# Antecedents of E-Loyalty: The Mediating Role of E-Trust among Nepalese E-Commerce Consumers

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## Abstract

**Purpose**: This paper examines the antecedents of e-commerce loyalty (ECL) in the Nepalese market, with the mediating role of e-commerce trust (ECT). It explores how factors such as perceived security risk, perceived privacy, user interface quality, information quality, and e-commerce awareness influence trust and subsequently drive loyalty.

**Design/Methodology/Approach**: A quantitative method was utilized, employing structured Likert-scale questionnaire to collect data from 425 respondents in Kathmandu, Lalitpur, and Bhaktapur. Hayes Process Macro Model 4 were employed to analyze and direct and mediated relationships among variables.

**Findings**: The findings reveal that ECT significantly mediates the impact of information quality, and perceived privacy on ECL, with trust amplifying their effects emphasizing its pivotal role in alleviating consumer concern. E-commerce awareness emerged as direct predictors of loyalty. Perceived privacy and perceived security risk have significant influence loyalty indirectly through trust.

**Implication**: Insights from this research are invaluable for e-commerce businesses and policymakers aiming to cultivate trust and loyalty in developing markets like Nepal. Strategies focusing on consumer-centric design and communication of privacy and security policies can enhance loyalty and sustainable growth.

**Originality**: This research adds to the limited number of scholarly papers on e-commerce loyalty in Nepal, providing a comprehensive framework for understanding the mediating influnce of trust in the e-commerce ecosystem.

**Keywords**: E-commerce Loyalty, E-commerce Trust, Information Quality, Perceived Privacy, Perceived Security Risk.

## 1. Introduction

The expansion and explosion in e-commerce has revolutionized consumer purchasing behavior, making trust and loyalty crucial factors for success in the competitive digital marketplace (Huang, 2021). The considerable investment required to secure new online customers typically leads to extended periods of unprofitability, highlighting the importance of fostering loyalty to ensure sustainable growth (Zhou et al., 2020). Long-term profitability and brand reputation are improved by repeat customers, who also act as advocates and bring in new business.

Despite the opportunities provided by e-commerce, retaining customer loyalty remains a significant challenge, especially in developing markets where competition is fierce and customer expectations continue to evolve. The ease of switching between platforms amplifies the competitive pressure, making it vital for businesses to cultivate strong customer relationships (Lee & Park, 2024). Research underscores the importance of loyal customers, who demonstrate higher spending patterns, reduced price sensitivity, and greater resistance to competitive offerings (Yoo et al., 2023).

Trust emerges as a cornerstone of loyalty in e-commerce, particularly in contexts where consumers cannot physically verify products or interact directly with sellers (Chaudhary et al, 2024; Ting & Ahn, 2023). Trust alleviates perceived risks, fosters positive attitudes toward online shopping, and directly influences repeat purchase behavior (Guo et al., 2023). Even small improvements in trust and retention rates can significantly impact profitability, reinforcing its critical role in e-commerce success (Zhou et al., 2020).

Consumers loyalty is a consistent preference for a particular platform, is driven by multiple factors, including perceived security, website usability, and the quality of information provided (Khan & Rahman, 2022). Loyal customers not only return for repeat transactions but also exhibit deeper emotional connections with brands, making them less likely to switch to

competitors (Guo et al., 2023). In this context, trust serves as both a direct influencer and a mediator, bridging the gap between user experience factors and loyalty outcomes.

Although much of the existing research focuses on e-commerce in developed economies, studies in emerging markets like Nepal remain limited. In these regions, consumer behavior is often shaped by unique socio-economic and cultural dynamics, such as heightened risk aversion and concerns over online transaction security (Hou et al., 2020). This creates a need for context-specific insights into how trust and loyalty interact in driving adoption of e-commerce and sustainability.

In Nepal, the e-commerce sector is still evolving, and the mediating role of trust in fostering loyalty has not been extensively explored. Trust-building in this market involves addressing both traditional factors, like user interface quality and information accuracy, and local considerations, such as cultural attitudes toward online shopping (Ting & Ahn, 2023). This study intends to bridge this gap by exploring the relationships between key determinants such as perceived security, awareness and privacy and their impact on ecommerce loyalty through the mediating effect of trust.

By focusing on these variables, this paper gives to a deeper considerate of loyalty dynamics in developing economies. It highlights the critical role of trust as a mediator, underscoring its importance in mitigating risks and enhancing user satisfaction. These insights not only advance academic discourse but also provide actionable strategies for businesses aiming to thrive in Nepal's growing e-commerce market.

The paper is organized as follows: Section 2 examines the significant literature, formulates the hypotheses, and discusses the theoretical framework. Section 3 outlines the data collection process and methodology. Section 4 presents the findings of the study and interprets their importance. Lastly, Section 5 concludes the study, highlights its limitations, and offers suggestions for future research.

