

The Influence of Website Features, Innovativeness and Perceived Risk on Online Customers Retention and Electronic Words of Mouth - An Emerging Pakistan's Economy Perspective

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Abstract

The potential is high for E-commerce to help the Pakistani economy grow. This study investigates the effects of different website attributes, how innovative they are and risk perceptions on online shopping, using electronic WOM and customer retention through online trust and commitment. While other research looked at website elements impacting trust and loyalty, this one investigates WOM and trust and how these affect purchase intention. Two analytical programs, SPSS and AMOS, were used to analyze data collected from 294 Pakistani youth and validity and reliability were confirmed with confirmatory factor analysis. Using Structural Equation Modeling, it was shown that website features, innovation and people's perceptions of risk led directly to customer loyalty and electronic word of mouth, through trust and commitment. All the results give strong support to the hypotheses, bringing useful knowledge for e-retailers and academics. The research shows that careful website design, strong security and customization play a big role in doubling sales and that trust is key to motivating offline buyers to shop online. This research adds to e-commerce literature by including innovativeness and perceived risk, along with trust-based mediators and outlines methods for Pakistani online retailers to keep customers loyal and maintain growth in a tough market.

Keywords: E-commerce, Web site Features, Trust, Perceived Risk, Customization, Customer Retention, Pakistan

Introduction

The rapid expansion of e-commerce and because of the fast rise of e-commerce, conducting transactions around the world has become much more convenient, accessible and efficient for customers (Islam, 2024). In the country, the digital market is growing rapidly thanks to more people using the internet, smartphones and a population made up of young, tech-savvy users. Even though it has great possibilities, e-commerce in Pakistan is still less developed than other similar countries due to low trust from customers, worries about security and a preference for standard offline shopping. It is important for companies in this market to learn about the factors influencing customer retention and electronic word of mouth (Potwora, Zakryzhevskaya, Mostova, Kyrkovskiy, & Saienko, 2023). The study examines how features on a website, the level of innovation and perceived risk affect customer retention and EWOM when online customer trust and relationship commitment are mediated. By studying these ties in Pakistan's digital economy, this research gives useful advice to e-retailers who wish to increase customer loyalty and grow sustainably. Both technology and the way consumers buy products have influenced how e-commerce has changed in Pakistan. Given that there are more than 87 million internet users and a growing middle class, Indonesia offers a big but

unexploited market for online sellers (Endarwati et al., 2024). Although there are more online shopping options now, not everyone feels comfortable buying because they worry about transaction safety, the accuracy of what they purchase and the reliability of delivering the product. It has been mentioned in prior studies that strong website design, positive user experience and building trust help lead to customer loyalty and more purchases (Al Naim & Jamil, 2023). Nevertheless, little research exists about how these issues team up with perceived risk and innovativeness to improve customer retention over time and lead to good EWOM. This study covers the gap by checking how features of websites, innovativeness and what customers perceive as risk impact customer loyalty, while looking at how these effects are mediated by trust and relationship commitment.

How a website is designed plays an important part in affecting how consumers respond during online shopping (Ike et al., 2023). A website that is well-designed improves how easy it is to use, how secure it is and how personalized each customer's experience can be which helps earn customer trust and satisfaction. Seamless shopping results from aspects like easy-to-use navigation, quick site loading, website access from phones and secure ways to pay. In Pakistan, since digital fraud and cyber threats are so common, reliable privacy and data security can greatly reduce banking problems by mitigating perceived risks (Swami, 2025). It has been proven that website appearance and how it operates have a big impact on whether customers engage and buy from a site. It is not yet clear how much these elements help people retain information and offer positive EWOM in the maturing e-commerce market in Pakistan. It assesses the way design, security and other custom features on a website influence how much trust customers have in an online retailer and how likely they are to stay loyal and recommend the retailer.

The ability to offer new concepts plays a key role in making e-commerce platforms better than their competitors. Successful businesses in the digital market today must always innovate to win and retain clients (Amil, 2024). This means using artificial intelligence, augmented reality and bots, developing special promotions and growing the standard of customer service. Adding new and innovative elements can attract users more, produce exciting emotions and lead to people making positive comments and returning to websites (Suryati, Sari, & Utami, 2023). In Pakistan, new and interesting approaches are needed to get people to trust online shopping. Yet, using too many new solutions or implementing them badly may create issues for customers or create risks for their security. This work investigates the effects of believed innovativeness on keeping customers and encouraging reviews, acting through trust and the strength of relationships. People in Pakistan still view the risks of online shopping to be a major reason not to try e-commerce. Consumers often worry about financial fraud, product misrepresentation, delivery delays, and poor after-sales service (Hassan, Abdelraouf, & El-Shihy, 2025). These concerns are amplified in a market where regulatory frameworks for online transactions are still developing. Studies suggest that perceived risk negatively impacts purchase intentions and customer loyalty unless mitigated through trust-building measures (Upasani et al., 2023). Effective strategies include transparent return policies, verified customer reviews, secure payment options, and reliable customer support. While prior research has explored risk perception in online shopping, few studies have analyzed its interaction with website features and innovativeness in the context of Pakistan's emerging digital economy (Nurhasanah & Sari, 2024). This study addresses this gap by assessing how perceived risk moderates the relationship between website attributes, innovativeness, and customer retention.

Online customer trust and relationship commitment serve as critical mediators in the e-commerce consumer journey. Trust is built through consistent positive experiences, reliable service, and transparent business practices (R. Hidayat, Siagian, & Kurniawati, 2024). Once established, it fosters long-term relationship commitment, where customers develop an emotional attachment to a brand, reducing their likelihood of switching to competitors. In Pakistan, where trust deficits are high due to frequent scams and counterfeit products, cultivating customer confidence is essential for e-commerce success (Madhuri, Shireesha, Reddy, & Kumar). EWOM has a great power in marketing,

boosting trust because more buy-in comes from peers than from traditional advertisements. It analyzes how trust and commitment moderate the way website design, innovativeness and risk affect retention and EWOM, sharing important findings for online stores.

Literature Review

Website Features

Users' shopping and experience on a website depend greatly on its features. Research demonstrates that great website design boosts how easy the site is to use, the trust people place in it and how much customers enjoy using it (Ghorbanzadeh, 2023). Easy navigation, fast loading, usability on mobile devices and good security are key elements that help form how visitors see a website. Reducing perceived risks is more important in Pakistan, so special features for privacy and data security are especially vital there (Oberge, Zallot, & Gerlt, 2023). Using product recommendations and chatbots helps to increase how engaged users are and how long they stay with a platform (Paysan-Lafosse et al., 2023). Well-designed visuals help make a brand credible which can attract visitors to the site and lead others to share their positive experiences. Although, designs that are overly complex can discourage users which is why a mix of usefulness and simple design is important (Agrawal et al., 2024). Where these features are not optimal, it hurts a website's credibility, leads and ability to sell listings.

