 billion and it is depended upon to create to \$3 billion of at regular intervals and might reach \$15 billion by 2020, where it is required to contribute 4% of GDP. Today Internet has added estimation to searching for purchasers through imagery, chronicles, virtual endeavor ons, and progressing input, free home movement and obligation regarding marked down costs. Sharp increment in web utilization alongside expanded pc and broadband infiltration has given another significance to network and client encounter.

The reception of 3G and up and coming 4G innovation, alongside the declining costs of advanced cells, is relied upon to result in an extra increment in web utilization in the nation. Changes on the installment front have achieved the expanding utilization of plastic cash by Indian customers. Installment passages have now been made more secure through numerous levels of confirmation. This has reinforced clients' trust in doing on the web exchanges. Disregarding such upgrades in web based shopping in India, there are some basic issues that still dishearten purchasers from internet shopping, for example, dread of misrepresentation, absence of standard advancements for the safe installment, security concerns. Still there are larger part of buyers who leave their shopping baskets even in the wake of choosing to make an online buy.

## **Significance of Trust in Online Shopping**

When a customer visits a e-commerce website he doesn't know whether the product related information is accurate or not, whether if he pays online his financial records are protected, whether the product will be delivered on time or not, whether he will be able to exchange or return a product if it do not meet out the

customer's expectations. In such a situation the customer takes his decision purely on the basis of trust. Trust has dependably been a key component in effective advertising whether it is mechanical or customer promoting. Today a portion of the web based business destinations don't center around building trust as a major aspect of continuous association with their clients. Such sites pursue hard core selling techniques without providing any help to customers in making their buying decisions. Such sites work as mere self-service catalogs. As a result such sites suffer from low customer retention and make mere profits.

For Web trust-based showcasing is the way to progress. Today trust based sites provide adequate help to a customer while shopping from their website. Such websites provide accurate information about not only their own products but about competitors products as well. They provide easy navigation facility which makes shopping experience turn into a pleasure. Such trust based websites have high customer retention rate and thereby increase their market share and profits.

# **Research Objectives**

- 1. To provide a review of the accessible examination into the elements influencing the web trust.
- 2. To identify the factors influencing web trust.
- 3. To provide Useful Implications to online marketers.

#### **Review of Literature**

Different conceptual as well as empirical studies have identified the trust inducing features under three different categories: Customer based organization based and website based. Various such past investigations significant to the present subject are audited in the accompanying area:

#### **Perceived Reputation**

Bojang Ismaila (2017) in his examination explored the factors influencing shopper's observation about online trust in Russia. He found that perceived security, perceived privacy and perceived reputation have significantly positive influence on online trust. Mei-Jane Chan () examined the elements influencing college undergraduate student's trust in web based shopping in Taiwan and found that online store's notoriety is one of the huge elements influencing understudy's trust and hence the web seller in Taiwan ought to underline on enhancing their online notoriety for expanding buyer trust in web based shopping. Thompson S.H. Teo (2005) contemplated the determinants of customer trust in United States, Singapore and china. The outcomes demonstrated that notoriety and framework affirmation of a web merchant and shopper's penchant to trust are emphatically identified with purchaser trust. Chao-Jung Hsu (2008) in his examination distinguished seven factors that significantly affect online trust including notoriety, outsider confirmation, client benefit, penchant to trust, site quality, framework affirmation and brand. Hee-Woong Kim () in his investigation looked at online trust building factors between potential clients and rehash clients. He found that if there should arise an occurrence of both potential clients and rehash clients notoriety alongside halfway involvement with the seller assumes an essential job in looking after trust.

#### **Perceived Security**

Van der Werff (2018) in his examination found that perceived security and privacy are vital factors influencing online trust. Amber C. Hwang et al. (2007) in his examination analyzed the impacts of apparent security, the and outsider association seals on confiding in convictions. He found that apparent security positively affects buyer's trust in a web merchant. Syed Shah Alam et al. () in his examination basically explored factors that impact shopper's observation about online trust in Malaysia. The investigation found that apparent security/protection significantly affects online brand trust. As per the outcomes, huge numbers of the respondents saw the Internet to be shaky and subsequently they were hesitant to give their own or budgetary data to the online retailers. Chanidapa Prompongsatorn et al. (2012) in his examination inspected the variables impacting shopper trust in web shopping

in Thailand. The examination inferred that customer view of notoriety, security, protection, convenience, helpfulness, and uprightness affect trust in Internet shopping in Thailand.