## 2. Literature Review and Hypothesis Development

### 2.1 Theoretical Background

Recent research has continued to apply key consumer behavior theories to e-commerce, such as the Theory of Reasoned Action (TRA), Expectation Confirmation Theory, and the Technology Acceptance Model (TAM), to understand how trust, loyalty, and technology adoption affect consumer behavior.

#### 2.1.1 Theory of Reasoned Action (TRA)

Fishbein and Ajzen's (1975) TRA model of social psychology explains the attitude, intention, and behavior of consumers. According to TRA, intent, the cognitive perception of willingness to engage in a specific behavior, is the best immediate predictor of a person's behavior. This theory suggests that trust is strengthened when a website's information quality (IQ) is accurate and dependable. As a result, consumers are more likely to make initial purchases, which, in turn, fosters loyalty. Recent studies, including those by Lee and Park (2024), continue to support the role of website information quality in shaping consumer trust and loyalty.

### 2.1.2 Expectation Confirmation Theory

Expectation Confirmation Theory, as described by Oliver (1980), explains how consumer satisfaction, trust, and loyalty are influenced by meeting or exceeding expectations. Within the scope of e-commerce, if the user experience confirms or surpasses their expectations, it leads to higher satisfaction and greater trust in the platform, thereby enhancing loyalty. Recent research highlights the mediating role of e-trust between service quality and eloyalty (Alnaim, Sobaih, & Elshaer, 2022).

### 2.1.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model (Davis, 1989) explains why consumers adopt technology, emphasizing two key beliefs: perceived ease of use and perceived usefulness.

These beliefs influence users' attitudes toward using e-commerce platforms, shaping their behavioral intentions and usage. As the technology improves, such as through better website design or user interface quality, the user experience becomes more seamless, which positively impacts trust and loyalty. Lee and Park (2024) demonstrated that exceeding consumer expectations in online shopping environments leads to stronger trust and loyalty. Recent studies confirm that user interface quality and perceived usefulness of e-commerce platforms carry out pivotal roles in shaping consumer attitudes and behavior (Yoo, Lee, & Atamja, 2023; Guo, Zhang, & Xia, 2023).

### 2.2 Ecommerce Trust and Ecommerce Loyalty

E-commerce trust and loyalty are crucial factors that influence consumer actions and decision-making in ecommerce platform. Trust plays a significant role in determining whether consumers will engage with an e-commerce platform and proceed with a purchase (Guo, Zhang, & Xia, 2023). Recent studies have emphasized that trust in e-commerce is directly associated to consumer trust, and it mediates the relationship between website design and consumer loyalty (Yoo, Lee, & Atamja, 2023). E-commerce loyalty, is the consumer's commitment to repeatedly purchasing from a specific online retailer due to positive experiences and trust. Trust in a platform, particularly in terms of its service quality, security, and product information accuracy, significantly influences the development of e-loyalty (Patma, Djajanto, Widodo, & Rahayu, 2022). The relationship between trust and loyalty is further demonstrated in the context of user experience and website interface quality. High-quality user interfaces, which improve simplicity of use and effectiveness, help foster trust (Guo, Zhang, & Xia, 2023). Hence, it can be hypothesized as:

*H1: E-Commerce Trust (ECT) has a significant relationship with E-Commerce Loyalty (ECL).*
*H7: E-Commerce Trust (ECT) mediates the relationship between independent variables and Ecommerce Loyalty (ECL)*

### 2.3 Information Quality

Information quality plays a critical role in shaping consumer trust and loyalty, particularly in e-commerce and social markets (Kranton & McAdams, 2024). In e-commerce, both product quality and information quality are vital factors influencing consumer trust, with significant effects on customer loyalty (Rashid & Rasheed, 2024). When consumers face uncertainty,

providing consistent and reliable information can strengthen their trust, improving their decision-making process and enhancing loyalty (Lin & Pazgal, 2024). Brand transparency is not just about giving information, but about sharing it clearly, proactively, and honestly, which helps build consumer trust and loyalty (Sansome et al., 2024). Thus, the hypothesis is stated as:

*H2: Information Quality (IQ) has a significant relationship with E-Commerce Trust (ECT).*

## 2.4 User Interface Quality

User experience and interface quality are crucial in shaping consumer trust and loyalty across various sectors. In e-commerce, trust, user experience, and electronic word of mouth are key factors influencing e-brand loyalty (Shahzad et al., 2024). In the fast-moving consumer goods sector, sensory, emotional, behavioral, and cognitive user experiences significantly affect brand image, trust, and loyalty (Wang et al., 2024). Trust and perceived privacy are also critical components in retail environments, where factors like personal interactions, product variety, and ease of use contribute to customer loyalty by shaping attitudes and satisfaction (Jo & Bang, 2024). Furthermore, new metrics being utilized to measure customer loyalty, with deep neural networks proving effective in predicting loyalty based on social media data (Urolagin & Patel, 2024). Thus, the hypothesis can be established as:

