

The Factor of Trust, Privacy and Convenience Risk on Consumer Online Shopping Behavior

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ABSTRACT

This study explores the influence of three key factors—trust, privacy concerns, and convenience risk—on consumer behavior in the context of online shopping. As e-commerce continues to grow rapidly, understanding these psychological and functional variables is critical for online retailers seeking to enhance customer satisfaction and encourage repeat purchases. Trust plays a pivotal role in shaping consumer confidence, especially in the absence of face-to-face interaction. When consumers perceive online vendors as honest, reliable, and secure, they are more likely to complete transactions. Privacy concerns reflect consumers' apprehension regarding the collection, use, and potential misuse of their personal data. A lack of transparency or control over personal information often leads to decreased willingness to engage in online commerce. Meanwhile, convenience risk refers to the potential inconvenience consumers may face during the shopping process, such as delayed deliveries, unclear return policies, or difficult website navigation. High levels of convenience risk can negatively impact user satisfaction and increase cart abandonment rates. This study emphasizes that addressing these three factors is essential for building consumer trust, enhancing user experience, and fostering long-term loyalty in online shopping environments. One of the main limitations of this study is the absence of empirical analysis. As this research is conceptual in nature, it does not include primary data collection or statistical testing to validate the proposed relationships between trust, privacy concerns, convenience risk, and consumer online shopping behavior. Therefore, while the framework and discussions are grounded in recent literature, the findings remain theoretical and would benefit from future empirical validation.

Keywords: Online Shopping Behavior, Trust, Privacy, Convenience Risk

INTRODUCTION

The recent advancements in technology have made it possible for people to purchase goods and services through online marketplaces such as Tik Tok Shop, Lazada, and Shopee. These platforms have become indispensable for consumers to fulfill their needs.

Online shopping, sometimes referred to as e-commerce (Electronic Commerce), is carried out via computers, smartphones, and other smart devices (Bloomenthal, 2024). Compared to traditional shops or merchants, this industry is becoming more and more competitive in both the local and worldwide economic markets. The process of buying and selling goods or services online is commonly referred to as "online shopping" (Reed, 2024). It is the custom of purchasing goods directly from a vendor without the use of a middleman. Additionally, consumers can purchase a variety of goods and services through online shopping, allowing them to compare prices with those of other middlemen and select the best deal (Sivanesan, 2017). Before making a purchase, millennials prefer to examine features, costs, schedules, programs, and product quality online,

according to the 2019 Indonesian Millennial Report (idEA, 2019).

Online shoppers' attitudes, preferences, and decision-making processes are all influenced by their behavior when making purchases. Wenzl (2024) defines online consumer behavior as the method by which customers decide which items to buy from an online retailer. According to Katerina Kondrenko (2024), this behavior encompasses a range of psychological processes and behaviors, including how consumers look for products, peruse online retailers, make decisions, and form purchasing habits. Furthermore, because online buying is more convenient, based on consumer perception, and tailored to the needs of the user, it is especially significant for marketing online electronic services when compared to traditional services (Lim et al., 2014). Understanding and taking into account consumer online shopping behavior is crucial, particularly for online businesses, since it enables this sector to successfully satisfy customer expectations. Customer trust in online retailers is one of the main factors that make consumer behavior in online purchasing significant. The basis of e-commerce is trust. Customers' behavioral attitudes may be influenced by their level of confidence in online retailers. According to Kartajaya et al. (2021), one factor influencing consumers' attitudes toward online purchasing is their degree of trust.

Well-known shopping platforms can foster trust, which aids consumers in making judgments about what to buy, according to earlier studies. Reviews and star ratings on purchasing platforms are two examples of factors that might boost consumer trust in online products. According to Laparojkit and Suttipun (2022), trust is a persistent problem in online shopping, as evidenced by the increase in fraud cases through various course sharing platforms. This shows that trust is a major factor in determining whether an investor will participate in business or online transactions. Additionally, the growing popularity of consumer trust in suppliers should be based on their belief that they are trustworthy, capable of taking action, and able to meet customer needs.

However, privacy also had an impact on online shoppers' purchasing decisions. Customers' views and actions about online purchasing have been greatly influenced by their growing awareness of online data manipulation and anxiety about the security of their financial and personal information (Abiakwe, 2020 & Bandara et al., 2020). Protecting consumer privacy is essential to the success of e-commerce (Liu et al. 2004). While a company's privacy statement may be important for startups and unnamed organizations, customer happiness is important for well-established businesses (Milne and Culnan, 2004).

