

Factors Affecting Customer Satisfaction In Online Shopping: An Analysis Of Convenience, Trust, Service Quality, Privacy, And Security

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ARTICLE INFO	ABSTRACT
	<p>Customer satisfaction is an overall attitude formed based on the experience after customers purchase a product or use a service (Fornell, 1992). The research in hand is a study of customer satisfaction with respect to online shopping. A satisfied customer is an angel for online retailers who can boost the profitability of the firm. Satisfied customers bring out the potential value to the company in the form of long-term customer relationship management. There are various factors which influence customer satisfaction. The basic objective behind this study is to understand the various factors influencing customer satisfaction in Online Shopping. Respondents for this study were millennials studying in the educational institutions and academicians working in government and private institutions in the Tricity (Chandigarh, Mohali and Panchkula) with the sample size of 503 respondents. The statistical analysis of the data collected was done through ANOVA, Correlation and regression using SPSS 22. The findings revealed that convenience, privacy, security, service quality, and trust were all found to significantly impact online customer satisfaction. It is noteworthy that all the factors exhibited varying degrees of correlation with online satisfaction.</p> <p>Keywords— “Customer satisfaction”, “trust”, “service quality”, “privacy”, “security”, “convenience”, “online shopping,”</p>

I. INTRODUCTION

A. Customer Satisfaction

Customer satisfaction is the result of collective understanding, assessment, and the physiological reaction of the customer towards the experience of the product or service consumers (Moezzi, 2009). Satisfaction arises from a comparison of actual performance with expectation related to the performance (Kotler, 1991, Oliver 1980). Satisfaction reflects a feeling of contentment or disappointment derived from the comparison between expectations and perceived performance. According to Kotler and Clarke, 1987, “Satisfaction is a function of a relative level of expectations which are formed on the basis of experience with the same or similar situations, statements made by friends or other associates.”

Oliver (1981) posits that satisfaction is a psychological state resulting from the interplay of emotions related to disconfirmed expectations and prior consumption experiences. This state, characterized by surprise or excitement, is transient but significantly influences overall attitudes toward purchasing products.

Dube and Morgan (1998) emphasize two types of satisfaction in online commerce: encounter satisfaction, derived from customer-supplier interactions, and process satisfaction, arising from the overall online shopping experience.

Anderson and Srinivasan (2003) introduce the concept of e-satisfaction, defined as a consumer's contentment with their previous purchasing experiences on a retail website. Bao (2015) expands on this by defining customer satisfaction in electronic environments as favorable feelings resulting from experiences during various stages of the online transaction process.

B. Customers' Satisfaction in Online Shopping

Ranjbarian et al. (2012) conducted a study on customers' satisfaction in online shopping in Iran, proposing an e-satisfaction model based on the behavior of 181 respondents. They examined the impact of five dimensions—convenience, merchandising, website design, security, and serviceability—on e-satisfaction. The findings indicated that convenience (shopping time and ease of browsing), merchandising (offering variety, quality and quantity of information, and security in privacy and financial transactions), and serviceability (complaint resolution, customer support, packing, timely delivery, competitive pricing, return policy, confirmation emails, and site feedback) significantly influenced customer satisfaction. However, they concluded that website design (navigation structure, interface, presentation speed, content customization, and information updates) did not affect e-satisfaction.

Liu et al. (2008) conducted a comprehensive study on online shopping customer satisfaction in China, focusing on three key stages of the purchasing process: information search, alternative evaluation, and purchase/post-purchase. They developed a model of customer satisfaction in the online shopping context and used multiple regression analysis to analyze data from 1001 respondents gathered through field surveys, email surveys, and an online questionnaire attached to a shopping website. The study identified eight factors—delivery, transaction capability, security/privacy, customer service, information quality, merchandise attributes, payment, and website design—as significant contributors to customer satisfaction. Particularly, delivery and customer service were highlighted as having a major impact on enhancing overall customer satisfaction.