*H3: User interface quality (UIQ) has a significant relationship with E-Commerce Trust (ECT).*

## 2.5 Perceived Privacy

Trust, loyalty, and perceived privacy are essential variables influencing consumer behavior in ecommerce. On social commerce platforms, consumers' trust and purchase intentions are strongly influenced by their perceptions of privacy and security (Laradi et al., 2024). Perceived privacy concerns shape consumers' willingness to engage in transactions, with privacy protection enhancing trust and, in turn, fostering loyalty (Jo & Bang, 2024). Furthermore, customer loyalty is driven by the overall trust in a platform, which is influenced by both privacy perceptions and security measures (Ünal et al., 2024). These studies highlight the critical role of privacy and trust in building long-term consumer loyalty in digital environments. Therefore, it is outlines as:

*H4: Perceived Privacy (PP) has a significant relationship with E-Commerce Trust (ECT).*

### 2.6 Ecommerce Awareness

Research highlights the critical role of customer engagement and trust in the success of ecommerce platforms. Taheri et al. (2024) identified that website vividness and effort expectation have a positive impact on customer engagement and loyalty in online environments. Similarly, Shahzad et al. (2024) demonstrated that the quality of chatbot services plays a significant role in e-commerce loyalty, with trust, user experience, and electronic word-of-mouth acting as mediators. Frasquet et al. (2024) emphasized how customer inspiration can drive both purchase intention and loyalty across online and offline channels. These studies collectively underscore the vital roles of user experience, trust, and engagement in enhancing e-commerce loyalty, while also pointing to the growing influence of new technologies like AI-chatbots and the importance of accessibility in digital marketing strategies. Based on this, the hypothesis is:

*H5: E-Commerce Awareness (ECA) has a significant relationship with E-Commerce Trust (ECT).*

### 2.7 Perceived Security Risk

Recent studies emphasize the complex interaction of factors shaping consumer behavior in e-commerce. Trust, perceived risk, and perceived security are crucial elements influencing purchasing decisions, with perceived risk acting as a moderator between trust and purchase intentions (Gefen, 2002). Negative online reviews have been shown to influence delayed or refused purchases, with perceived risk playing a mediating role between these reviews and consumer behavior (Lu, 2024). Additionally, customer satisfaction and trust in ecommerce platforms are impacted by service quality, assurance, interface design, and brand equity (Jou et al., 2024). Perceived security not only directly affects customer trust but also enhances satisfaction, which in turn influences both trust and service quality (Jou et al., 2024; Adhikari et al, 2024). Thus, the hypothesis is:

*H6: Perceived security Risk (PSR) has a significant relationship with E-commerce Trust (ECT).*
In Figure 1, the conceptual model is displayed.

**Figure 1**

*Conceptual Framework*
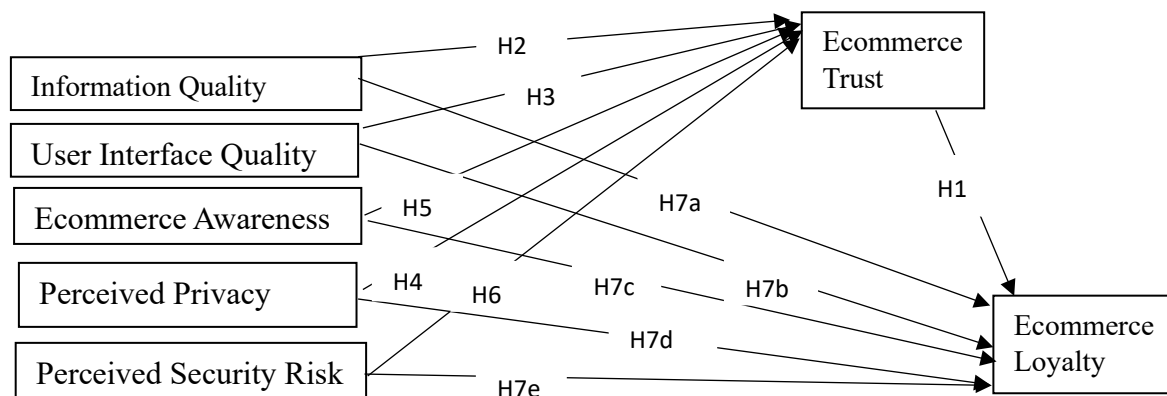


 (Source: Aslam et al, 2019; Eid, 2011)

## 3. Research Method

### 3.1 Research Design

A quantitative, cross-sectional survey design was used to collect data from e-commerce users in urban areas of Lalitpur, Bhaktapur, and Kathmandu. A structured questionnaire gathered information on demographics, perceptions of security risks, privacy, information quality, user interface quality, e-commerce trust, and loyalty, utilizing validated instruments from prior research. Additionally, a causal-comparative design examined the relationships between independent variables (security risk, privacy, information quality, awareness, and user interface quality) and e-commerce loyalty, with trust as a mediating factor, enabling exploration of potential causal links.

