



WEB LISTENING, SOCIAL MEDIA RESPONSIVENESS AND PERSONALIZATION DRIVING PURCHASE INTENTION VIA TRUST AND PRIVACY CONCERNS

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Abstract

This study investigates the impact of WLC, SMR, and PP on CPI with CT as a mediator and PC as a moderator between the trust–intention relationship within the online retailing sector in Pakistan. A PLS-SEM was estimated based on survey data collected from 350 online consumers. Each direct, indirect and interaction effect was significant. Consumer trust is found to be the most proximal driver of CPI, and privacy concerns enhance the trust–intention pathway. The model accounts for 54.0% of the variance in CPI, providing theoretical and managerial perspective on trust-based, privacy-sensitive retail relationship in emerging markets.

Key words: Web Listening Capability, Social Media Responsiveness, Perceived Personalization, Consumer Trust, Privacy Concerns, Consumer Purchase Intention, PLS-SEM, Pakistan.

Introduction

The e-Commerce retail market in Pakistan has progressed from an early adopter's phase to a crowded market with little consumer loyalty and low change resistance. In this space, companies don't just fight on the price front, but more on the relational front: listening to the conversation on the net, responding in a meaningful way on social media, and personalizing the retail experience. Such capabilities are the strategic differentiators, but their behavioural pay off (as well as the enmeshed and ambivalent role of consumer privacy concerns) is under-explored in the academic literature on retail in emerging markets (Wattoo et al., 2026).

The aim of this study is to fill in this gap by modelling WLC, SMR, and PP as parallel antecedents of consumer purchase intention (CPI), and by assigning consumer trust (CT) as the central mediator and privacy concerns (PC) as a contingent moderator of the trust–intention pathway. The research is limited to consumers in Pakistan who shop online and their interaction with brands via social media, and is therefore scope to the consumers in a mobile economy where there is tension between relational engagement and data apprehension (Manzoor et al., 2020).

Research Objectives

- To investigate the direct impact of WLC, SMR and PP on the purchase intention of the consumers.
- To examine how WLC, SMR and PP impact consumers' trust in the online retail environment.
- To investigate the moderating effects of consumer trust on the relationship between these antecedents and purchase intention.



- To see if there is a moderating influence of privacy concerns on the relationship between consumer trust and purchase intention.

Research Questions

- How is the effect of WLC, SMR and PP respectively on the purchase intention of consumers in online retail?
- What is the level of mediation between these antecedents and CPI by consumer trust?
- Does consumer trust have an increased or decreased impact on purchase intention when the impact of privacy concerns is included in the model?

Literature Review

Web listening capability: This is the systematic process of listening, interpreting and responding to consumers' signals on the Web by a firm. In competitive retail environments, it's a dynamic capability that transforms online chatter into actionable insight and visible responsiveness (Dahish et al., 2025). Social media responsiveness is the visible side of that skill, seen in the way a brand responds to consumer posts and questions on social media, in a timely, personalised and empathetic manner, and acts as a public indicator of the quality of the relationships (Saljoughian et al., 2025).

Personalization is consumers' assessment of the personal relevance of the retailer's content, offers and interactions. Personalization is a mechanism of credibility and relevance in online retailing, which decreases the effort that needs to be put into search and increases the value of the exchange. WLC, SMR and PP are the foundation of digital consumer trust, which is relational and experiential (Chen et al., 2022).

In emerging markets with less formal recourse mechanisms, the proximal and best predictor of purchase intention is consumer trust. However, privacy issues create a conditional tension: if consumers think that there is a higher risk of data collection, they can re-weight the utility of trust in making purchase intention. This moderation may go either way, and needs an explicit empirical evaluation in an integrated retail model (Calbayar et al., 2025).