II. LITERATURE REVIEW

A. Factors Enhancing Customer Satisfaction

Based on Literature review, it was understood that various factors play a vital role in enhancing satisfaction in online shopping. Harris and Goode (2004) studied the role of trust in online loyalty, using data from online book and flight ticket purchasers. They found that loyalty and satisfaction are influenced by trust, perceived value, satisfaction, and service quality. Trust is crucial in building loyalty among online customers. For book purchasers, service quality and trust significantly shape satisfaction, while for flight ticket purchasers, service quality and perceived value drive loyalty.

Bauer et al. (2006) created a scale for measuring online shopping service quality, identifying five key dimensions: functionality/design, enjoyment, process, reliability, and responsiveness. These dimensions positively impact perceived value and customer satisfaction, with enjoyment notably influencing repurchase intention. Cristobal et al. (2007) developed a multiple-item scale to measure perceived e-service quality, identifying web design, customer service, assurance, and order management as key dimensions. These factors positively influence consumer satisfaction. The study suggests that website managers should enhance service loyalty, customer sensitivity, personalized service, and quick responses to complaints. Major drivers of satisfaction in online shopping include website design, privacy/security, and correct product delivery.

Lin (2007) examined the impact of website quality dimensions—information quality, service quality, and system quality—on customer satisfaction in B2C e-commerce, focusing on 297 Taiwanese students using an online bookstore. The study found that website design and interactivity (system quality), as well as informativeness and security, significantly contributed to customer satisfaction. Trust and responsiveness also positively impacted satisfaction, while empathy had no significant effect.

Salo and Karjaluoto (2007) explored factors influencing the formation of trust in online environments through a conceptual model. They identified internal factors (past experience, reputation, website quality, perceived usefulness, ease of use) and external factors (consumer characteristics, product/service characteristics, market/cultural differences, risk perception) as key in shaping trusting beliefs. These beliefs influence the intention to visit a website, affecting online transaction outcomes. The study highlighted that lack of trust in online vendors significantly contributes to failures in the online environment.

Yang (2007) investigated the impact of e-service quality, e-system quality, and e-information quality on e-satisfaction and e-loyalty in Taiwan, using data from 668 respondents, including business professionals and students aged 20-40. The study concluded that service quality (efficiency, system availability, fulfillment) and information quality (real-time, complete, concise content) significantly influence e-satisfaction, which in turn enhances e-loyalty. However, system quality was found to have no significant impact on e-satisfaction and e-loyalty.

Sohail and Shaikh (2008) conducted a study among internet banking users in Saudi Arabia. Using a questionnaire, they identified three key factors—efficiency and security, fulfillment, and responsiveness—that significantly influence users' evaluation of service quality. Ganguly et al. (2009) investigated website characteristics, trust, and purchase intention in online stores within the Indian context. They sampled students from various prestigious business schools in India who had prior online shopping experience. Their findings highlighted that website factors such as visual design, navigation design, communication, social presence, privacy, information design, and security play a crucial role in establishing online trust. The study concluded that trust acts as a mediating variable between website design and purchase intention, contributing to reducing perceived risk in online transactions.

Lin et al. (2009) conducted a study to explore the factors influencing satisfaction and loyalty in online shopping. The study concluded that technology acceptance factors significantly influenced both customer satisfaction and e-loyalty. Similarly, website service quality was found to have a significant impact on customer satisfaction and loyalty, indicating a direct linear relationship where increased satisfaction leads to higher loyalty. Interestingly, specific hold-up costs did not show a significant relationship with customer satisfaction but did positively impact customer loyalty. The overall findings suggested that enhancing website quality factors and technology acceptance could effectively increase customer satisfaction and subsequent loyalty in online shopping contexts. Zhou et al. (2009) examined the impact of website design quality and service quality on consumers' online repurchase behavior to identify the more influential factor in determining repurchase intention. They found that service quality had a significantly stronger effect on consumers' trust and satisfaction compared to website design quality. This, in turn, led to higher repurchase intentions among customers. The study recommended that website managers prioritize enhancing service quality to effectively retain customers and ensure a consistent revenue stream.