### 3.2 Population and Sampling

The research population consists of individuals who used e-commerce websites, living in the major urban areas of Nepal, specifically the cities of Kathmandu, Lalitpur, and Bhaktapur. Samples are employed in statistical testing when the population sizes are too large for the test to encompass all potential observations. A sample represents a portion of the entire population and is not biased toward any particular attribute. The sample size taken for the study was 425.

### 3.3 Measurement

Questions related to ecommerce awareness were adapted from Gefen (2000), Similarly, the items for ecommerce trust were based on the work of Eid (2011), Aslam, Hussain, Farhat, & Arif (2019), while statements on ecommerce trust were sourced from Eid (2011), Gefen (2002). Likewise, statements for perceived security risk were from the work of Eid (2011), Kolsaker & Payne (2002), perceived privacy were from Eid (2011), user quality interface were from Eid (2011), Spiller & Lohse (1997) and information quality were from Aslam, Hussain, Farhat, & Arif (2019).

### 3.4 Research Instrument

This study uses a quantitative approach, employing a survey questionnaire as the primary tool. Distributed to Nepalese e-commerce users via email and print, the questionnaire consists of two sections: demographics and statements on perceived security risk, privacy, information quality, user interface quality, awareness, trust, and loyalty. Responses are measured on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The 45item questionnaire, adapted with slight modifications from previous studies, assesses key research variables.

## 4. Data Analysis and Result

### 4.1 Respondents Profile

**Table 1**

*Demographic Profile of Respondents*

|  | Frequency | Percentage |
|---|---|---|
| **Gender** | | |
| Feale | 212 | 49.88 |
| Male | 213 | 50.11 |
| **Age group(years)** | | |
| 18-20 | 75 | 17.64 |
| 21-30 | 183 | 43.05 |
| 31-40 | 106 | 24.94 |
| 41-50 | 33 | 7.76 |
| 50> | 28 | 5.88 |
| **Education** | | |
| +2 | 60 | 14.11 |

| | | |
|---|---|---|
| Bachelors | 201 | 47.29 |
| Masters | 128 | 30.11 |
| Phd | 34 | 8 |
| CA | 2 | 0.4 |
| **Monthly income (NKR)** | | |
| <20000 | 207 | 48.70 |
| 20001-30000 | 77 | 18.11 |
| 30001-40000 | 33 | 7.76 |
| 40001-50000 | 70 | 16.47 |
| >50000 | 38 | 8.94 |
| **City** | | |
| Kathmandu, Nepal | 120 | 28.23 |
| Lalitpur, Nepal | 164 | 38.58 |
| Bhaktapur, Nepal | 141 | 33.17 |

(*Source: Questionnaire2024*)

In Table 1, the demographic profile of the respondents is shown, starting with gender distribution. The sample is fairly balanced, with 50.11% male and 49.88% female participants, suggesting that both genders were well-represented in the survey. In terms of age, the majority of respondents fall within the 21-30 age group (43.05%), indicating that younger adults dominate the sample. The next largest group is aged 31-40 years (24.94%), followed by the 18-20 age range (17.64%), and the older age groups, including 41-50 years (7076%) and above 50 years (5.88%).

Regarding education, the largest proportion of respondents holds a bachelor's degree (47.29%), showing that most individuals have completed undergraduate studies. A significant portion also holds a master's degree (30.11%), while smaller percentages have

+2 qualifications (14.11%), a PhD (8%), and very few (0.4%) are Chartered Accountants, reflecting a diverse range of educational backgrounds. For monthly income, 48.70% of respondents earn less than 20,000 NPR, indicating that a large portion of the sample belongs to lower-income groups. The next income range is 20,001-30,000 NPR, with 18.11% of participants in this category, followed by 40,001-50,000 NPR (16.47%). Fewer respondents earn above 50,000 NPR (8.94%) or fall in the 30,001-40,000 NPR range (7.76%).

Finally, the geographic distribution of respondents reveals that 38.58% are from Lalitpur, the highest percentage among the three districts. Bhaktapur is represented by 33.17% of the sample,

and 28.23% of respondents are from Kathmandu, indicating a diverse regional representation within the sample.