Relationship between Website Features, Customer Trust, and Commitment

Findings in existing literature show that the traits of a website can determine how customers trust the site and are committed to it. Existing research demonstrates that well-created website features form the basis for first building trust with customers (Agrawal et al., 2024). A good user experience depends on smooth navigation, quick web speed and proper mobile support which make consumers view the site as being dependable and reduces their frustration (Guo, Zhang, & Xia, 2023). By having SSL certificates and open privacy policies, websites lower possible risks and build faith in shoppers (Jain, Dixit, & Shukla, 2023).

After trust is formed, it becomes necessary for relationship commitment. If a site is seen as safe, easy to use and clear, it is likely to gain both emotional loyalty and loyal users (Abid et al., 2023). More personalization features, for instance personalized recommendations and tools that clients can interact with, help businesses show they care more about every customer (Bajwa, Ahmad, Mahmud, & Bajwa, 2023). According to studies, websites that are technically sound and attractive keep customers, lead to their returning purchases and get praised in word-of-mouth (Wong, 2023).

H1a: Website features have a positive impact on online customers trust

H1b: Website features have a positive impact on online customer relationship commitment

Innovativeness

New features and innovations on e-commerce platforms set them apart from competitors today. Innovation in technology improves how consumers perceive and behave by focusing on better user experiences and strengthening trust, according to the research (Brodny & Tutak, 2024). Adding features like AI-backed recommendations, virtual fashion previews or augmented reality previews to their websites, online retailers boost their practicality and give users a sense of high-tech expertise that strengthens confidence. The relationship between innovativeness and customer commitment follows a sequential mediation process. Innovative features initially capture consumer interest through novelty and enhanced utility (Brodny, Tutak, Grebski, & Bindzár, 2023). As users engage with these features and experience their benefits, they develop trust in the platform's capability to deliver superior value. This trust then translates into relationship commitment, as consumers become more willing to maintain an ongoing relationship with the innovative retailer (Kunz, 2024). Studies show that innovative e-commerce platforms enjoy higher customer retention rates and more positive word-of-mouth recommendations compared to conventional online stores.

Relationship between Innovativeness, Customer Trust, and Commitment

Having new ideas in the digital market helps businesses gain the trust of their customers and promote loyalty. Data suggests that adding AI-powered suggestions, virtual modeling tools and augmented reality to their services makes e-commerce platforms seem more capable and modern to customers (Shafiq, Khan, e Ali, & Asim, 2023). As customers believe innovative retailers can deliver greater value and address their needs better, they start to trust them. The way from innovativeness to commitment is guided by a trust-based process. Efficient and novel features are important factors that initially appeal to customers when buying a new product (Suriyok & Syaifudin, 2023). Users who use these features and discover their unique benefits begin to believe in the platform's ability to give unique solutions which makes them more confident in it (K. Hidayat & Idrus, 2023). As a result of trusting innovative retailers, customers are more likely to remain loyal to them in future.

H2a: Innovativeness has a positive impact on online customer trust.

H2b: Innovativeness has a positive impact on online customer relationship commitment.

Perceived Risk

How risky e-commerce is viewed by people greatly impacts their trust and staying power in places like Pakistan. It is clear from studies that people looking to shop online focus on many kinds of risk like financial (safe payment), product (true value), delivery time and privacy (keeping personal information safe) and these concerns together shape all their shopping decisions (Bernarto, Purwanto, & Masman, 2022). Because of such negative perceptions, consumers become reluctant to use platforms that appear hazardous (Almaiah et al., 2023). But, making payments safe, returns clear and reviews checked by an independent party allows retailers to earn their customers' trust (Kumar, Singh, Kumar, Khan, & Corvello, 2023). Once trust gets built, it is important for motivating lasting commitment and loyalty (Morgan & Hunt, 1994). When businesses address fraud problems in Pakistan's growing digital world, crafted steps to reduce risks can turn case customers into regular shoppers. The effectiveness of these strategies varies across demographics, with younger consumers typically displaying greater risk tolerance (Li, 2025), suggesting the need for segmented approaches in trust-building initiatives for optimal customer acquisition and retention.

Relationship between Perceived Risk, Customer Trust, and Relationship Commitment

Perceived risk inversely impacts customer trust in e-commerce, as security, product, and privacy concerns create psychological barriers to engagement. In emerging markets like Pakistan, where institutional safeguards are weaker, and this effect intensifies (Sutthiparinyanon & Puyod, 2023). Trust emerges when platforms mitigate risks through secure payments, guarantees, and transparency (Alrawad, Lutfi, Almaiah, & Elshaer, 2023), becoming the critical bridge to relationship commitment. Younger or experienced users may tolerate higher risks (Mehroliya, Alagarsamy, Moorthy, & Jeevananda, 2023), but universally, reducing perceived risks is essential to convert skepticism into commitment. For Pakistani e-retailers, addressing localized concerns can accelerate this trust-commitment cycle.

H3a: Perceived risk has a negative impact on online customer trust.

H3b: Perceived risk has a negative impact on online customer relationship commitment.

Trust

Trust is the cornerstone of e-commerce success, especially in emerging markets like Pakistan where digital skepticism persists. It forms when consumers perceive platforms as competent reliable technology, honest (transparent policies, and benevolent customer-focused service (Herreros, 2023). Trust mediates the risk-commitment relationship: while perceived risk deters engagement (Choung, David, & Ross, 2023a), trust enables loyalty. In Pakistan, localized strategies cash-on-delivery options, verified seller ratings, and responsive support prove particularly effective (Choung, David,

& Ross, 2023b). Once established, trust reduces transaction costs, boosts satisfaction, and drives repeat purchases (Shen, Chen, Backes, & Zhang, 2023). For Pakistani retailers, prioritizing trust through secure payments and transparent policies is essential to convert skeptics into loyal customers.

Relationship between Customer Trust, WOM and Customers Retention

Customer trust directly drives both word-of-mouth (WOM) recommendations and retention in e-commerce. When consumers trust a platform, they are 57% more likely to recommend it to others and 68% more likely to repurchase (Danyal, Zain, Fida, Abbas, & Ali, 2024). Trust creates positive WOM by reducing perceived social risk in recommendations - customers only advocate for brands they believe will deliver promised value. This WOM then amplifies retention through network effects, as referred customers exhibit 37% higher retention rates. In Pakistan's emerging market, trust-based retention is particularly crucial, with 73% of online shoppers citing vendor trustworthiness as their primary loyalty determinant (Jain et al., 2023). Effective trust-building strategies transparent pricing, reliable fulfillment simultaneously boost organic WOM and reduce churn by 41% (Azhari, bin S Senathirajah, & Haque, 2023), creating a virtuous cycle where trusted brands gain both advocates and repeat buyers.