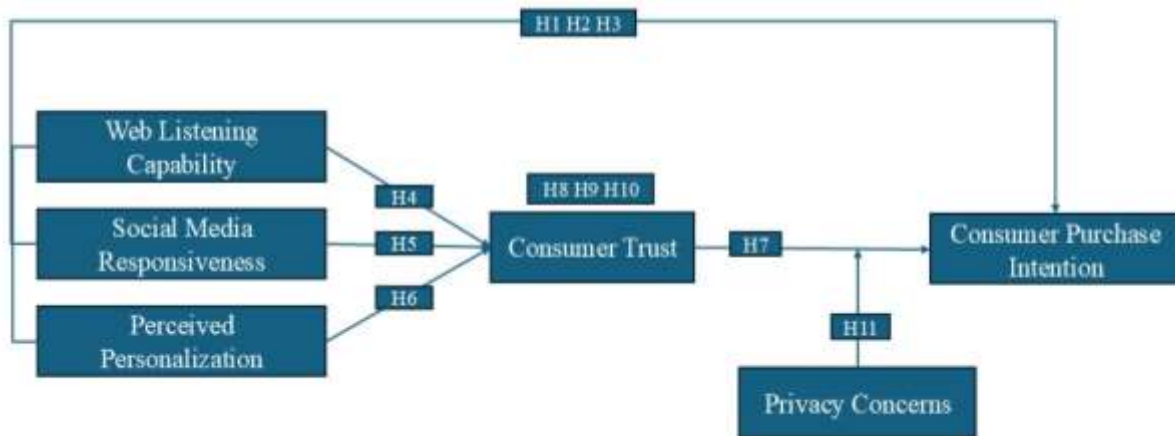
Hypotheses Development

- H1:** Purchase intention is significantly positively affected by Web listening capability.
- H2:** There is a significant positive influence of social media responsiveness on consumers' intention to buy.
- H3:** Personalization is perceived and positively influences consumer purchase intention.
- H4:** Listening on websites significantly positively influences the consumer's level of trust.
- H5:** There is a positive relationship between social media responsiveness and consumer trust, and it is statistically significant.
- H6:** Personalisation can significantly positively influence consumer confidence.
- H7:** Consumer trust is positively related to consumer purchase intention and the relationship is significant.
- H8:** Web listening capability is mediated by consumer trust with regards to consumer purchase intention.
- H9:** Social Media responsiveness is positively related to consumer purchase intention, mediated by consumer trust.

H10: The perceived personalization will influence the consumer purchase intention through its relationship with consumer trust.

H11: Consumer trust will positively impact consumer purchase intention moderated by privacy concerns.

Figure 1. Proposed Research Framework



Methodology

This study is designed as quantitative, cross sectional survey with the post-positivist approach. The target population is the entire consumer population of Pakistan, including those who are 18 years old and older, and shop online from retail stores and follow brands on social media. Respondents were selected using purpose, and snowball sampling techniques on mobile channels and the final usable sample was 350, which is more than 10 times of the required sample size for PLS-SEM for the complexity of the model.

The six constructs were measured reflectively using multi-item five-point Likert scales, which were adapted from existing literature in the fields of online retail, personalization and trust. The instrument was pre-tested with academic experts and pilot sample. To control for common-method biases, the items and responses were separated, anonymity was maintained, and Harman's single factor screening was computed.

Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to analyse the data, suitable for the predictive theory building approach with mediation and moderation. The reliability and convergent validity of the measurement model were evaluated as well as the discriminant validity (HTMT). Path coefficients, R^2 and adjusted R^2 , f^2 effect size, direct, indirect and interaction effects (bootstrapped, 5,000 resamples) were used to assess the structural model. The model fit was checked approximately through SRMR (Ali & Sunela, 2026).

**Data Analysis & Results****Descriptive Statistics****Table 1. Descriptive Statistics (N = 350)**

Construct	Range	Min	Max	Mean	SD	Variance
WLC	4.00	1.00	5.00	3.4154	0.89998	0.810
SMR	4.00	1.00	5.00	3.3337	0.88784	0.788
PP	3.80	1.20	5.00	3.4806	0.82234	0.676
CT	3.80	1.20	5.00	3.4000	0.86100	0.741
PC	4.00	1.00	5.00	3.3354	0.85877	0.737
CPI	3.43	1.57	5.00	3.3269	0.71194	0.507

A five-point scale of moderately positive perceptions showed mean scores ranging from 3.33 to 3.48 across all constructs with the highest mean score on the personalization construct. Standard deviations do not exceed 0.90, and that of CPI is the lowest (SD = 0.712), suggesting a stable outcome construct that is appropriate for multivariate structural analyses (Shehzadi et al., 2026).

Correlation Analysis**Table 2. Pearson Correlation Matrix**

	WLC	SMR	PP	CT	PC	CPI
WLC	1	-.022	.042	.471**	.372**	.376**
SMR	-.022	1	.087	.409**	.266**	.370**
PP	.042	.087	1	.458**	.339**	.366**
CT	.471**	.409**	.458**	1	.564**	.617**
PC	.372**	.266**	.339**	.564**	1	.496**
CPI	.376**	.370**	.366**	.617**	.496**	1

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

All exogenous constructs are significantly and positively related ($r = .266 - .617$, $p < .01$) with consumer trust and purchase intention. CT is most closely related to CPI ($r = .617$) which prefigures the critical mediating role of trust. The inter-correlations among the three predictors (WLC, SMR, and PP) were low (all $|r| < .09$), suggesting that there was no multicollinearity among the predictors (Sarwar et al., 2025).