**4.2 Assessment of Measurement Model**

**Table 2**

*Descriptive Analysis*

| Variables | Mean | SD | Cronbach's Alpha | Adopted Sources |
|---|---|---|---|---|
| Ecommerce Awareness | 4.3594 | 0.4143 | 0.705 | Gefen (2000) |
| Information Quality | 3.7583 | 0.5287 | 0.791 | Aslam et al (2019) |
| User Interface Quality | 4.2435 | 0.4520 | 0.713 | Eid (2011), Spiller & Lohse (1997) |
| Perceived Privacy | 3.9550 | 0.6962 | 0.863 | Eid (2011) |
| Perceived Security Risk | 3.5116 | 0.6220 | 0.803 | Eid (2011), Kolsaker & Payne (2002) |
| Ecommerce Trust | 4.0776 | 0.5540 | 0.793 | Eid (2011), Gefen (2002) |
| Ecommerce Loyalty | 3.7733 | 0.4439 | 0.708 | Eid (2011), Aslam et al (2019) |

*(Source: SPSS Output 2024)*

In Table 2, the reliability of each component was evaluated using Cronbach's alpha coefficients. On the basis of guidelines provided by Hair et al. (2012), a Cronbach's alpha coefficient exceeding 0.70 is typically regarded as an acceptable level of reliability. The findings of this study indicate that the Cronbach's alpha coefficients range from 0.705 to 0.863.

**4.3 Assessment of Structure Model**

*Table 3*

*Correlation Analysis*

| | ECA | UIQ | IQ | PSR | PP | ECT | ECL |
|---|---|---|---|---|---|---|---|
| ECA | 1 | | | | | | |
| UIQ | .176** | 1 | | | | | |
| IQ | .068 | .716** | 1 | | | | |
| PSR | .029 | .733** | .738** | 1 | | | |
| PP | .141** | .749** | .769** | .817** | 1 | | |
| ECT | .046 | .694** | .780** | .778** | .782** | 1 | |
| ECL | .262** | .541** | .624** | .561** | .659** | .606** | 1 |

*ECA: Ecommerce Awareness, UIQ: User Interface Quality, PSR: Perceived Security Risk, PP: Perceived Privacy, ECT: Ecommerce Trust, ECL: Ecommerce Loyalty, IQ: Information Quality*

*\*. Correlation is significant at the 0.05 level (2-tailed).*

*\*\*. Correlation is significant at the 0.01 level (2-tailed).*

*(Source: SPSS Output, 2024)*

Table 3 shows the correlation matrix of the variables ECT, ECA, UIQ, IQ, PSR, and PP with the dependent variable ECL. The correlation coefficient of 0.262 indicates a low positive relationship between ECA and ECL. While 0.541 of UIQ shows a moderate relationship between UIQ and ECL. Additionally, IQ shows a moderate positive relationship with ECL (0.624). PSR also exhibits moderate positive relationships with ECL (0.561). Similar relationship can be seen in relation between PP and ECL as well (0.659). Lastly, ECT has a moderate positive relationship with ECL (0.606).

**Table 4**

Regression Analysis

| R | R Square | Adj R Square | F | Sig |
|---|---|---|---|---|
| 0.714[a] | 0.510 | 0.502 | 72.369 | 0.000 |

*(Source: SPSS Output, 2024)*

Table 4 summarizes the regression model results for the study. The R value for the data is 0.714, and the adjusted R square is 0.502, indicating that 50.2% of the variation in the dependent variable is explained by the independent variables while the rest 49.8% is explained by the b=variables not included in this study. The F value is 72.369, with a significance value of 0.001, suggesting that the overall model is statistically significant and that the independent variables collectively have a significant impact on e-commerce loyalty.

**Table 5**

*Regression Coefficients for Ecommerce Trust*

| Model | B | t | Sig. | Tolerance | VIF |
|---|---|---|---|---|---|
| (Constant) | .930 | 4.797 | .000 | | |
| Ecommerce Awareness | -.043 | -1.206 | .229 | .927 | 1.079 |
| User Interface Quality | .085 | 1.595 | .111 | .356 | 2.809 |
| Information Quality | .353 | 7.656 | .000 | .346 | 2.891 |
| Perceived Security Risk | .245 | 5.590 | .000 | .276 | 3.621 |
| Perceived Privacy | .200 | 4.835 | .000 | .248 | 4.039 |

*Note: ECA: Ecommerce Awareness, UIQ: User Interface Quality IQ: Information Quality PSR: Perceived Security Risk PP: Perceived Privacy ECT: Ecommerce Trust*

*(Source: SPSS Output, 2024)*

In Table 5, there is no multicollinearity among the independent variables, as evidenced by the fact that the VIF for each variable is less than 5 (VIF < 5). Therefore, with significant values of .000, .000, and .000, respectively, a significant relationship exists between PSR, IQ, and PP with ECT.

In Table 6, the beta value of 0.208 indicates that the impact of ECA on ECL is greater than that

of the other variables. There is no multicollinearity between the independent variables, as shown by the VIF of each variable being below 5 (VIF < 5). As a result, with significant values of .000, .000, .000, and .010, respectively, a significant relationship exists between ECA, IQ, PP, and ECT with ECL.