Kassim and Abdullah (2010) conducted a cross-cultural analysis among consumers from Malaysia and Qatar to explore how perceived service quality influences satisfaction, trust, and loyalty in the online environment. The study concluded that higher perceived service quality directly contributes to customer satisfaction, which in turn fosters trust and loyalty, often through positive word-of-mouth recommendations.

Hsiao et al. (2010) examined the factors influencing trust in online product recommendations among members of a game-based community website in Taiwan. They employed structural equation modeling (SEM) to analyze data collected through a questionnaire. The study found that product recommendations from website members contribute significantly to building trust, which subsequently influences consumers' intentions to make purchases from that site. Trust formation was influenced by factors related to the website itself (such as perceived web reputation, quality, and institutional assurance) and social network factors (including perceived ability, benevolence/integrity, and critical mass). The research concluded that consumers tend to trust product recommendations more when they come from websites they already trust.

Becerra and Korgaonkar (2011) investigated how product, brand, and vendor trust beliefs collectively influence consumers' online intentions. Their findings indicated that trust in brands significantly impacts online intentions and plays a crucial role in enhancing online sales. Moreover, the study highlighted that the influence of trust in vendors on online intentions varies depending on the trust consumers place in the brand and specific products.

Hur et al. (2011) constructed a structural model to explore how sport website quality relates theoretically to e-satisfaction and behavioral loyalty. They identified dimensions of website quality including information, interaction, design, system, and fulfillment, all of which contribute to enhancing e-satisfaction. The study revealed that e-satisfaction serves as a crucial mediating factor between sport website quality and e-loyalty among consumers.

Ha and Stoel (2011) investigated the impact of e-shopping quality and experiential e-shopping motives on online apparel retailing among 298 college students aged 18 to 34 in the USA. They examined how factors like privacy/security, customer service, website content/functionality, and experiential/atmospheric elements (such as fun, excitement, and pleasure) influence e-satisfaction and e-shopping intention. The study concluded that website content/functionality and experiential/atmospheric quality significantly enhance e-satisfaction. However, privacy/security and customer service predominantly affect e-shopping intention rather than directly impacting e-satisfaction. This suggests that e-retailers aiming to maintain a competitive edge should focus on strategies that enhance both e-satisfaction and e-shopping intention.

Omar et al. (2011) investigated the factors influencing customer satisfaction among Chinese online shoppers using a questionnaire with 204 respondents in Beijing, China. The study identified dimensions such as convenience (safe and prompt delivery), security of online payments, product quality (performance), website interactions (internet chat rooms, effective communication systems), and website design (sensory simulations) as crucial for enhancing online customer satisfaction. The findings underscored the importance for e-retailers to prioritize safe and efficient delivery, address security concerns, optimize product performance, and enhance web design features to gain a competitive advantage in the online shopping market.

Dharmesti and Nugroho (2012) investigated factors contributing to customer satisfaction in online shopping, focusing on their role as mediators for e-loyalty. Data gathered from 208 respondents in Indonesia using purposive sampling (107 online questionnaire responses and 101 offline responses) revealed that information quality, security/privacy, convenient payment systems, delivery efficiency, and customer service positively influenced customer satisfaction. However, factors such as product variety and website design did not significantly impact satisfaction. Moreover, customer satisfaction was identified as a mediator for five key determinants of e-satisfaction: information quality, security/privacy, payment systems, customer service, and delivery efficiency.

Elizabeth and Arjunan (2012) examined the importance of e-trust and e-loyalty in online banking among customers from private, public, and foreign banks in Bangalore. They conducted a survey using a structured questionnaire to investigate the antecedents of e-trust and e-loyalty. The study proposed a conceptual model illustrating that website quality, shared values, and effective communication play crucial roles in fostering e-trust, which subsequently enhances e-loyalty in online banking transactions.