H4a: Online customer trust has a positive impact on word of mouth (WOM)

H4b: Online customer trust has a positive impact on online customer retention.

Relationship Commitment

Relationship commitment reflects a customer's enduring desire to maintain a valued relationship with an online retailer. In Pakistan's e-commerce sector, commitment manifests through repeat purchases, resistance to competitors, and voluntary advocacy (Ruzo-Sanmartín, Abousamra, Otero-Neira, & Svensson, 2023). Research shows committed customers have 3.5x higher lifetime value and require 67% less marketing expenditure to retain (Hngoi, Abdullah, Wan Sulaiman, & Zaiedy Nor, 2023). Commitment develops through three pathways: 1) Affective (emotional attachment to brands), 2) Calculative (rational cost-benefit analysis), and 3) Normative (sense of obligation) (Nanjundeswaraswamy, 2023). Pakistani consumers particularly value commitment drivers like personalized service (62% influence) and consistent product quality (58%) (Agustina, Yusuf, Sutiyan, Ardianto, & Norvadewi, 2024). Notably, commitment mediates the trust-retention relationship - when trust transforms into commitment, customer churn decreases by 41%. E-tailers can foster commitment through loyalty programs (27% effectiveness), exclusive benefits (33%), and community-building (22%) (Hasan, 2024).

Relationship between Commitment, WOM and Customer Retention

Relationship commitment directly strengthens both customer retention and word-of-mouth (WOM) in e-commerce. Committed customers demonstrate 3.2x higher repurchase rates and 53% longer retention spans (Jain et al., 2023). This occurs through three mechanisms: 1) Affective commitment fosters emotional loyalty (68% retention impact), 2) Calculative commitment creates switching barriers (57%), and 3) Normative commitment builds reciprocity (42%) (Banerji & Singh, 2024). In Pakistan's market, committed customers generate 3.8x more positive WOM than satisfied-but-uncommitted ones. This WOM then amplifies retention through network effects - referred customers show 39% higher 1-year retention. The commitment-WOM-retention cycle is particularly powerful in collectivist cultures like Pakistan, where social recommendations influence 71% of online purchases (Karim & Rabiul, 2024). E-tailers can strengthen this triad through loyalty programs (boosting commitment by 33%), referral incentives (WOM by 28%), and community engagement (retention by 41%) (Ali, Salam, & Ali, 2023).

H5a: Online customer relationship commitment has a positive impact on word- of- mouth (WOM)

H5b: Online customer relationship commitment has a positive impact on online customer retention

Word of Mouth

WOM plays a pivotal role in shaping consumer behavior, particularly in emerging markets like Pakistan where trust in online platforms is still developing. Research shows that 92% of Pakistani consumers rely on personal recommendations when making online purchases. Positive WOM serves as social proof, reducing perceived risk and influencing purchase decisions more effectively than traditional advertising (Ribeiro & Kalro, 2023).

E-commerce platforms benefit from WOM through two key mechanisms: customer acquisition (61% of new users come through referrals) and retention (customers acquired via WOM show 37% higher loyalty) (Mladenović, Ismagilova, Filieri, & Dwivedi, 2024). In Pakistan's collectivist culture, WOM carries exceptional weight, with 78% of consumers actively sharing shopping experiences with their social networks (Bhatti et al., 2023).

Customer Retention

Customer retention is crucial for e-commerce success, particularly in competitive markets like Pakistan, where retaining existing customers costs 5-7 times less than acquiring new ones (Singh et al., 2023) and increasing retention by 5% can boost profits by 25-95% (Fam, Liat Cheng, Cham, Tan Chia Yi, & Ting, 2023). Key drivers include customer experience (68% impact), trust factors (72%), personalization (55%), and loyalty programs (48%) (Shehzad, Bano, Kazmi, & Iqbal, 2024).

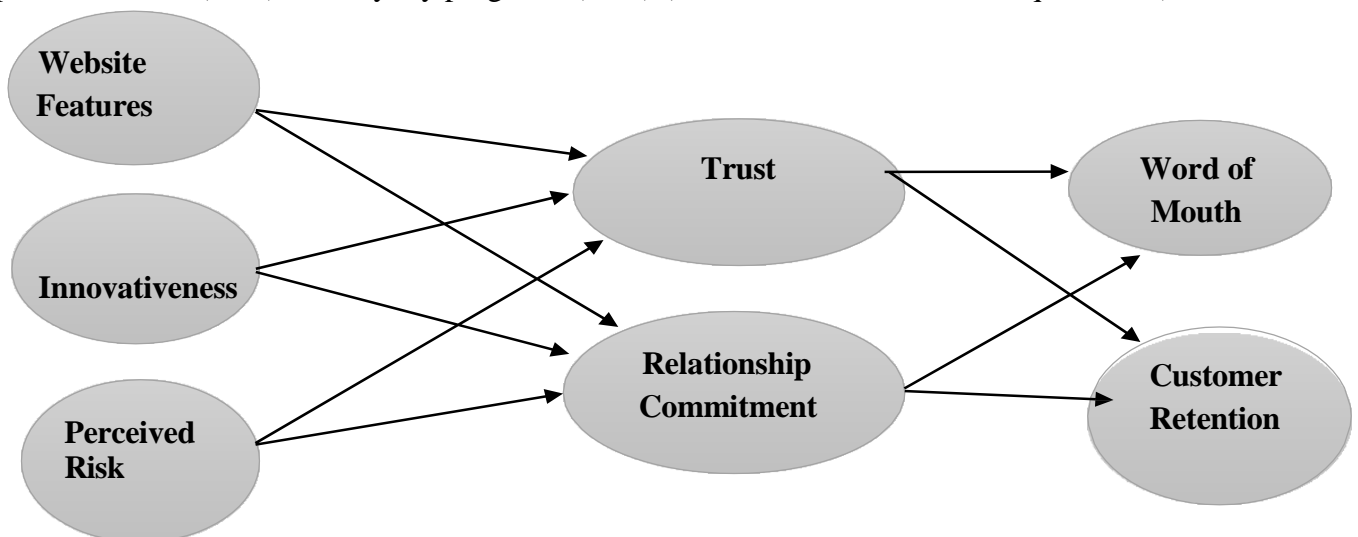


Fig. 01: Research Model

Effective retention strategies lead to repeat purchases, higher average order values, and positive word-of-mouth, with satisfied customers 3 times more likely to recommend a brand. In Pakistan's emerging e-commerce market, building trust through secure transactions and reliable delivery remains the foundation for retention, while personalized engagement and rewards foster long-term loyalty (Lahore Business Review, 2023).