**Table 6**

*Regression Coefficients for Ecommerce Loyalty*

| Model | B | t | Sig. | Tolerance | VIF |
|---|---|---|---|---|---|
| (Constant) | .848 | 4.013 | .000 | | |
| ECA | .208 | 5.458 | .000 | .924 | 1.083 |
| UIQ | -.038 | -.677 | .499 | .354 | 2.826 |
| IQ | .211 | 4.034 | .000 | .303 | 3.295 |
| PSR | -.013 | -.274 | .785 | .257 | 3.891 |
| PP | .225 | 4.989 | .000 | .234 | 4.264 |
| ECT | .133 | 2.572 | .010 | .280 | 3.569 |

*Note: ECA: Ecommerce Awareness, UIQ: User Interface Quality IQ: Information Quality PSR: Perceived Security Risk PP: Perceived Privacy ECT: Ecommerce Trust, ECL: Ecommerce Loyalty*

*(Source: SPSS Output, 2024)*

The study evaluated the mediation role of ECT in the relationship between the independent variables and ECL using the PROCESS SPSS Macro (Hayes, 2022). As shown in Table 7, the total effect of ECA on ECL is 0.2805, suggesting a positive relationship. The direct effect is 0.2510, and the indirect effect through ECT is 0.0294. However, the confidence interval for the indirect effect ranges from -0.0482 to 0.0950, suggesting that the mediation through ECT is not statistically significant. The t-statistic of 5.5786 shows that ECA has a strong direct effect on ECL, with little evidence that ECT mediates this relationship.

The total effect of IQ on ECL is 0.5239, showing a positive impact. The direct effect is 0.3247, and the indirect effect through ECT is 0.1991. The confidence interval for the indirect effect (0.0477 to 0.1005) confirms it is statistically significant. With a t-statistic of 16.4223, the results show that IQ affects ECL both directly and indirectly through ECT, indicating partial mediation.

For User Interface Quality (UIQ), the total effect on ECL is 0.5317, showing a strong positive relationship. The direct effect is 0.2290, while the indirect effect through ECT is 0.3026. The confidence interval for the indirect effect (0.2237 to 0.3815) does not include zero, meaning the mediation effect is statistically significant. The t-statistic of 13.2451 indicates that ECT partially mediates the relationship, suggesting that UIQ affects ECL both directly and through ECT.

Perceived Security Risk (PSR) has a total effect of 0.4007 on ECL, suggesting a moderate positive impact. The direct effect is 0.1628, while the indirect effect through ECT is 0.2378. The confidence interval for the indirect effect (0.2162 to 0.4561) confirms its significance. The t-statistic of 13.9541 shows that ECT plays a significant role in this relationship, indicating partial mediation.

Finally, PP has a total effect of 0.4203 on ECL, showing a positive relationship. The direct effect is 0.3046, and the indirect effect through ECT is 0.1157. The confidence interval for the indirect effect (0.0460 to 0.1851) is statistically significant. With a t-statistic of 18.0338, the results indicate that PP affects ECL both directly and indirectly through ECT, confirming partial mediation.

**Table 7**

*Mediation Analysis by Process Macro Model 4*

| Relationship | Total Effect | Direct Effect | Indirect Effect | Confidence Interval | | T-statistics | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound | | |
| ECA→ECT→ ECL | .2805 | .2510 | .0294 | -.0482 | .0950 | 5.5786 | Direct Relationship |
| IQ→ECT→ ECL | .5239 | .3247 | .1991 | .0477 | .1005 | 16.4223 | Partial Mediation |
| PP→ECT→ ECL | .4203 | .3046 | .1157 | .0460 | .1851 | 18.0338 | Partial Mediation |
| UIQ→ECT → ECL | .5317 | .2290 | .3026 | .2237 | .3815 | 13.2451 | Partial Mediation |
| PSR→ECT → ECL | .4007 | .1628 | .2378 | .2162 | .4561 | 13.9541 | Partial Mediation |

*Note: ECA: Ecommerce Awareness, UIQ: User Interface Quality IQ: Information Quality PSR: Perceived Security Risk PP: Perceived Privacy ECT: Ecommerce Trust, ECL: Ecommerce Loyalty*
*(Source: SPSS Output, 2024)*

**Table 8**

*Result of Hypothesis Test*

| Hypothesis (H) | Relationship | Result |
|---|---|---|
| H1 | Ecommerce Trust has a significant relationship with E-commerce Loyalty | Validated |
| H2 | Information Quality has a significant relationship with E-commerce Trust | Validated |
| H3 | User Interface Quality has a significant relationship with E-commerce Trust | Refuted |
| H4 | Perceived Privacy has a significant relationship with E-commerce Trust | Validated |
| H5 | Ecommerce Awareness has a significant relationship with E-commerce Trust | Refuted |
| H6 | Perceived Security Risk has a significant relationship with E-commerce Trust | Validated |
| H7a | Ecommerce Trust mediates the relationship between Ecommerce Loyalty and Information Quality | Validated |
| H7b | Ecommerce Trust mediates the relationship between Ecommerce Loyalty and User Interface Quality | Validated |
| H7c | Ecommerce Trust mediates the relationship between Ecommerce Loyalty and Ecommerce Awareness | Refuted |
| H7d | Ecommerce Trust mediates the relationship between Ecommerce Loyalty and Perceived Privacy | Validated |
| H7e | Ecommerce Trust mediates the relationship between Ecommerce Loyalty and Perceived Privacy Risk | Validated |