#### Perceived Ease of Use (PEOU)

Sharifi Fard Saeideh (2017) examined in his study what factors influence online purchase intention of Malaysian buyers with reference to social network websites. JaeJon Kim (2007) examined what influences Chinese buyers' choices to buy on the web. The reason for the examination was to explore the impacts of Chinese customers' trust on their obtaining goal. The investigation recommended that there exists a critical connection among trust and acquiring aim. The investigation additionally reasoned that online business learning saw notoriety, saw chance, and saw convenience are likewise the variables that influence trust. Ardion Beldad et al. (2010) directed a writing audit covering observational investigations on online trust. In view of the survey he found that the improvement of online trust relies upon either customer based factors or electronic or association based.

#### **Propensity to Trust**

Sathiyavany N, Shivany S (2018) conducted a study to identify factors influencing web trust in case of online banking. Yong-Sheng Chang et al. (2013) led an investigation that first time inspected the diverse elements that influence online trust as well as doubt. The aftereffects of the investigation demonstrated that Propensity to trust and doubt essentially impact customer trust or doubt toward e-sellers since they are dictated by identity factors outside the control of the e-merchant. In this way, e-merchants must target diverse market sections in view of various identity factors. Chao-Jung Hsu (2008) in his examination uncovered that to more readily comprehend purchasers' evaluation of online trust; it is helpful to discover the key variables seen by Internet clients. The investigation uncovered that online merchants should center around such online trust factors as penchant to trust, notoriety, mark, framework affirmation, site quality, outsider confirmation, and client benefit. Jing Liu (2005) in his examination analyzed the determinants of buyer trust in the United States, Singapore and China. The aftereffects of the examination showed that notoriety and framework affirmation of an Internet seller and purchasers' inclination to trust are decidedly identified with customer trust. In addition buyer's trademark (inclination to trust) is observed to be determinant of customer trust in the event of all the three nations.

## Third Party Organization/ Web Seal/Third Party Guarantees

**Bauman Antonina (2017)** conducted a literature review based on content analysis of 138 research papers related to online consumer trust. **Amber C. Hwang et al. (2007)** in his examination investigated factors, for example, customers' view of data security, protection, trust, and their acknowledgment of internet business. In particular, he inspected the impacts of hosting a third get-together association/web seal, and furthermore protection and security proclamations on the appropriation conduct of electronic business. The aftereffects of the examination demonstrated noteworthy connection among trust and security and in addition outsider affirmation. Menno de Jong et al. (2010) led a writing survey covering experimental investigations on online trust. In light of the survey he found that the improvement of online trust relies upon either customer based factors or electronic or association based.

## Website Design

Farhod P. Karimov et al. () in his examination exhibited an audit of analysis constructed writing with respect to the determinants of introductory trust in business-to-buyer (B2C) online business. In his examination he arranged trust-actuating site highlights into three classes to be specific visual plan, meaningful gesture outline and substance outline. The consequences of the examination demonstrated that 'visual plan' measurements are vital in empowering on the web starting trust. **Radwan M. Al-Dwairi (2013)** in his investigation attempted to recognize the variables for confided in web based business sites. The consequences of the examination showed that security and protection highlights are critical elements of the confided in web based business sites. What's more, internet business web architecture additionally assumes an essential job in inspiring e-clients to direct their online exchanges.

# **Research Methodology**

**The study**: This examination is exploratory in nature and attempted to give a comprehension of the components prompting trust towards internet shopping. The investigation is based on mainly primary data used to investigate factors affecting purchaser's online trust and in this way their future buy expectation. Time of the examination was from 10th Feb, 2018 to 30th April, 2018. The investigation included under graduate and also post graduate students of various universities of Uttrakhand.

**The Sample:** The sample of the present study comprises of 200 respondents from different universities located in different parts of Uttrakhand. Respondents are those students (Under Graduate as well as post graduate) who purchase online.

The Tools for Data Collection: A self organized survey was utilized to gather information. The initial segment of the poll included inquiries regarding demographic profile of respondents, for example, sexual orientation, educational qualification and so on.. The second piece of the poll incorporated a self-organized scale that was utilized to gather essential information. The 35 close ended statements of the scale depended on five point Likert scale (Strongly Agree – 5 to Strongly Disagree – 1) and used to gauge 'factors influencing customer's online trust. The unwavering quality of the scale was observed utilizing Cronbach's Alpha.

**The Tools for Data Analysis:** The examination of gathered information was finished by Statistical Package for Social Science (SPSS). They were then subjected to Principal Component Method of Factor Analysis utilizing Varimax Rotation to extract factors.

# Data Analysis

The results of the present study are sorted out as under. In the primary section, the demographic profile of the respondents is exhibited. The second segment introduces the factors affecting online trust.