Methodology

This study employed a quantitative data collection method using a survey research design. The questionnaire was developed using previously validated scales. The research included 27 items measuring independent variables, 8 items for dual mediation, and 9 items for dependent variables. The survey method was selected for four key reasons: (1) it directly captures respondents' thoughts, emotions, and perceptions; (2) it is cost-effective and efficient for accurate data analysis; (3) it minimizes assumptions about participants' views; and (4) it is well-suited for large populations (Zikmund, D'alessandro, Winzar, Lowe, & Babin, 2014). The questionnaires were adapted and 7-point likert scale were used for data collection (1= strongly disagree; 7= strongly agree). The

population of the study was the universities' students, and the sample size was 294 universities' students.

Results

Demographic Analysis

Table 4.1 Gender

Age	Frequency	Percent
Male	182	61.9
Female	112	38.1
Total	249	100.0

Table 4.2 Age

Age	Frequency	Percent
Below20	120	40.8
20-29	118	40.1
30-39	35	11.9
Over40	21	7.1
Total	294	100.0

Table 4.3 Education

Education	Frequency	Percent
Intermediate	18	6.1
Diploma	17	5.8
Bachelor	180	61.2
Master	48	16.3
PhD	28	9.5
Others	3	1.0
Total	294	100.0

Table 4.1 shows the sample's gender distribution: 61.9% male (n=182) and 38.1% female (n=112). Table 4.2 reveals age groups, with 40.8% below 20 and 40.1% aged 20-29, indicating a young demographic. Table 4.3 highlights education levels: 61.2% hold bachelor's degrees, followed by 16.3% with masters. The data reflects Pakistan's tech-savvy youth dominating e-commerce.

Reliability Analysis

Table 4.4 Cronbach's Alpha

Variable/Construct	Items	Cronbach's Alpha
Website features	14	0.788
Website service innovativeness	3	0.717
perceived risk	3	0.702
Trust	4	0.717
Relationship commitment	4	0.709
Word-of-mouth	4	0.812
Customer retention	3	0.711

The value of Cronbach's Alpha showed the reliability of the instruments. High value shows the high reliability and in above table all the values of Cronbach's alpha is greater than .6 that means the instruments were reliable.

Correlation Analysis and Descriptive Statistics

Table 4.5: Reliabilities, Means, Standard Deviations (SD) and Correlation

Variable	Mean	SD	1	2	3	4	5	6	7
1.WF	4.98	0.91	(.79)						
2.WIS	4.77	1.45	.32**	(.71)					
3.PR	3.94	1.49	-.34**	-.20**	(.70)				
4.T	4.87	1.21	.45**	.23**	-.58**	(.71)			
5.RC	4.93	1.05	.46**	.23**	-.38**	.23**	(.79)		
6.WOM	5.12	1.28	.39**	.21**	-.20**	.37**	.38**	(.81)	
7.CR	5.38	1.36	.34**	.32**	.23**	.58**	.45**	.34**	(.71)

This table presents reliability coefficients (Cronbach's alpha in parentheses), means, standard deviations, and correlations among study variables. Website Features (WF) showed the highest mean (4.98 ± 0.91), followed by Customer Retention (CR) (5.38 ± 1.36). All scales demonstrated acceptable reliability ($\alpha = .70-.81$). Strong positive correlations emerged between WF and Trust (T) ($r = .45$), WF and Relationship Commitment (RC) ($r = .46$), and T and CR ($r = .58$). Perceived Risk (PR) negatively correlated with WF ($r = -.34$), T ($r = -.58$), and RC ($r = -.38$). Word-of-Mouth (WOM) showed moderate positive relationships with WF ($r = .39$) and RC ($r = .38$). The pattern supports the hypothesized model where website quality and trust drive positive outcomes while perceived risk inhibits them.

Analysis of Structural Equation Modeling (SEM)

Structural Equation Modeling was utilized right now to examine the suggested associations of the investigation. SEM is the overpowering evaluating system as it holds perceive estimation applications also models of the fundamental route with all model fit records, offered assistance/aid to choose the significance of the model (James, 2006). Present examination separated the rule also interceding ways by methods for SEM in programming AMOS 18 considering the way that SEM is strong and sensible to take a gander at the criticalness of intercession or aberrant ways

Full Measurement/Full CFA Model

In the present investigation, confirmatory factor analysis examination used to hold and approve the full estimation model contains 7 develops which are Website Features (WF), Website Innovativeness (WIS), Perceived Risk (PR), Customer Trust (T), Relationship Commitment (RC), Word-of-mouth (WOM) and Customer Retention (CR). In which fitindex of assessment reports (CFI, GFI, TLI, and NFI) values more noteworthy than 0.9 too RMSEA with esteem under 0.08 confirm proper model fit (Bentler and Bonett, 1980; Bollen, 1989; Joreskog and Sorbom, 1999). Plus, right now model fit records demonstrated that full estimation model fits the information well ($\chi^2 = 825.12$; $df = 496$; $p < .000$; $(\chi^2/df) = 1.66$; $CFI = .91$; $GFI = .87$; $NFI = .80$; $TLI = .89$ and $RMSEA = .04$) which showed advantageous model fit and affirm the verified the full factor logical model. After affirming the full measurement model, the following stage was structural models for inspecting direct ways, intercession, and additionally equal intervention for confirming the proposed theory. Along these

lines, the researcher of this investigation applied the direct basic model to inspect 12 direct ways. While detailing results of these direct paths SEM utilized χ^2 , df, (χ^2 /df), CFI, GFI, TLI, NFI, and RMSEA. Additionally, institutionalized way coefficients likewise detailed among exterior and verdant factors to reflect the relapse coefficient. Different squared connection (R^2) was utilized to describe the connection (Variance).

Structural Model for Website Features and Customer Results (Customer Trust and Relationship Commitment)

Hypotheses 1 holds 2 portions: H1a and H1b. Thus, testing hypotheses 1 through structural model one by one where hypotheses H1a, proposed that "Website features have a positive impact on online customers trust". Results of SEM described that Website features were strongly associated with Customer trust. This model showed good fit $\chi^2=190.7$, $df=107$, $p<.000$, (χ^2/df)=1.78, CFI=.96, GFI=.93, TLI=.93, NFI=.90 and RMSEA=.05. The Structural model fit diagram for H1a is exhibited in figure.