## 5. Discussion

The study applied the TAM model to examine existing knowledge about FinTech services from a theoretical perspective. The results aligned with previous research (Lin, 2024), offering deeper insights into the processes and factors driving FinTech adoption. Additionally, the study incorporated the Expectation Confirmation Theory and TRA model to explore other variables influencing ecommerce loyalty. The findings supported the TAM model, demonstrating that the variables studied significantly impact ecommerce loyalty.

This research examined the variables affecting e-commerce loyalty in three major cities of Nepal, utilizing data analysis techniques like mediation analysis, reliability tests, correlation

analysis, and descriptive statistics. Descriptive analysis showed significant variability in respondents' views on perceived privacy, information quality, security risk, e-commerce awareness, user interface quality, and trust. These factors are consistent with prior studies, such as Yoo, Lee, & Atamja (2023), who highlighted the influence of website design and information quality on user loyalty, and Lee & Park (2024), who emphasized trust in fostering loyalty towards small retailers.

Correlation analysis revealed strong positive relationships between user interface quality, information quality, e-commerce trust, perceived privacy, and e-commerce loyalty, supporting findings by Guo, Zhang, & Xia (2023), who found website usability significantly influences customer loyalty, with trust acting as a moderator. Similarly, Ting & Ahn (2023) showed that interaction and trust are key to developing loyalty in C2C platforms. Mediation models indicated that e-commerce trust significantly mediates the relationship between determinants like perceived privacy, information quality, and user interface quality, aligning with Xiao et al. (2016), who showed that trust mediates the relationship between service quality and loyalty.

The study also reinforced that trust plays a pivotal role in fostering sustained e-commerce loyalty, as noted by Azam (2015) and Patma et al. (2022). It highlights the intricate interplay between trust and other factors, supporting the framework by Dwivedi et al. (2017), which suggests that loyalty results from cognitive factors such as trust. This study offers new insights into the context of Nepal, suggesting that cultural attitudes towards privacy, trust, and online shopping behaviors influence loyalty in unique ways. The findings reaffirm the importance of trust as a mediator in e-commerce loyalty, consistent with prior research, and encourage future studies to explore other mediators or the impact of cultural differences on e-commerce loyalty behaviors.

## 6. Conclusion

This study aims to understand how Ecommerce Trust impacts Ecommerce Loyalty. The dependent variable in this study is Ecommerce Loyalty (ECL), while the independent variables include Perceived Privacy (PP), Perceived Security Risk (PSR), Ecommerce Awareness (ECA), Information Quality (IQ) and User Interface Quality (UIQ). Additionally, Ecommerce Trust (ECT) acts as a mediator. In order to analyze the data, software such as Microsoft Word, Excel, and SPSS (Version 22) was used. Various statistical methods were applied in SPSS, including correlation, regression, mediation analysis (using the PROCESS macro), demographic profile, and reliability testing.

The study is based on three theoretical models: TAM, TRA and Expectation Confirmation Theory to identify the factors that influence ecommerce users trust and loyalty on ecommerce platforms. The results indicate that user loyalty is shaped by the factors outlined in these models.

The analysis emphasizes the importance of ECT in amplifying the positive effects of Information Quality on trust and loyalty. High-quality information on e-commerce platforms builds trust, which in turn increases customer loyalty. Along with this Trust also boosts the influence Perceived Privacy with Loyalty. Moreover, although Perceived Privacy influences

consumer loyalty, their effects are significantly boosted by E-commerce Trust. This suggests that when customers trust a platform, their concerns about privacy and security are alleviated, leading to stronger loyalty. The findings make it clear that trust is a core component of e-commerce. ECT helps reduce the negative impact of privacy and security concerns, thereby fostering customer loyalty.

In conclusion, the study highlights the importance of e-commerce platforms focusing on building and maintaining trust with their customers. To do so, platforms should prioritize improving the user experience through intuitive design and easy navigation, providing high-quality and relevant information, and safeguarding privacy. By cultivating trust, ecommerce platforms can significantly boost consumer loyalty, create a safer and more positive shopping environment, and build lasting customer relationships, contributing to the growth and sustainability of the e-commerce industry.

## 7. Implications

The study's conclusions provide several practical suggestions for e-commerce companies and legislators looking to enhance customer loyalty. First and foremost, the key role that ecommerce trust plays as a mediator in the relationship between ecommerce loyalty and various factors (including information quality, perceived security risk, user interface quality and perceived privacy, indicates that companies need to prioritize establishing and maintaining consumer trust. E-commerce sites should invest in ensuring security and improving operational transparency. By doing so, companies can directly influence e-trust, which is essential for fostering long-term loyalty.