# Demographic Characteristics

Variables	Classification of	Frequency	Percentage
	Variables		
Age Group	18-25	200	100%
	26-35	0	0%
	35 and above	0	0%
Gender	Male	148	74%
	Female	52	26%
Marital Status	Married	0	0%
	Single	200	100%
Educational Qualification	Professional Degree	66	33%
	Post Graduation	66	33%
	Under Graduation	70	35%
Average Family Income	Rs20,000 and below	20	10%
_ ,	20,000-30,000	30	15%
	30,000 -40,000	70	35%
	40,000 and above	80	40%

The table below exhibits the demographic traits associated with the respondents considered for the purpose of this study.

# **Table1: Demographic characteristics of Respondents**

**Source**: Primary Data Collected for the Study

Among 200 respondents, there were 148 (74%) were male respondents and 52 (26%) were females. As far as age-group is concerned all of our respondents belong to the age group of 18-25. All of our respondents were single. As far as educational qualifications are concerned respondents include both undergraduate as well as post graduate pursuing either professional or non-professional degrees. Majority of the respondents belong to the families having an average income of Rs. 40,000 and above.

# Reliability Coefficient

In order to check the consistency of respondents' answers to all the close ended statements included in the scale we have used the most popular method which is Cronbach Alpha. According to this method, reliabilities less than 0.6 are considered poor, those in the 0.7 range are considered acceptable whereas those above 0.8 are considered good. In this study the alpha value was 0.989 which is very good.

# **Factors Affecting Online Trust: Exploratory Factor Analysis**

Consumers may have different perceptions towards online trust in relation to online shopping. To investigate respondent's attitude towards online trust and the Reasons underlying their attitude, they were provided with a list of statements representing the reasons affecting online trust and were requested to mark their agreement or disagreement with each of these statements on a 5 point Likert scale ranging from 1 for strongly Disagree to 5 for Strongly Agree. The resulting responses were factor analyzed. in order to judge the appropriateness of data for factor analysis Bartlett's test of sphericity and KMO sampling adequacy test was applied .the value of both the tests (p<0.001 and 0.707 indicated that data is appropriate. Principal component Analysis with Varimax rotation was used to analyze data while retaining Eigen values greater than 1 and factor loadings greater than 0.40.Total 35 close ended statements got reduced to six factors using factor analysis. The factor solution indicated that almost 95 percent of the variance was explained by six factors.

<b>Determinants of Online Trust</b>	Factor Loadings					
ITEM TOTAL(38)	F1	F2	F3	F4	F5	F6
Website Design						
Visual Appeal	0.978					
Simple Language	0.913					
Quick Information	0.907					
Eligible Graphics	0.906					
Layout of Websites	0.901					
Visual Honesty	0.811					
Up-to-date Content on Online sites	0.591					
Relevant and Accurate Information	0.581					

Brand/Website Recognition					
Brand Familiarity	0.978				
Familiarity	0.959				
Famous Brands	0.925				
Brand Quality	0.904				
Image of Site	0.754				
Security and Privacy	0.751				
Safe Transaction on Online Websites		0.931			
Privacy		0.834			
Comfortable in Giving Personal Information		0.706			
Adequate Security Features		0.686			
Propensity to Trust		0.080			
Usual trust unless there is a reason			.701		
Tendency to trust is high			.606		
Easy to Trust online sites			589		
Likely to trust in presence of even			.558		
improper knowledge.  Perceived Reputation					
Good Reputation in my eyes				0.021	
True and Honest information				0.931	
Websites are trustworthy and honest				0.931	
Positive Internet Experience				0.909	
Dependable infrastructure					
Concern about customer's welfare				0.848	
Good ability to face risks				0.811	
Websites act in my best interest				0.730	
Experience and Proficiency in Internet Usage				0.037	
Site content is easy for me to understand.					0.888
Website Knowledge					0.860
Comfortable shopping at online sites					0.821
Prior Online Shopping Experience					0.676
Confident in assessing trustworthiness					0.591

of sites			
Confident in assessing quality of site			0.355

#### Discussion

This present investigation gives proof that buyers trust in web based shopping is the aftereffect of particular components. This research in line with previous findings Sathiyavany N, Shivany S (2018), Bojang Ismaila (2017), Bauman Antonina (2017), Teo (2005), Chao-Jung Hsu (2008). Radwan M. Al-Dwairi (2013), Jing Liu (2005), Chanidapa Prompongsatorn et al. (2012)) confirmed that consumer's online trust is affected by various factors such as perceived reputation, Perceived security and privacy, Website Design, propensity to trust etc. However, two new factors have also been identified in present study which are Brand/Website Recognition popularly known as Brand Familiarity which indicates the extent of a person's familiarity with various online websites one serves and the availability of famous and well known brands on online websites. Second factor which has been identified is Proficiency and experience in Internet usage which describes the level of comfort one feels while undergoing online shopping, how much e-commerce knowledge a person possess etc.