Ha and Stoel (2012) investigated the factors influencing e-shopping intention and satisfaction among consumers, focusing on privacy/security, website content/functionality, customer service, and experiential/atmospheric factors. Their study, conducted with a sample of 298 college students in the USA, revealed that privacy/security and customer service significantly influenced e-shopping intention. Meanwhile, website content/functionality and atmospheric/experiential factors were found to significantly impact e-shopping satisfaction.

Samritwong (2012) investigated factors contributing to customer satisfaction and loyalty in online environments. The study surveyed 384 respondents with online shopping experience in selected districts of Bangkok using a questionnaire. Pearson correlation coefficient was employed to analyze the relationships among variables. The findings suggested that perceived service quality (including ease of use, website design, and assurance), perceived usefulness, enjoyment, firm reputation, and trust factors such as responsiveness, system availability, and customer contact significantly influenced customer satisfaction. Moreover, the study observed that increased customer satisfaction led to enhanced e-loyalty, manifested through intentions to repurchase, positive word-of-mouth, and recommendations to others.

Karim (2013) investigated factors influencing customers' decision-making processes in online shopping using Kotler and Keller's Five Stage Buying Process Model. The study involved 60 respondents and highlighted that convenience is a primary motivator for choosing online shopping. Convenience encompassed attributes such as timesaving, availability of information, reduced stress, cost-effectiveness, better offers, user-friendliness, 24/7 shopping availability, and a wide product variety, all contributing to increased motivation for online shopping. Conversely, issues related to payment security, delivery delays or errors, inadequate product return policies, and poor customer service were identified as inhibitors that undermine trust and reliability in online shopping, thus dampening purchase intentions. The study recommended that online retailers prioritize secure transactions, timely and accurate delivery, and customer-friendly return policies to foster a secure and competitive online shopping environment.

Muhammad (2013) conducted a case study on eBay.com to explore factors influencing repurchase intentions. The study involved 390 working Thai customers in Bangkok using eBay.com. It was found that trust in the website significantly enhances perceived usefulness of eBay. Furthermore, the study concluded that customer satisfaction, perceived usefulness, perceived interactivity, and trust directly contribute to the repurchase intentions of Thai customers on eBay.com.

Jiang et al. (2013) investigated consumer perceptions of online shopping convenience by identifying and measuring its dimensions. The study conducted focus group interviews with 15 customers to explore critical aspects of convenience and inconvenience in online shopping. From these interviews, five dimensions of convenience were identified: access, search, evaluation, transaction, and possession/post-purchase convenience. The authors developed and validated a survey instrument based on these dimensions, which was administered to 550 respondents through an online survey attached to a supermarket chain company. Data analysis included exploratory factor analysis, confirmatory factor analysis, and correlation analysis, revealing that all identified dimensions positively influenced customers' perceived convenience. The study concluded that higher perceived convenience in online shopping leads to increased repurchase intentions and positive recommendations to others.

Hilaludin and Cheng (2014) conducted a study to identify factors influencing customer satisfaction and e-loyalty in online shopping. They collected data from 180 respondents in Malaysia, including undergraduate, postgraduate, and professional degree holders, using a questionnaire. Their framework included website design, security, e-service quality, and information quality. The findings indicated that e-service quality and information quality significantly contribute to customer satisfaction in online shopping. However, website design and security did not show a positive influence on customer satisfaction. The study also highlighted that higher levels of customer satisfaction lead to greater e-loyalty in online shopping contexts.

Jiradilok et al. (2014) investigated factors influencing online purchase intentions among 400 respondents from Thailand and China, encompassing both experienced and inexperienced online shoppers. They identified assurance and empathy as crucial dimensions that enhance online purchase intentions by fostering trust in shopping websites. For experienced online shoppers, pricing and website information quality emerged as significant factors influencing purchase intentions. In contrast, inexperienced shoppers prioritized responsibility and reliability in addition to assurance and empathy when considering online purchases.