Two characteristics of the internet and privacy are the main concerns of individuals, according to studies. The first is that anyone using the Internet can find private information. The second is what will happen to the private information they voluntarily gave (Dinev and Hart, 2004). Many consumers lack the knowledge necessary to make informed judgments, despite the fact that the experience shapes their opinions on privacy. According to Anton et al. (2007), most customers are not aware of websites' privacy policies. Last but not least, convenience risk is the belief that internet buying may not be as simple as it seems. For instance, a delayed delivery, trouble using a platform, or the inconvenience of having to return items to clients. Customers are alert to convenience hazards when they shop online because of these issues. According to Bhatti et al. (2019), convenience risk is the chance that products will be delivered to the wrong person or that they will be misplaced or harmed during transit. Additionally, a number of issues pertaining to convenience risk lessen consumers' propensity for online shopping. Low literacy rates, language barriers, a lack of technological expertise, adequate products, IT infrastructure, and a shortage of transaction time are some of these issues (Haider & Nasir, 2016; Nazir et al., 2012; Tariq, Bashir, & Shad, 2016; Chaudary et al., 2014; Aijaz & Butt, 2009).

PROBLEM STATEMENT

The rapid growth of online shopping has fundamentally altered customer behavior because of how easy and accessible it is to purchase goods and services. Many consumers are still hesitant to shop online despite its benefits due to a number of problems. Trust is one issue that comes up. Online shopping differs from traditional purchasing since it entails risk and imprecise information. Because of these issues, online retailers need to win over customers' trust and convince them that online purchasing is superior to traditional retail (Mempengaruhi et al., 2020).

One trust barrier that may deter consumers from making purchases online is a lack of trust. Customers are

unsure when they shop online since they are unable to fully assess the information they encounter. This uncertainty falls into two categories: environmental and behavioral. Credit card fraud, privacy violations, and unauthorized publication of personal information are among the problems associated with environmental uncertainty brought on by the internet's unpredictability (Fereshte Rasty et al., 2020). Due to the consequent loss of trust, many customers are reluctant to engage in certain online buying behaviors, such as disclosing personal information or making purchases online (Fortes & Rita, 2016).

The second problem with internet buying is privacy, as customers worry that their personal data may be abused or stolen. 2500 American customers were worried about their digital privacy, according to a recent nationwide poll by Private Internet Access (PIA). Notably, 66% of them said they were anxious about their privacy when they shopped online (Williams, 2023). In general, people make an effort to safeguard their online privacy, (Boerman et al., 2018). It is simple to acquire, examine, and merge personal information with information gathered by other organizations.

This may occur when individuals' personal information is collected without their knowledge or agreement, potentially leading to privacy infractions and legal issues (Data, 2024). Boerman et al. (2018) claim that people avoid the internet and give misleading information online mostly due to privacy concerns. Finally, problems with convenience risk, such complicated return rules, product inconsistencies, and shipment delays, negatively impact the whole online purchasing experience (Ahmad et al., 2020).

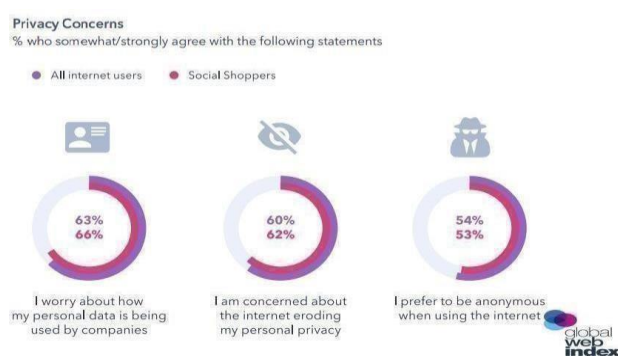
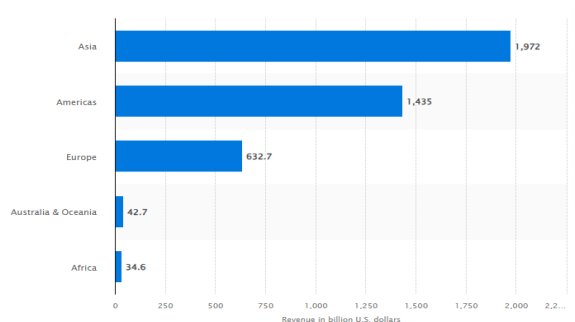