# **Implications**

The discoveries of this investigation have a few administrative ramifications which are as per the following:

Since Perceived security and privacy has been identified as a major determinant of online trust in the present study also in line with previous studies therefore it is required that online vendors should adopt various measures to make online transactions safe and secure such as third party seal, various assurances etc. Moreover, since website design plays an important role in inducing online trust therefore e-vendors should try to improve "look and feel" of a website, should make use of virtual experiences and artificial intelligence to make their websites user friendly. Lastly, since propensity to trust is found to be a key determinant of online trust in many empirical as well as conceptual studies considered, therefore e-vendors should try to adopt different measures to induce trust based on different personality traits of the customers.

# **Limitations and Future Scope of Study**

This empirical study suffers from certain demerits. Firstly, the present study focuses on a specific segment of population which is students from university. Thus, further research, replicating the same can be conducted by considering respondents from different age-groups as well as different educational and professional backgrounds. Second, this study does not examine the effect of different types of e-commerce websites on online trust. Therefore, Future research can focus on different kinds of online sites to compare factors affecting online trust. Moreover, online trust is a continuous evolving concept which keeps on changing with consumers online purchase experiences as well as with time. Therefore, considering the same a longitudinal study can be conducted to find the effect of time on online trust determinants.

#### Conclusion

Thus, we can say the present study reveals the major role of trust antecedents in web based shopping. A critical examination of leading researches in field as well as an empirical study conducted on university students concludes that dimensions namely Security and Privacy, perceived reputation, propensity to trust, website design, Brand/Website recognition, proficiency and experience in internet usage have been established as strong determinants of trust in online shopping. Though various kinds of security and authentication measures have been adopted by websites to make online shopping safe and secure but still security and privacy has emerged as one of the major factor influencing web trust. Moreover, the personality traits of consumers also affect the trust towards online shopping. An individual's personality determines how likely he/she is to trust online websites easily even in absence of any evidence or proof. In addition an individual's past online shopping experience and his expertise in internet usage also affect his level of trust towards online shopping. The more proficient an individual is in internet usage, the more likely he will trust online websites. Thus, The

online marketers who wish to leverage the growth of online shopping, should stress upon the above studied dimensions and plan their strategies to induce trust in online customers.

#### References

# **Research Papers**

- 1. Alam Syed Shah, Way Siew Shir, Ahsan Nil far, "Assessing the Determinants of Online Brand trust: An Empirical Study", pp. 1-11.
- 2. Bauman Antonina, Bachmann Reinhard (2017), "Online Consumer Trust: Trends in Research" Journal of Technology Management & Innovation, Volume 12, Issue 2,pp. 68-79.
- **3.** Beldad Ardion, Steehouder Michaël (2010) "How shall I trust the faceless and the intangible? A literature review on the antecedents of online trust", Computers In human Behavior, pp. 857-869.
- **4.** Bojang Ismaila (2018) "Determinants of Trust in b2c e-commerce and their relationship with consumer online trust: a case of ekaterinburg, Russian Federation" Journal of Internet Banking and Commerce, May 2017, vol. 22, no. S8,pp. 1-59.
- **5.** Chan Mei-Jane (2009) "An Empirical Study for Factors that Affect Undergraduate Students' Trust in Online Shopping in Taiwan," Journal of Information Systems and Technology Management, Vol. 4., No. 2, pp. 58-64.
- 6. Chang Yong-Sheng, Fang Shyh-Rong (2013) "Antecedents and Distinctions between Online Trust and Distrust: Predicting High and Low-Risk Internet Behaviors", Journal of Electronic Commerce Research, Vol.14, No.2, pp. 149-168.
- 7. Chao-Jung Hsu (2008) "Dominant Factors for Online Trust", Proceedings of "International Conference on Cyber worlds 2008", pp. 165-172.
- 8. Fard Sharifi Saeideh (2017) "Determinants of Online Purchase Intention and Moderating Role of Trust in Social Network Websites in Malaysia", World Applied Sciences Journal, Vol. 35, Issue 9, pp. 2060-2070.
- 9. Hwang Amber C, Ow Terence T., Hinton-Hudson Veronica D. (2007) "Antecedents of Online Trust and Acceptance of E-Commerce.", Proceedings of IRMA International Conference, pp. 1345-1348.
- 10. Karimov Farhod P., Brengman Malaika, Leo Van Hove (2011) "The Effect of Website Design Dimensions on Initial Trust: a Synthesis of the Empirical Literature", Journal of Electronic Commerce Research, Vol 12, NO 4, pp 272-301.
- 11. Kaur Baljeet, Madan Sushila. (2013) "Factors Influencing Trust in Online Shopping: An Indian Consumer's Perspective", European journal of Business and Management, Vol.5, No.29, pp. 132-138.
- 12. Khan F., Rasli A. M, Yusoff R. M., Isa K. (2015) "Impact of Trust on Online Shopping: A Systematic Review of Literature", Journal of Advanced Review on Scientific Research, Vol 8, No. 1, pp. 1-8.
- 13. Kim Hee-Woong, Xu Yunjie, Koh Joon (2004) "A Comparison of Online Trust Building Factors between Potential Customers and Repeat Customers", Journal of Association for Information Systems, Vol. 5 No. 10, pp.392-420.
- 14. Kooli Kaouher, Mansour Kaouther Ben, Utama Rizky (2014)," Determinants of online trust and their impact on online purchase intention", International Journal of Technology Marketing, Vol.9, No.3, pp.305 319.
- Li Rong, Kim JaeJon, Park JaeSung (2007) "The Effects of Internet Shoppers' Trust on their Purchasing Intention in China", Journal of Information Systems and Technology Management Vol. 4, No. 3, pp. 269-286.
- 16. Prompongsatorn Chanidapa, Sakthong Nattapong, Chaipoopirutana Sirion, Combs Howard (2012) "The Factors Influencing Consumer Trust of Internet Shopping in Thailand", Proceedings of ASBBS, Vol.19, No.1, pp. 736-745.
- 17. Radwan M. Al-Dwairi (2013) "E-Commerce Web Sites Trust Factors: An Empirical Approach", Contemporary Engineering Sciences, Vol. 6, no.1, pp. 1 7.