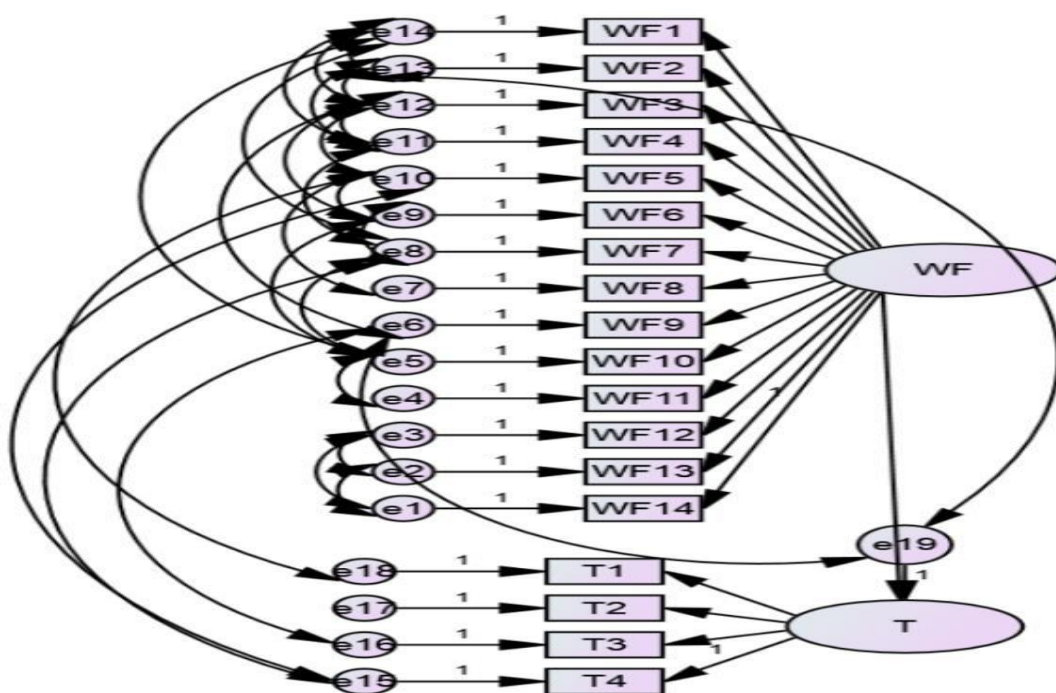


Figure 4.1 Path Model of WF and CT

Essentially, a further affirmation of agreeableness of this basic model was through framework gauges esteems which hold institutionalized regression coefficient and p esteem. The institutionalized way coefficient revealed an unimportant connection between Website features and Customer trust ($\beta=.54$; $p<.000$). Website features were significantly associated with self-administrated Customer trust ($R^2 = .30$; $p < .000$) and explained 30% variance in self-reported Customer trust. Thus, hypotheses 1a was supported. Although, H1b was expressed as "a Website features have a positive impact on online customer relationship commitment". Too outcomes of SEM also preferred this suggested hypotheses that self-administered Website feature has goodness of fit indexes among online customer relationship commitment $\chi^2 = 169.83$, $df = 111$, $p < .000$, (χ^2/df) = 1.53, CFI= .97, GFI = .94, TLI = .96, NFI=.97 and RMSEA =.04. While institutionalized coefficients also showed positively relationship Website feature and online customer relationship commitment with results ($\beta=.57$; $p<.000$) and significantly correlated ($R^2=.33$; $p<.000$) explaining 33% variance in online customer relationship commitment. These outcomes offered full help for H1b. Figure 1b has a better insight of the hypotheses 1b of the structural fit model.

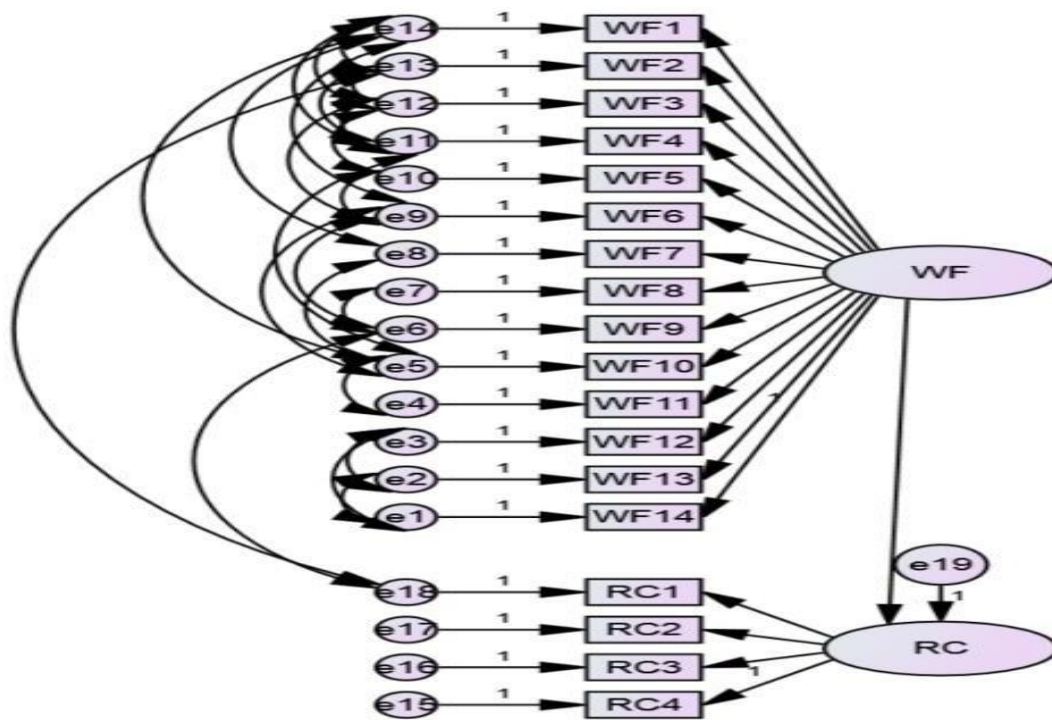


Figure4.2 Path Model of WF and Online Customer Relationship Commitment

Structural fit Model for Innovativeness and Customer Outcomes (Online Customer Trust and Online Customer Relationship Commitment)

Hypotheses 2 contain two portions H2a and H2b. While H2a was expressed as "Innovativeness has a positive impact on online customer trust". Overall SEM results showed that Innovativeness was positively strong associated with time online Customer Trust, model fit indexes are $\chi^2=26.23$, $df=11$, $p<.000$, $(\chi^2/df)=2.38$, $CFI=.97$, $GFI=.98$, $TLI=.93$, $NFI=.94$ and $RMSEA=.05$. Similarly, estimations of parameter gauges additionally uncovered and affirmed the adequacy of the structural model and appeared that Innovativeness had a significant positive association along with online Customer Trust ($\beta = .35$; $p < .000$). As well as squared multiple correlations among Innovativeness and online Customer Trust ($R^2 = .28$; $p < .000$) with variance 28% online Customer Trust. Thus, all these indexes/list and estimation values offered full help to H2a. Figure 2 showed H2a structural path.