Winnie (2014) examined the influence of trustworthiness on customer e-loyalty and e-satisfaction using the commitment-trust theory. The study involved 195 internet users and highlighted trustworthiness as a critical factor affecting engagement in e-commerce. It was found that trustworthiness significantly enhances both e-satisfaction and e-loyalty. The study recommends that e-commerce platforms should focus on developing strategies rooted in benevolence, honesty, and competence to foster trust among online consumers.

B. Factors Affecting Customer Satisfaction in Online Shopping

The in-depth study of existing literature led to the finding that various factors affect customer satisfaction during online purchase but the following seemed to have most significant impact on the customer satisfaction in online shopping.

- 1) Convenience: Convenience, defined as anything that enhances comfort or saves work, has evolved in marketing from a focus on product attributes to service attributes. Initially conceptualized by Copeland (1923) and later expanded by Bucklin (1963) and Brown (1989), convenience products are characterized by

low risk and low buying involvement. Modern research by Seiders et al. (2000, 2007) and others emphasizes time-saving and effort-minimizing factors in service convenience. Key dimensions include ease of use, interactivity, information richness, and security (Jun et al., 2004; Parasuraman et al., 2005; Yang & Peterson, 2004). Jih (2007) and Beauchamp and Ponder (2010) highlight transaction and operational convenience, particularly in online shopping, where access and search convenience are perceived as superior to traditional retail.

- 2) Privacy: Privacy in online shopping is crucial as it determines the safety and protection of customer information (Chiu et al., 2008). Concerns about privacy are heightened with the introduction of new payment apps that handle personal data extensively (Liu et al., 2005). Research by Zheng et al. (2012) ranked privacy risk as the second most significant concern for online shoppers, following performance risk. Udo (2001) also emphasized that privacy and security are the primary concerns for online buyers. While Beresford et al. (2011) highlighted significant worries about unauthorized access to personal information, Keisidou et al. (2011) found that privacy concerns did not influence consumer attitudes towards online shopping for different products.
- 3) Security: Security in online shopping pertains to the belief that personal and financial information is safe from manipulation or misuse by retailers. This concern is significant due to the extensive data collected by online retailers, including personal and financial details. Research by Lu (2009) highlights that security is crucial for building consumer confidence, as the risk of unauthorized use of information is a major concern. Studies indicate that perceived security significantly impacts online shopping attitudes, with consumers hesitant to shop online if they feel their information is not adequately protected (Javadi et al., 2012; Collier & Bienstock, 2006; Kaur, 2013).
- 4) Trust: Trust is crucial in online shopping due to higher perceived risks compared to physical stores, where consumers interact with faceless retailers without the benefit of physical product examination or salesperson assistance (Reichheld & Scheffer, 2000; Samadi & Nejadi, 2009). This trust is vital for mitigating concerns about privacy invasion and identity theft (Pilić & Jurickova, 2016). Defined as a willingness to accept vulnerability based on positive expectations of another party's intentions (Rousseau et al., 1998), trust is a complex, multidimensional construct that reduces complexity and fosters positive relationships in commercial exchanges (Gefen, 2000; Pavlou, 2003). Trust encourages reliance on exchange partners and predictable behavior, making it fundamental in e-commerce transactions (Moorman et al., 1992; Jarvenpaa & Tractinsky, 1999; Kim, 2001).
- 5) Service quality: Service quality is defined by the extent to which it meets or exceeds consumer expectations, forming a perception gap between expected and actual service (Parasuraman, Zeithaml, & Berry, 1985). Influenced by past experiences, word-of-mouth, personal needs, and external communication, service quality is a subjective evaluation of overall service superiority. Key models include SERVQUAL, which identifies ten determinants of service quality, and SERVPERF, which offers a direct measurement approach (PZB, 1988; Cronin & Taylor, 1992). In online shopping, e-service quality factors such as efficiency, reliability, system availability, fulfillment, and privacy are crucial (Parasuraman et al., 2005; Collier & Bienstock, 2006). The quality of service in online shopping enhances consumer satisfaction by reducing waiting time and perceived risk, thus improving the overall shopping experience (Bao & Jinlong, 2015; Yulisetiari, 2017).