Figure 1 : Total retail e-commerce revenue worldwide 2024

Figure2: The social shoppers privacy concern in2019

The enormous number of options available online may cause decision fatigue and increase the stress of the transaction due to the convenience risk associated with online purchasing (Decision Fatigue Is Ruining Online purchasing, but Existing Tech Can Help, 2024). According to Adnan (2014), approximately 43% of purchases end in failure because the consumer lacks the necessary literacy and understanding to identify the relevant products or complete the online transaction.

URGENCY TO CONDUCT STUDY

In 2024, the e-commerce revenue in Oceania and Africa was less than 50 billion US dollars, while the e-commerce revenue in the United States was approximately 500 million US dollars. Asia's leading position is

mostly due to China, whose revenue in 2024 will surpass 1.4 billion US dollars. For example, worries about fraud, data security, and logistical inefficiencies are causing online shopping to spread quickly throughout Asia, which may discourage potential buyers and restrict industry growth.

Growing reliance on online shopping, particularly since the COVID-19 pandemic, has raised significant issues including privacy, trust, and convenience risk, illustrating how online shopping significantly affects consumer behavior. This is because, even after the outbreak forced people to shop online, they were likely to keep doing so because of the advantages it offered, like better information seeking and less transportation costs (Kim RY, 2020). Channel changes and brand loyalty were disrupted to an unprecedented degree by the outbreak.

Significantly, 75% of consumers adopted new purchasing behaviors, many emphasizing convenience and value. 39% of them, mostly Gen Z and millennials, chose new brands over well-known ones (Emerging Consumer Trends in a Post-COVID- 19 World, 2021).

Figure 1 show that highlighted Asia as the largest contributor to global e- commerce revenue, emphasizing the regions dominant role in the online shopping market. In 2024, the combined revenue from internet retail in Asian nations was close to two trillion dollars. Based on figure 2 show, despite the fact that more consumers make purchasing online, internet users characterize the activity as overwhelming, challenging, and frustrating. In general, consumers are worried about data security as well as privacy. The results showed that 66% of social shoppers are concerned about how businesses utilize their personal information more than the overall internet user rate of 63%. In a similar vein, 60% of internet users and 62% of social shoppers express concern about privacy degradation. Online anonymity is preferred by 53% of social shoppers, which is little less than the 54% of users in general. These results demonstrate the pressing need for a thorough investigation to tackle the escalating privacy and data security issues, guaranteeing that e- commerce platforms can restore customer confidence and improve the online purchasing experience for customers (Social Shoppers Privacy Concerns, 2019).

RESEARCH OBJECTIVES

Research Objective 1:

To determine the relationship between Trust on Consumer Online Shopping Behavior.

Research Objective 2:

To determine the relationship between Privacy on Consumer Online Shopping Behavior

Research Objective 3:

To determine the relationship between Convenience Risk on Consumer Online Shopping Behavior

RESEARCH QUESTIONS

Research Question 1:

Is there any significant relationship between Trust on Consumer Online Shopping Behavior?

Research Question 2:

Is there any significant relationship between Privacy on Consumer Online Shopping Behavior?

Research Question 3:

Is there any significant relationship between Convenience Risk on Consumer Online Shopping Behavior?

LITERATURE REVIEW

Overview of The Factor of Trust, Product Variety, And Convenience Risk on Consumer Online Shopping Behavior

Online shopping, also referred to as e-commerce, is a separate type of electronic commerce that links customers and sellers from anywhere in the world via a web browser (Laliberte, 2023). Long before the Internet was invented, online buying started in the 1970s. This was made possible by technology such as Electronic Data Interchange (EDI), which enabled the first online transactions by enabling businesses to electronically communicate sales and information such as purchase orders or invoices. When the first online store and the World Wide Web were introduced in 1994, Web, e-commerce started to gain development. The large platforms including Amazon (1995) and eBay (1995) have emerged, contributing to the rapid expansion of e-commerce since 1994. By eliminating the need to visit physical businesses, these platforms transformed the retail sector by introducing the concepts of online buying and selling (Dujardin, 2024).