The study also emphasizes the importance of providing accurate, high-quality, and easily accessible information. E-commerce companies must ensure that product descriptions, prices, and other relevant information are clear, reliable, and readily available, as information quality is a key factor in building e-trust. When combined with an intuitive user interface, this will enhance the overall user experience, positively impacting trust and, in turn, e-loyalty.

Additionally, the study highlights the importance of addressing customer concerns about online transactions through perceived privacy. E-commerce sites should be proactive in communicating the security and privacy measures they have in place for their customers. This can include implementing authentication features, offering secure payment methods, and providing clear information about data protection policies. By reducing perceived security risks and improving perceived privacy, platforms can foster greater trust, which in turn boosts customer loyalty.

Although the results of this study are particular to the Nepalese e-commerce market, they offer valuable insights for researchers, academics, and policymakers in other regions or contexts when designing e-commerce-related programs and strategies. The survey results provide important implications for e-commerce businesses in understanding consumer needs and enhancing customer loyalty at different stages of their e-commerce journey. The growing focus on improving e-commerce experiences and building consumer trust within the industry is promising. These findings lay the groundwork for future research on ecommerce loyalty,

exploring various factors, trends, and the state of e-commerce literacy across different regions and contexts.

## 8. Limitations and Directions for the Future Study

Since the study's focus was on Ecommerce Consumers in Nepal's Kathmandu, Bhaktapur and Lalitpur city, its findings might not be applicable in other areas due to differences in other areas' economies, culture, ecommerce ecosystems, etc. Few variables were used in this study, and it did not examine how respondents' personalities influenced their usage of ecommerce sites. The researcher could concentrate on include additional moderating factors in the future to determine the effects of investigating ecommerce use. This study employed convenience sampling since there was no predetermined list of ecommerce consumers, making it unable to generalize the findings. This study used a cross-sectional technique that was carried out at a single point in time, despite the fact that interactions between ecommerce consumers are dynamic. As a result, the researcher might choose a longitudinal study design.

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| Construct | Statements |
|---|---|
| E-commerce awareness | 1. I am aware of electronic commerce. <br> 2. I am aware of searching for products/services on the Internet. <br> 3. I am aware of the processes of purchasing on the Internet. <br> 4. I am familiar with checking product/service ratings on e-commerce platforms. |
| Information quality | 2. The website has up-to-date products and services information. <br> 3. It is easy to complete the transaction due to quality of <br> 4. information. <br> 5. The website presents information that is easy to understand. <br> 6. The information on the Web site facilitates buying the products or <br> 7. services that it sells or markets. <br> The Web site does not necessarily have to provide the up-to-date products and services information <br> Information on the Web site is accurate. The Web site provides sufficient information. |
| Perceived security risk | 2. Purchasing on e-commerce website will not cause financial risk. <br> 3. The electronic payment on the website is safe <br> 4. The website is a safe place to transmit sensitive user's <br> 5. information. <br> The Web site has sufficient technical capacity to ensure that the data I send cannot be modified by hackers. <br> The Web site has mechanism to ensure the safe transmission of its users' information. <br> 6. In this Web site, there is high risk of credit card misuse. <br> 7. feel that financial transaction is secure in this Web site. |
| Perceived privacy | 2. Website only collects user's personal data that are necessary for <br> 3. its activity. The Web site abides by personal data protection laws. <br> 4. feel safe when sending my personal information to the website. <br> 5. The website shows concern for privacy of its users <br> 6. It does not share my personal information with other sites. <br> 7. This Web site would not sell, trade or rent my personal information to others. Web site protects my right to control access to my personal information |

| User interface quality | 1. The website interface is easy to use. |
| | 2. The information on the website is attractively displayed. |
| | 3. The website is visually appealing |
| | 4. The website increases my search effectiveness |
| | 5. The web site is a user-friendly site. |
| | 6. The web site is very convenient to use. |

| E-commerce trust | 1. E-product/service provider is trustworthy and honest I feel very |
| | 2. confident about the e-commerce provider The website fulfills the |
| | 3. promises and commitments. |
| | 4. Even if not monitored, I'd trust ecommerce website to do the job |
| | 5. right I am quite certain what to expect from the website. |
| | 6. The websites never make false claims. |
| | 7. The behavior of the websites is ethical. |

| E-commerce loyalty | 1. The Web site does not have the necessary resources to carry out |
| | 2. its activities successfully. |
| | 3. I will continuously purchase from the website in the near future. |
| | 4. My preference for the E-commerce would not willingly change. |
| | 5. Changing my preference from the E-commerce requires major |
| | 6. rethinking. |
| | I will promote this website to my close friends |
| | I am confident in my decision on the quality of the products/services offered through the ecommerce site. |