After finding different variables and sub variables that can affect satisfaction associated with online shopping, the researcher moves towards research methodology to check various hypothesis to achieve objective of this paper.

III. NEED FOR STUDY

Customer satisfaction represents the overall sentiment formed following a purchase or service experience (Fornell, 1992). Specifically, it denotes a customer's contentment derived from previous interactions with a specific retail-oriented website (Anderson and Srinivasan, 2003). Research indicates that trust (Lin, 2007), convenience (Ranjbarian et al., 2012; Omar et al., 2011; Samritwong, 2012), privacy/security (Ha and Stoel, 2011; Liu et al., 2008), and service quality (Yang, 2007; Jiradilok et al., 2014; Hilaludin and Cheng, 2014; Harris and Goode, 2004) all positively influence customer satisfaction. This result was carried out in tier 1 cities, different countries and on different demographics. There were few works that cater to demographics of tier 2 and tier 3 cities. As online shopping has been raised in tier 3 cities also, we need to determine whether these results can be generalized in tier 3 cities. i.e. Chandigarh, Panchkula and Shimla.

IV. OBJECTIVE OF THE STUDY

To study the factors influencing customer satisfaction in online shopping.

Hypothesis:

To study above mentioned objective following hypothesis were drafted:

H1a: Convenience has a significant relationship with customers' satisfaction in Online shopping.

H1b: Privacy has significant relationship with customers' satisfaction in Online shopping.
 H1c: Security has significant relationship with customers' satisfaction in Online shopping.
 H1d: Service Quality has significant relationship with customers' satisfaction in Online shopping.
 H1e: Trust has significant relationship with customers' satisfaction in Online shopping.

V. RESEARCH METHODOLOGY

Respondents for this study are millennials studying in the educational institutions and academicians working in government and private institutions in the Tricity (Chandigarh, Mohali and Panchkula). A total of 503 respondents were approached for collecting data through questionnaire through both online as well as offline mode. The study employed convenience sampling as the method for gathering data from the respondents. Data was collected through primary as well as secondary sources. For this purpose, various journals, books and various reports on online shopping in India were studied. Primary data was collected over a period of six months through a questionnaire. A covering letter was prepared to explain the purpose of data collection. This questionnaire was distributed through a google form shared through social media or gmail. For Convenience, Standardized items were adapted from the work of Convenience-Ling Jiang, Zhilin Yang and Minjoon Jun (2013). For service quality, Standardized items were adapted from the work of Gefen (2002) as used in Zhou, Lu and Wang study in 2009 and for trust, privacy and security, items were adapted from Ha (2004). The Cronbach's alpha (α) coefficient is a statistic used to measure the internal consistency or reliability of a set of scale or survey items that are intended to measure a single construct or domain. Interestingly, the Cronbach alpha value for all the sub constructs of customer's satisfaction was in the acceptable range.

TABLE I: CRONBACH'S ALPHA RELIABILITY COEFFICIENT FOR CUSTOMERS SATISFACTION

Customers satisfaction constructs	Cronbach's Alpha Value
Convenience	.922
Service Quality	.926
Trust	.901
Privacy	.865
Security	.750
Online satisfaction	.910

The average Cronbach's alpha for customer satisfaction is .910, which is considered good. As seen in the results in above mentioned table 5.2, the cronbach's alpha reliability coefficients for convenience is .922, trust is .901, service quality is .926, privacy is .865 and security is .750. The statistical analysis of the data collected was done through ANOVA, Correlation and regression using SPSS 22.

VI. DATA ANALYSIS AND INTERPRETATION

The data collected through questionnaire survey was analyzed using SPSS and the result obtained have been interpreted and presented hereunder.

A. Convenience and Customers' Satisfaction

H_{1a}: Convenience has significant relationship on Customers' satisfaction in online shopping.

To explore the significant relationship of convenience on Customers' satisfaction in online shopping, Pearson's correlation was run.