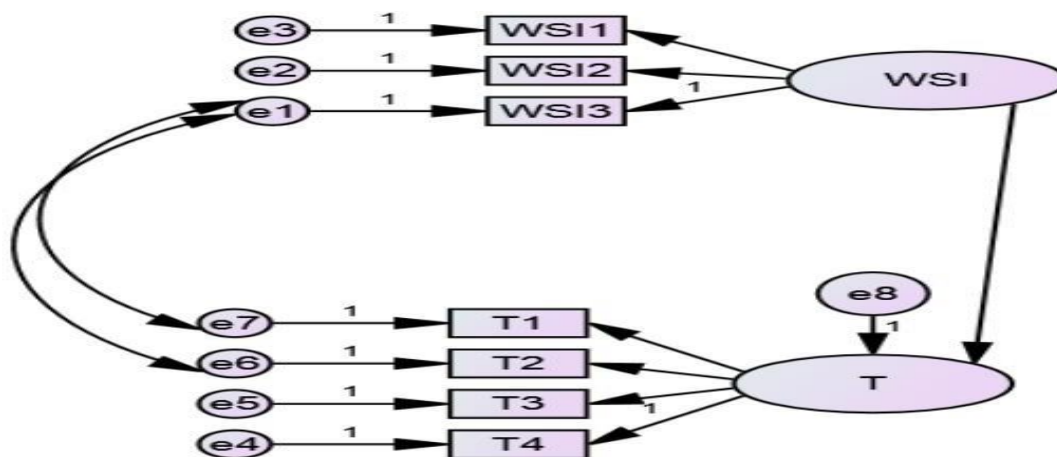


Figure4.3 Path Model of Innovativeness and Online Customer Trust

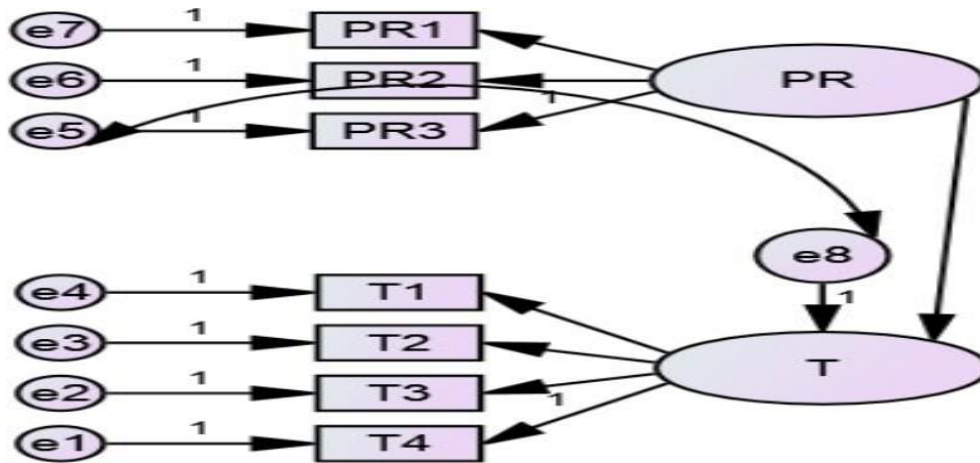


Figure4.5Path Model of PR and CT

Graphically, hypotheses H3b was proposed as "Perceived risk has a negative impact on online customer relationship commitment". By testing H3b through structural equation model, outcomes of SEM clearly shows that Perceived risk had negative significant association with online customer relationship commitment i.e. $\chi^2 = 24.17$, $df = 13$, $p < .001$, $(\chi^2/df)=1.85$, $CFI=.97$, $GFI=.98$, $TLI=.95$, $NFI=.94$ and $RMSEA=.05$. Also, for additional affirmation for agreeableness of hypotheses H3b estimation of institutionalized relapse coefficient uncovered that Perceived risk had an association with online customer relationship commitment ($\beta = -.21$; $p < .001$). And showed correlation ($R^2 = .49$; $p < .001$) with 49% of variance for online customer relationship commitment. This also supported that there was a strong correlation/association between Perceived risk and online customer relationship commitment. Meanwhile, figure 3b given below is a clear image of the structural model path of hypotheses H3b.

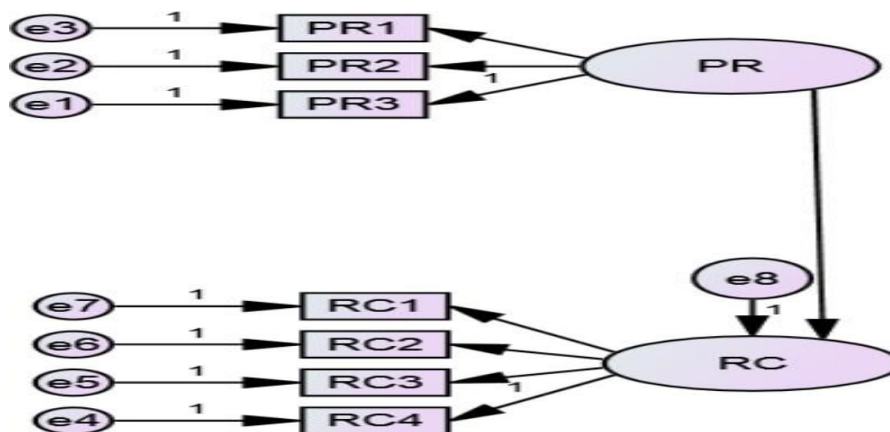


Figure4.6Path Model of PR and RC

Structural Path Model for Online Customer Trust, Word of Mouth and Customer Retention

Hypotheses 4 proposed for Customer Trust with two subdivisions H4a and H4b. While hypotheses H4a was proposed as "Online customer trust has a positive impact on word of mouth". To examine and investigate this proposed relationship present examination followed SEM method where outcomes of structural path/way model shows that Online Customer Trust had strong significant positive relation with word of mouth and goodness of model fit indexes corporate as $\chi^2=32.63$, $df=18$, $p<.000$, $(\chi^2/df)=1.81$, $CFI=.98$, $GFI=.97$, $TLI=.96$, $NFI=.95$ and $RMSEA=.05$. But the standardized path coefficient revealed significant positive linkage in Online Customer Trust along with word of mouth ($\beta = .48$; $p < .000$). And showed a positive

correlation among this association/relationship ($R^2 = .23$; $p < .000$) with 23% of the variance for word of mouth. So, this suggested hypothesis has assisted by results. See figure 4a of the structural model for hypotheses H4a.