Researchers began studying online purchasing as it became more popular. Selling products or services is only one aspect of electronic e-commerce; additional goals include retaining customers, building relationships with other businesses, and conducting business with them (Tian and Stewart, 2007). Customer behavior is influenced by a number of elements, such as privacy, trust, and convenience risk. Consumer loyalty and online buying behavior are significantly influenced by trust, and security and trust are related, according to Gommans et al. (2001). The customer cannot look directly into the salesperson's eyes or view the merchandise in person when placing an order. Therefore, it is essential for firms to establish trust with their consumers in order to avoid uncertainty.

Moreover, online shopping might give you more privacy than in-store shopping. People are less likely to see what you buy and spent.

Yet, the overall privacy risks are much higher online, (Hilst, 2016). Principally, consumers have the right and authority over their personal information. According to Soffer & Cohen. (2015), mentioned privacy is about the right to know who collects their personal information, why the information is being collected, and how it will be used. The majority of research participants indicated that they valued privacy, with particular concerns over the disclosure of different aspects of personal information.

A wide range of products and different online vendors also present a convenience risk. Liu, Gardner, Shannon, and Forsythe (2006). When consumers are unable to recognize the perfect products, they may become very anxious. Customers' perceptions that ordering will be challenging, that they won't be able to cancel once they've made their purchase, or that there will be delays in product delivery or returns are all associated with convenience risk (Forsythe, Liu, Shannon, & Gardner, 2006). According to Adnan (2014), 43% of purchases fail because the buyer is unable to identify the relevant items or has trouble completing the online transaction.

Trust in E-Commerce

Quintus et al. (2024) examined advanced (Austria) and emerging (Moldova) markets and discovered that trust is strongly influenced by website quality, perceived security, and firm reputation. This, in turn, greatly increases purchase intention while lowering perceived risk. Lăzăroiu et al. (2020) demonstrated that trust is a crucial component in online buying decisions by confirming that it positively modulates the detrimental effect of perceived risk on purchase intention in social media commerce finalizing an online purchase (Adnan, 2014).

Privacy Concerns

Using automated analysis, Vlachogiannakis et al. (2025) found that about 30% of well-known online retailers give up personal information to Facebook and other third parties, thus raising worries about consumer privacy. Zhang & Yu (2020) demonstrated in Chinese samples that cross-platform purchase behavior is adversely affected by perceived risk, particularly with regard to service and product security. These worries are lessened by trust. Furthermore, Jiang et al. (2024) discovered that while risk tolerance and privacy experience moderate

perceived privacy control, trust mediates this relationship and does not necessarily lower privacy worries.

Convenience Risk (Perceived Risk of Convenience) Chiu et al. (2021) demonstrate that perceived convenience, combined with usability and low waiting times, increase repeat purchase intention. Similarly, Yang & Forney (2023) found that complex navigation and delayed delivery elevates convenience risk, which leads to cart abandonment and lower satisfaction— especially in mobile commerce contexts. Interaction of Trust, Privacy, and Convenience Risk Pakistani study by Riaz et al. (2024) revealed that financial, time, and psychological risks negatively affect trust, which in turn influences online purchase

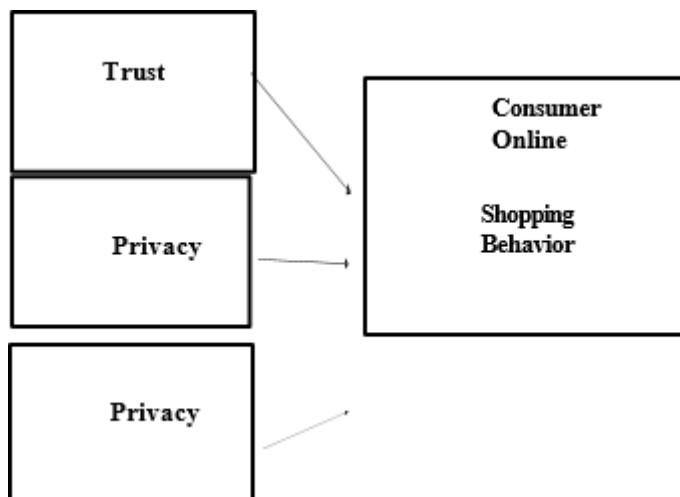


Figure 3: Proposed Theoretical Framework

Thus, from the above- mentioned relationship, the hypothesis for this study can be derived as follows:

H1: There will be a significant and positive relationship between trust and consumer online shopping behavior.