TABLE II: CORRELATION/ REGRESSION MODEL SUMMARY

R (Correlation)	R Square	Adjusted R ²	ANOVA (F)	Sig.
.769	.592	.591	727.087	.000

TABLE III: IMPACT OF CONVENIENCE ON ONLINE SATISFACTION

Dimensions	Standardized Coefficient (Beta)	t	Sig.	Collinearity Statistics	
				Tolerance	VIF
(Constant)		1.307	.192		
Overall Convenience	.769	26.965	.000	1	1

From the results, Convenience was found to have a positive correlation with online satisfaction ($r=.769$ and $p<.05$). With regard to the impact of convenience on satisfaction level of respondents regarding online shopping, the p value was found to be significant ($p<.05$). It stated that convenience was found to be significant predictor of online satisfaction. The R^2 for online satisfaction as dependent variable was .592 which indicated that approximately 59.2 % of the variation in online satisfaction is explained by convenience alone. Therefore, alternate hypothesis H_{4a} convenience has significant relationship on customers' satisfaction in online shopping was accepted.

B. Privacy and Customers' Satisfaction

H_{1b}: Privacy has significant relationship on Customers' satisfaction in online shopping.

To explore the significant relationship of privacy on Customers' satisfaction in online shopping, Pearson's correlation was run.

TABLE IV: CORRELATION/REGRESSION MODEL SUMMARY/ PRIVACY/ ONLINE SATISFACTION

R (Correlation)	R Square	Adjusted R ²	ANOVA (F)	Sig.
.533	.284	.282	198.61	.000

Dependent Variable: Online Satisfaction

TABLE V: IMPACT OF PRIVACY ON ONLINE SATISFACTION

Dimensions	Standardized Coefficient (Beta)	T	Sig.	Collinearity Statistics	
				Tolerance	VIF
(Constant)		21.116	.000		
Privacy	.533	14.093	.000	1	1

From the results, Privacy was found to have a positive correlation with online satisfaction ($r=.533$ and $p<.05$). With regard to the impact of privacy on satisfaction level of respondents regarding online shopping, the p value was found to be significant ($p<.05$). It stated that privacy was found to be significant predictor of online satisfaction. The R^2 for online satisfaction as dependent variable was .284 which indicated that approximately 28.4 % of the variation in online satisfaction is explained by privacy alone. Therefore, alternate hypothesis H_{4b} privacy has significant relationship on customers' satisfaction in online shopping was accepted.

C. Security and Customers' Satisfaction

H_{1c}: Security has significant relationship on Customers' satisfaction in online shopping.

To explore the significant relationship of security on Customers' satisfaction in online shopping, Pearson's correlation was run.

TABLE VI: CORRELATION /REGRESSION MODEL SUMMARY

R(Correlation)	R Square	Adjusted R ²	ANOVA (F)	Sig.
.407	.165	.164	99.284	.000

Dependent Variable: Online Satisfaction

TABLE VII: IMPACT OF SECURITY ON ONLINE SATISFACTION

Dimensions	Standardized Coefficient (Beta)	t	Sig.	Collinearity Statistics	
				Tolerance	VIF
(Constant)		26.381	.000		
Security	.407	9.964	.000	1	1

From the results, Security was found to have a positive correlation with online satisfaction ($r=.407$ and $p<.05$). With regard to the impact of security on satisfaction level of respondents regarding online shopping, the p value was found to be significant ($p<.05$). It stated that security was found to be a significant predictor of online satisfaction. The R^2 for online satisfaction as dependent variable was .165 which indicated that approximately 16.5 % of the variation in online satisfaction is explained by privacy alone. Therefore, alternate hypothesis H_{4c} security has significant relationship on customers' satisfaction in online shopping was accepted.

D. Service Quality and Customers' Satisfaction

H_{1d}: Service Quality has significant relationship on Customers' satisfaction in online shopping.