- 18. Sathiyavany N, Shivany S (2018) "E-Banking Service Qualities, E-Customer Satisfaction, and e-Loyalty: A Conceptual Model" The International Journal of Social Sciences and Humanities Invention, Vol. 5,Issue 6,pp. 4808-4820.
- 19. Teo, T and Liu, J. (2005) "Consumer Trust in E-Commerce in the United States, Singapore and China", International Journal of Management Science, pp. 22-38.
- 20. Thakur Anand, Shabnam Narula, Chahal Puneet, "Examining Antecedents of Trust in Online Shopping: A Review Based Study".
- 21. Van der Werff, L., Real, C., & Lynn, T. (2018). Individual trust and the internet. In R. Searle, A. Nienaber, & S. Sitkin (eds.), Trust. Oxford, UK: Routledge
- 22. Wang Ye Diana, Emurian Henry H. (2005) "An overview of online trust: Concepts, elements, and implications", Computers in Human Behavior, Vol.21, pp.105-125.
- 23. Zhong LI Wen, Gang DU Jian, "Online Trust in E-tailing: A Conceptual Framework, Implications, and Future Directions", pp. 1132-1137.

#### **Website Articles**

- 1. Admin. (February 5, 2014). "E-commerce Industry: Current Online Retail & E-commerce Market Scenario in India" Retrieved from https://www.dartconsulting.co.in/DARTBlogs/e-commerce-industry-current-online-retail-e-commerce-market-scenario-in-india/
- 2. Friedman Alex. (January 29, 2014). "Why Online Companies Must Focus on Building Trust" Retrieved from http://www.marketingprofs.com/opinions/2014/24247/why-online-companies-must-focus-on-building-trust.
- 3. Urban L Glen, Sultan Fareena, Qualls J. William. (Sept 20, 2016). "Placing Trust at the Center of Your Internetstrategy" retrieved from
- https://www.researchgate.net/publication/40964353\_Placing\_Trust\_at\_the\_Center\_of\_Your\_Internet\_Strategy.
- 4. Zawadzinski Maciej.(Sept 2, 2016). "The Three Rs That E-Commerce Marketers Should Master" Retrieved from http://www.marketingprofs.com/articles/2016/30588/the-three-rs-that-e-commerce-marketers-should-master.
- 5. Zawadzinski Maciej. (September 2, 2016) "The Three Rs That E-Commerce Marketers Should Master". retrieved from <a href="http://www.marketingprofs.com/articles/2016/30588/the-three-rs-that-e-commerce-marketers-should-master">http://www.marketingprofs.com/articles/2016/30588/the-three-rs-that-e-commerce-marketers-should-master</a>.