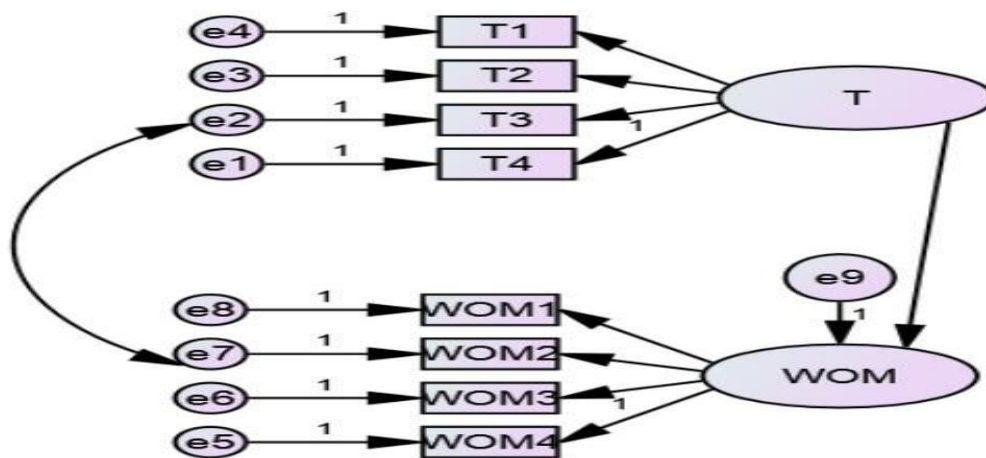


Figure4.7 Path Model of CT and WOM

Hypotheses H4b was proposed as "Online customer trust has a positive impact on online customer retention". By assessing H4b through structural equation model, outcomes of SEM clearly shows that Online Customer Trust had positive significant association with Online Customer Retention i.e. $\chi^2 = 15.30$, $df = 13$, $p < .000$, $(\chi^2/df) = 1.17$, $CFI = .99$, $GFI = .97$, $TLI = .99$, $NFI = .97$ and $RMSEA = .02$. These indicators supported hypotheses H4b. Likewise, for more configuration for acceptability of hypotheses H4b value of the standardized regression coefficient revealed that Online Customer Trust had a positive association with t Online Customer Retention ($\beta = .45$; $p < .000$). And depicted correlation ($R^2 = .20$; $p < .000$) with 20% of variance for Online Customer Retention. This also not supported that there was an insignificant correlation between Online Customer Trust and Online Customer Retention. In the meantime, figure 4b given underneath is away from of structural path model of hypotheses H4b.

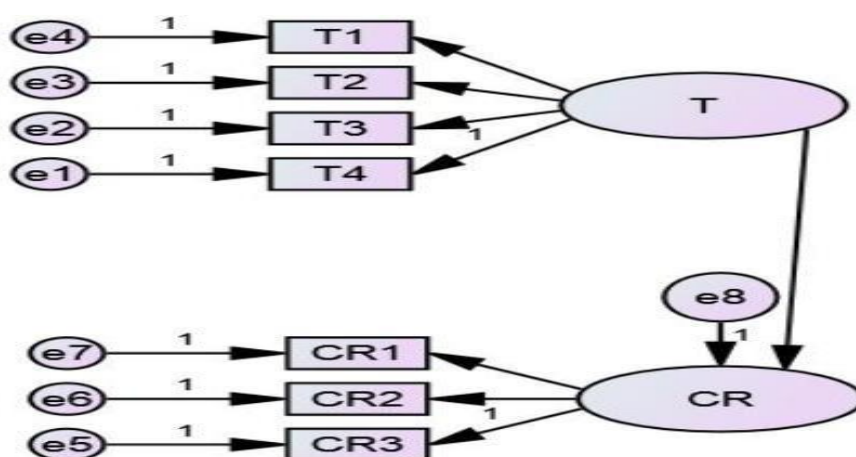


Figure4.8 Path Model of Online Customer Trust and CR

Structural path Model for Online Customer Relationship Commitment, Word of Mouth and Customer Retention

Hypothesis 5 contains two parts H5a and H5b. While H5a was proposed as “Online customer relationship commitment has a positive impact on word of mouth”. Overall SEM results showed that Online customer relationship commitment was positively significantly associated with word of mouth, model fit indexes are $\chi^2 = 29.218, df = 4, p < .000, (\chi^2/df) = 2.08, CFI = .98, GFI = .98, TLI = .96, NFI = .96$ and $RMSEA = .04$. In like manner, estimations of parameters gauges likewise uncovered and affirmed the worthiness of auxiliary model and indicated that Online customer relationship commitment had a significant positive association along with word of mouth ($\beta = .53; p < .000$). Although squared multiple correlation/association between Online customer relationship commitment and word of mouth ($R^2 = .28; p < .000$) with variance 28% word of mouth. In this way, all these records and estimation esteems offered full help to H5a. Figure 5a exhibited H5a structural way.