To explore the significant relationship of service quality on Customers' satisfaction in online shopping, Pearson's correlation was run.

TABLE VIII: CORRELATION/ REGRESSION MODEL SUMMARY

R(Correlation)	R Square	Adjusted R ²	ANOVA (F)	Sig.
.735	.540	.539	587.160	.000

Dependent Variable: Online Satisfaction

TABLE IX: IMPACT OF SERVICE QUALITY ON ONLINE SATISFACTION

Dimensions	Standardized Coefficient (Beta)	T	Sig.	Collinearity Statistics	
				Tolerance	VIF
(Constant)		6.033	.000		
Service quality	.735	24.231	.000	1	1

From the results, Service quality was found to have a positive correlation with online satisfaction ($r=.735$ and $p<.05$). With regard to the impact of service quality on satisfaction level of respondents regarding online

shopping, the p value was found to be significant ($p < .05$). It stated that service quality was found to be significant predictor of online satisfaction. The R^2 for online satisfaction as dependent variable was .539 which indicated that approximately 53.9 % of the variation in online satisfaction is explained by service quality alone. Therefore, alternate hypothesis H_{4d} service quality has significant relationship on customers' satisfaction in online shopping was accepted.

E. Trust and Customers' Satisfaction

H_{1e} : Trust has a significant relationship on customer satisfaction in online shopping.

To explore the significant relationship of trust on Customers' satisfaction in online shopping, Pearson's correlation was run.

TABLE X: CORRELATION /REGRESSION MODEL SUMMARY

R	R Square	Adjusted R ²	ANOVA (F)	Sig.
.725	.525	.524	553.630	.000

TABLE XI: IMPACT OF TRUST ON ONLINE SATISFACTION

Dimensions	Standardized Coefficient (Beta)	T	Sig.	Collinearity Statistics	
				Tolerance	VIF
(Constant)		3.781	.000		
Trust	.725	23.529	.000	1	1

From the results, trust was found to have a positive correlation with online satisfaction ($r = .725$ and $p < .05$). With regard to the impact of trust on satisfaction level of respondents regarding online shopping, the p value was found to be significant ($p < .05$). It stated that trust was found to be a significant predictor of online satisfaction. The R^2 for online satisfaction as dependent variable was .525 which indicated that approximately 52.5 % of the variation in online satisfaction is explained by trust alone. Therefore, alternate hypothesis H_{4e} trust has significant relationship on customers' satisfaction in online shopping was accepted.

VII. CONCLUSION

In the study, convenience, service quality and trust had very strong correlation with online satisfaction. Privacy too showcased positive correlation but not very high and surprisingly Security had moderate positive correlation contrary to other findings where it has strong positive correlation.

Convenience had the strongest positive correlation with online satisfaction ($r = .769$, $p < .05$), explaining 59.2% of its variance ($R^2 = .592$). Privacy also showed a positive correlation ($r = .533$, $p < .05$), accounting for 28.4% of the variance in online satisfaction ($R^2 = .284$). Security, while positively correlated with online satisfaction ($r = .407$, $p < .05$), explained 16.5% of the variance ($R^2 = .165$). Service quality demonstrated a strong positive correlation ($r = .735$, $p < .05$), explaining 53.9% of the variance ($R^2 = .539$). Lastly, trust had a positive correlation with online satisfaction ($r = .725$, $p < .05$), explaining 52.5% of its variance ($R^2 = .525$). All predictors were significant ($p < .05$), supporting the acceptance of the alternate hypotheses that each factor has a significant relationship with online customer satisfaction.

VIII. LIMITATIONS OF THE STUDY

This research was conducted in select cities of North India, leaving room for further studies to explore cultural differences in consumer behavior across other regions of the country. The study may have inherent biases due to the varied experiences of respondents and its cross-sectional nature. Satisfaction is a dynamic concept, frequently changing daily and monthly. Additionally, the study did not consider mediating or moderating variables that could influence buyer satisfaction. While general shopping behaviors were examined, consumer behavior might differ across various product categories.

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