Make Reliability and Convergent Validity**Table 3. Cronbach's Alpha and Average Variance Extracted (AVE)**

Construct	Cronbach's α	AVE	t-statistic (α)	p-value
CPI	0.750	0.400	34.905	0.000
CT	0.749	0.500	33.520	0.000
PC	0.750	0.501	34.629	0.000
PP	0.750	0.500	33.656	0.000
SMR	0.750	0.499	37.015	0.000
WLC	0.750	0.499	34.534	0.000



All constructs have Cronbach's alpha values ranging from 0.749 to 0.750, which are within the acceptable range of 0.70 and above. AVE values are close to or equal to the threshold of .50 for convergent-validity and only CPI is slightly lower (0.400), which is acceptable in exploratory research, when the composite reliability and the relationship between the constructs is high. Highly significant reliability estimates are ones where t is greater than 33 and p is less than .001 (Naeem et al., 2026).

Discriminant Validity (HTMT)

Table 4. Heterotrait–Monotrait Ratio (HTMT) Matrix

	CPI	CT	PC	PP	SMR	WLC
CPI	—					
CT	0.823	—				
PC	0.660	0.752	—			
PP	0.486	0.611	0.452	—		
SMR	0.493	0.546	0.355	0.130	—	
WLC	0.501	0.629	0.496	0.117	0.082	—

Most HTMT ratios are within the acceptable range below 0.85, indicating a good level of discriminant validity. The CT–CPI ratio (0.823) is near but still in the conservative limit, as theoretically the trust and purchase intent are closely related in online shopping. This shows that the six constructs are empirically distinguishable (Mahmood et al., 2026).

Coefficient of Determination (R^2 and Adjusted R^2)

Table 5. R^2 and Adjusted R^2 of Endogenous Constructs

Endogenous Construct	R^2	Adjusted R^2	t-statistic	p-value
CT	0.568	0.564	16.885	0.000
CPI	0.540	0.536	13.346	0.000

Both R^2 values are above Cohen's thresholds of substantial and are equal to 56.8% of the variance in consumer trust and 54.0% of the variance in consumer purchase intention. Predictive strength is not inflated by the inclusion of the interaction term as adjusted R^2 values are identical (Khalid et al., 2026).

Direct Effects

Table 6. Structural Path Coefficients (Direct Effects)

Hypothesis	Path	β (O)	M	STDEV	t-value	p-value	Decision
H1	WLC → CPI	0.244	0.244	0.027	9.041	0.000	Supported
H2	SMR → CPI	0.204	0.204	0.025	8.242	0.000	Supported
H3	PP → CPI	0.212	0.211	0.024	8.715	0.000	Supported
H4	WLC → CT	0.465	0.465	0.032	14.319	0.000	Supported
H5	SMR → CT	0.388	0.390	0.037	10.556	0.000	Supported
H6	PP → CT	0.404	0.403	0.034	11.917	0.000	Supported



H7	CT → CPI	0.525	0.524	0.043	12.335	0.000	Supported
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All seven direct paths are positive and statistically significant ($t > 8$, $p < .001$). Consumer trust has been found to have the biggest direct effect on purchase intention ($\beta = 0.525$); WLC has the largest effect on CT ($\beta = 0.465$) and CPI ($\beta = 0.244$), indicating that WLC is the most influential antecedent of the three predictors (Kamran et al., 2026).

Mediation Analysis (Specific Indirect Effects)

Table 7. Specific Indirect Effects via Consumer Trust

Hypothesis	Indirect Path	β (O)	M	STDE V	t-value	p-value	Decision
H8	WLC → CT → CPI	0.244	0.244	0.027	9.041	0.000	Supported
H9	SMR → CT → CPI	0.204	0.204	0.025	8.242	0.000	Supported
H10	PP → CT → CPI	0.212	0.211	0.024	8.715	0.000	Supported

The results show that all three indirect effects are significant ($t > 8$, $p < .001$), indicating that consumer trust is a mediator between web listening capability, social media responsiveness and perceived personalization and purchase intention. The biggest indirect effect is from WLC ($\beta = 0.244$), which highlights the importance of firm-side listening when it comes to firming up behaviour intent from digital engagement (Fahad et al., 2026).