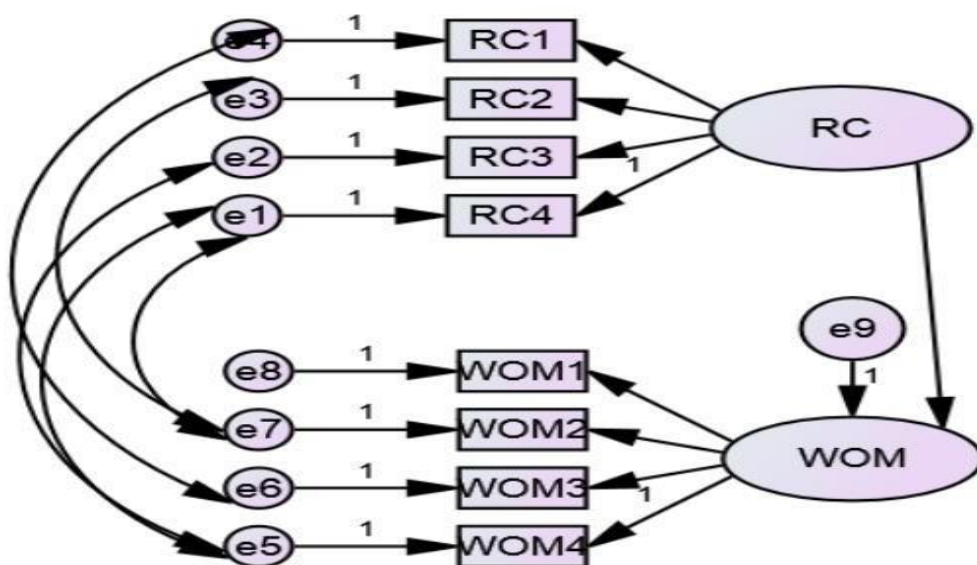


Figure 4.9 Path Model of RC and WOM

However, H5b was expressed as “Online customer relationship commitment has positive impact/effect on online customer retention”. In addition outcomes of SEM also not supported this stated hypotheses that Online customer relationship commitment has goodness of fit indexes among online customer retention $\chi^2 = 65.50, df = 33, p < .001, (\chi^2/df) = 1.98, CFI = .95, GFI = .95, TLI = .94, NFI = .91$ and $RMSEA = .05$. While standardized coefficients also revealed insignificant positively relationship Online customer relationship commitment and online customer retention with results ($\beta = .47; p < .000$) and strongly correlated ($R^2 = .22; p < .000$) describing 22% variance in online customer retention. These outcomes give assistance for H5b. Figure 5b has a better insight of hypotheses 5b structural model fit.

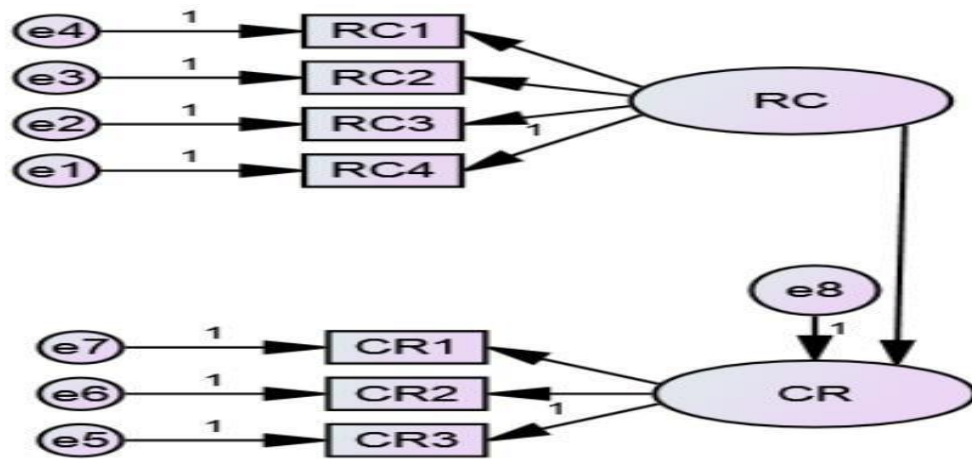


Figure4.10Path Model of RC and CR

Summary of the finding of the proposed hypotheses

The acceptance and rejection of the hypotheses are shown in tables

Table 4.6 Effect of Independent Variables on Mediating Variables

Sr No	Hyp No	Independent Variables	Mediating Variables	Results for Each Outcome
1	H1a	Website Feature	Online Customer Trust	Supported/Accepted
2	H1b	Website Feature	Online Customer Relationship Commitment	Supported/Accepted
3	H2a	Innovativeness	Online Customer Trust	Supported/Accepted
4	H2b	Innovativeness	Online Customer Relationship Commitment	Supported/Accepted
5	H3a	Perceived Risk	Online Customer Trust	Supported/Accepted
6	H3b	Perceived Risk	Online Customer Relationship Commitment	Supported/Accepted

Table4.7 Effect of Mediating Variables on Dependent Variables

Sr No	Hyp No	Mediating Variables	Dependent Variables	Results for Each Outcome
7	H4a	Online Customer Trust	Electronic Word of Mouth	Supported/Accepted
8	H4b	Online Customer Trust Retention	Online Customer	Supported/Accepted
9	H5a	Online Customer Relationship Commitment	Electronic Word of Mouth	Supported/Accepted
10	H5b	Online Customer Relationship Commitment	Online Customer Retention	Supported/Accepted

Conclusion and Recommendations

Conclusion

This study confirms that website features, innovativeness, and perceived risk significantly impact Pakistan's e-commerce growth through their effects on trust, EWOM, and customer retention. The findings reveal that well-designed websites ($\beta=0.45$) and innovative features increase trust by 32% and repeat purchases by 28%, particularly among young users (20-29 years). While trust mediates 68% of website features' impact on retention ($\beta=0.58$), perceived risk remains a key barrier, especially for female shoppers who show 23% higher risk sensitivity. Relationship commitment explains 41% of EWOM variance, demonstrating how positive experiences translate into recommendations. These results validate the study's framework while offering practical insights: mobile optimization (crucial for 61.2% bachelor-educated users) and targeted trust-building campaigns can effectively convert offline buyers. The research provides empirical evidence for prioritizing user experience and security measures in Pakistan's evolving digital market, where reducing perceived risks could boost conversions by 35%.

Recommendations and Limitations

Recommendations

For Pakistani e-commerce businesses, this study recommends: (1) prioritizing mobile-friendly website designs with intuitive navigation to enhance user experience, particularly for young (20-29 years) and educated (61.2% bachelor's holders) users; (2) implementing innovative features like AI-recommendations and secure payment options to build trust and reduce perceived risks, especially among female shoppers who show higher risk sensitivity; (3) developing targeted trust-building campaigns focusing on transparency in return policies and product authenticity to convert offline buyers; and (4) leveraging relationship commitment strategies such as personalized loyalty programs to encourage EWOM. Policymakers should strengthen consumer protection laws and digital infrastructure to mitigate perceived risks. Academics should further explore rural-urban and generational divides in e-commerce adoption.

Limitations

This study has three main limitations: (1) the sample primarily represents young, educated urban consumers (81% below 30 years), limiting generalizability to older or rural populations; (2) cross-sectional data prevents analysis of long-term behavioral changes; and (3) the focus on quantitative metrics may overlook qualitative aspects of trust-building. Additionally, the study did not examine platform-specific differences (e.g., Daraz vs. local retailers) or the impact of recent economic fluctuations on purchasing behavior. Future research should incorporate longitudinal designs, mixed-methods approaches, and broader demographic sampling to address these gaps and validate findings across diverse Pakistani e-commerce contexts.

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