H2: There will be a major and affirmative relationship between privacy and consumer online shopping behavior.

H3: There will be a significant and positive relationship between convenience risk and consumer online shopping behavior.

Practical Strategies for Mitigating Online Retail Risks

Online retailers face persistent challenges in fostering consumer trust, particularly in environments characterized by perceived convenience and privacy risks. Several actionable strategies can address these concerns effectively. First, retailers should simplify and clarify privacy policies by replacing dense legal jargon with accessible, consumer-friendly language. Clear explanations of what data are collected, why they are necessary, and how they benefit the user can improve trust and reduce hesitation to transact (TechRadarPro, 2025). Complementing this effort, organizations should adopt data minimization principles, collecting only the information essential to improving the consumer experience, which simultaneously reduces security vulnerabilities and regulatory exposure (TechRadarPro, 2025).

Second, empowering consumers through granular data control mechanisms is vital. Privacy preference centers that allow users to view, modify, or delete personal data—combined with transparent explanations of how each choice affects service functionality—reinforce perceptions of autonomy and ethical data stewardship (TechRadarPro, 2025). In parallel, visible security and trust assurances should be leveraged. Prominently displaying recognized third-party trust certifications, such as SSL, Norton Secured, or McAfee badges, provides a tangible signal of transactional safety (CommerceGurus, 2022). Empirical evidence suggests that more than 60% of consumers hesitate to purchase when recognizable trust marks are absent, underscoring their commercial importance (Drip/Actual Insights, 2022).

Moreover, the strategic placement of trust seals— particularly on high-conversion pages such as checkout interfaces—can optimize their persuasive impact. Ideally, these seals should be interactive, linking to explanatory content that verifies their authenticity, while avoiding visual clutter that may produce cognitive overload (Abmatic.ai, n.d.). Beyond user-facing interventions, retailers must ensure the integrity of back- end processes. Regular privacy audits, continuous third- party vendor monitoring, and structured onboarding/offboarding procedures provide ongoing assurance that data practices remain compliant and secure (Corporate Compliance Insights, 2023; One Trust/Cyber Risk Alliance, 2025).

Finally, investment in privacy-enhancing technologies (PETs) can sustain innovation while preserving trust. Techniques such as encryption, consent management platforms, and differential privacy mechanisms allow personalization without compromising confidentiality (Wikipedia, 2025). Transparent communication regarding the use of first-party data for customized experiences, such as Instacart's anonymized and opt-in personalization model, demonstrates how operational transparency can both comply with evolving regulations and enhance perceived value (Deloitte & The Wall Street Journal, 2024). Collectively, these measures represent a holistic framework for mitigating perceived convenience and privacy risks in e-commerce environments, strengthening both transactional efficiency and long-term relational capital.

CONCLUSIONS

In the evolving landscape of e-commerce, consumer behavior is significantly influenced by three pivotal factors: trust, privacy concerns, and perceived convenience risk. **Trust:** Trust serves as the cornerstone of online shopping behavior. It encompasses consumers' confidence in the reliability and integrity of online retailers. A trustworthy platform can alleviate apprehensions related to product quality, transaction security, and service delivery.

Customer may refrain from online due to concerns about the gathering, storing, and possible misuse of personal and financial data. Skepticism endures despite the adoption of security safeguards and privacy regulations, underscoring the need for stronger and more open data protection procedures. **Perceived Convenience Risk:** This refers to the possible challenges that customers may

In summary, while trust can enhance consumer engagement in online shopping, privacy concerns and perceived convenience risks pose significant barriers. Addressing these challenges through improved transparency, user-friendly interfaces, and robust security measures is essential for fostering a more conducive online shopping environment.

To foster positive online shopping behavior without new empirical studies, online retailers should: Cultivate trust through secure infrastructure, transparent policies, and reliability. Actively mitigate privacy risk by providing clear data practices, visible third-party certifications, and user control. Reduce convenience risk via intuitive design, seamless logistics, and easy return processes. By addressing these three in concert, retailers can create a more compelling, reassuring, and frictionless shopping environment even in the absence of brand-new empirical validation. Encounter when they shop online, like difficult navigation, postponed delivery, or onerous return procedures. The online purchasing experience may suffer as a result of such annoyances, prompting customers to switch to more conventional means or look for other platforms that provide more efficient services.

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