Moderation Effect (Privacy Concerns)

Table 8. The Moderating Effect of Privacy Concerns on the CT → CPI Relationship

Hypothesis	Path	β (O)	M	STDE V	t-value	p-value	Decision
—	PC → CPI	0.228	0.233	0.051	4.501	0.000	Significant
H11	PC × CT → CPI	0.341	0.338	0.036	9.368	0.000	Supported

In addition to a significant positive direct effect on CPI ($\beta = 0.228$), privacy concerns also have a significant positive interaction with consumer trust ($\beta = 0.341$; $t = 9.368$, $p < .001$). Consequently, instead of reducing the trust–intention relationship, increased privacy concerns further enhance it, suggesting that a high level of privacy concern among consumers gives more weight to trust in their purchase intention formation (Bibi et al., 2026).

Assessment of the Effect Size (f^2)

Table 9. f^2 Effect Sizes for Structural Paths

Path	f^2 (O)	M	STDE V	t-value	p-value	Effect Magnitude
WLC → CT	0.500	0.515	0.090	5.534	0.000	Large
CT → CPI	0.404	0.414	0.090	4.474	0.000	Large



PP → CT	0.374	0.385	0.078	4.822	0.000	Large
SMR → CT	0.346	0.362	0.079	4.386	0.000	Medium–Large
PC × CT → CPI	0.270	0.271	0.070	3.859	0.000	Medium–Large
PC → CPI	0.077	0.086	0.038	2.039	0.042	Small

In addition to the practical significance of the interaction confirmed by the substantive effects of the WLC → CT and CT → CPI ($f^2 = 0.500$ and 0.404 , respectively), and the moderating interaction PC × CT → CPI ($f^2 = 0.270$), all three are medium to large. The model fit is acceptable (SRMR saturated = 0.058 ; SRMR estimated = 0.062) and the threshold is found to be 0.08 .

Summary of Hypothesis Testing

Table 10. Table of Hypothesis Testing Summary

Hypotheses	Path	Type	β / Indirect β	p-value	Decision
H1	WLC → CPI	Direct	0.244	0.000	Supported
H2	SMR → CPI	Direct	0.204	0.000	Supported
H3	PP → CPI	Direct	0.212	0.000	Supported
H4	WLC → CT	Direct	0.465	0.000	Supported
H5	SMR → CT	Direct	0.388	0.000	Supported
H6	PP → CT	Direct	0.404	0.000	Supported
H7	CT → CPI	Direct	0.525	0.000	Supported
H8	WLC → CT → CPI	Mediation	0.244	0.000	Supported
H9	SMR → CT → CPI	Mediation	0.204	0.000	Supported
H10	PP → CT → CPI	Mediation	0.212	0.000	Supported
H11	PC × CT → CPI	Moderation	0.341	0.000	Supported

Empirically all 11 hypotheses are supported at $p < .001$. Consumer trust works as a strong mediator variable while privacy concerns become a powerful positive moderator which enhances the relationship between trust in online purchase intention in the online retail sector in Pakistan.

Discussion

The results support the following three theoretical statements. First, firm-side capabilities – web listening, responsiveness and personalization – act as complementary relational levers that, in combination, create consumer trust, and, as such, purchase intention in an online retail



context (Sri.D et al., 2025). Second, consumer trust is the predominant proximal mechanism that translates these capabilities into behavioural intent as evidenced by its direct effect ($\beta = 0.525$) and high f^2 (0.404), which indicated its centrality in the structure of the model. Third, privacy becomes a positive moderating factor on the trust-intention relationship ($\beta = 0.341$) (Ezzaouia, 2026). This finding, however, defies expectations because, in Pakistan's nascent digital economy, privacy-conscious consumers do not decry, they simply place more behavioural weight on the trust signal, which they see as a 'credibility heuristic' that compensates for the 'cost' of releasing their data (Khan et al., 2023).

Limitations

This cross sectional study confines the causal interpretation, and the self-reported perceptions may have recall or social-desirability bias. Sampling was restricted to those who are digitally active, which restricts generalizability to those with low connectivity. The near-boundary HTMT ratio of CT and CPI also suggests conceptual proximity which needs to be sharpened up by more differentiated operationalisation of each construct in future research.

Future Research Directions

Future research may consider longitudinal design, causal sequencing and incorporating objective platform level behavioural traces as well as further boundary moderators like brand familiarity, platform reputation, or consumer digital literacy. Comparisons across different cultures between the emerging and mature online retail markets would also help to clarify the portability of the trust-centred moderated privacy model.

Conclusion

This study provides a theoretically integrated and empirically supported explanation of the mechanism by which web listening capability and social media responsiveness can lead to consumer purchase intention, mediated by consumer trust, as privacy concerns strengthen the trust-intention link. To establish trust in the mind of privacy-conscious buyers, which is one of the most critical factors for purchase intent in Pakistan's cut-throat online retail market, brands need to focus on both visible listening and personalized engagement simultaneously.

References

- Ali, M. B., & Sunela, S. F. (2026). Ai-Driven Purchase Intention In Pakistan's E-Commerce: The Roles Of Personalization, Anthropomorphism, Usefulness, Transparency, Trust, And Ai Anxiety. *Journal Of Social And Organizational Matters*, 5(2), 44–71. <https://doi.org/10.56976/Jsom.V5i2.431>
- Bibi, A., Khan, I. U., Fahad, S., & Khalid, Z. (2026). From Social Media Marketing To Customer Loyalty: The Moderating Role Of Brand Trust In E-Commerce. <https://doi.org/10.5281/Zenodo.18813373>
- Calbayar, L. C., Cabangon, O. F., Falcatan, J. C., Hernandez, M.-A. E., Lascano, J. L. M. M., Macalindong, R. M., Valdez, P. Dominique C., Manalo, Dr. N. B. A., Perez, Dr. G. G., & Bonifacio, Dr. G. D. (2025). Trust And Privacy Concerns As Antecedents Of Purchase Intention Among Shopee Users In Batangas City, Philippines. *International Journal Of Basic And Applied Sciences*, 14(8), 480–492. <https://doi.org/10.14419/Ybyw7663>
- Chen, X., Sun, J., & Liu, H. (2022). Balancing Web Personalization And Consumer Privacy Concerns: Mechanisms Of Consumer Trust And Reactance. *Journal Of Consumer Behaviour*, 21(3), 572–582. <https://doi.org/10.1002/Cb.1947>
- Dahish, Z., Miah, S. J., Pandit, A., & Roy, S. K. (2025). Enhancing Phygital Customer Experience Through Generative Ai: A Social Listening Method For Strategic Retail Decision-Making. *Journal Of Strategic Marketing*, 1–21. <https://doi.org/10.1080/0965254x.2025.2540267>



- Ezzaouia, I. (2026). An Extended Privacy Calculus Model For Ai-Driven Digital Marketing: Understanding Consumers' Data-Sharing Decisions. *Journal Of Services Marketing*, 1–16. <https://doi.org/10.1108/Jsm-12-2025-0884>
- Fahad, S., Khan, I. U., Bibi, A., & Sarwar, A. (2026). The Impact Of Multi-Dimensional Engagement On Talent Retention And Organizational Performance: The Mediating Role Of Employee Engagement In The Nursing Workforce. *Journal Of Political Stability Archive*, 4(1), 208–226. <https://doi.org/10.63468/Jpsa.4.1.12>
- Kamran, Khan, I. U., Mahmood, U., & Khalid, Z. (2026). Job Autonomy, Management Support, And Digital Competence Effects On Productivity: Engagement Mediation. <https://doi.org/10.5281/Zenodo.18857603>
- Khalid, Z., Khan, I.-U., Sarwar, A., Bibi, A., & Ali, N. (2026). The Impact Of Ai, Digital Learning, And Blended Approaches On Student Engagement For Inclusive Education. *The Critical Review Of Social Sciences Studies*, 4(1), 90–105. <https://doi.org/10.59075/5r5c2740>
- Khan, A., Qabool, S., & Rasheed, N. A. (2023). An Empirical Study Of Smartphone Companies In An Emerging Economy: The Role Of Trust And Commitment In Fostering Consumer Engagement And Loyalty Via Social Media. *Pakistan Business Review*, 24(4), 411–435. <https://doi.org/10.22555/Pbr.V24i4.873>
- Mahmood, U., Khan, I.-U., Kamran, & Khalid, Z. (2026). Digital Marketing Adoption As A Strategic Mediator Between Capabilities And Performance: Evidence From Smes In Pakistan. *Social Sciences Spectrum*, 5(1), 102–115. <https://doi.org/10.71085/Sss.05.01.466>
- Manzoor, U., Sajjad Ahmad Baig, Muhammad Hashim, & Abdul Sami. (2020). Impact Of Social Media Marketing On Consumer's Purchase Intentions: The Mediating Role Of Customer Trust. *International Journal Of Entrepreneurial Research*, 3(2), 41–48. <https://doi.org/10.31580/Ijer.V3i2.1386>
- Naeem, Z., Khan, I. U., Shehzadi, I., & Khalid, Z. (2026). Exploring The Relationship Between Sustainable Business Practices And Brand Loyalty: Evidence From Pakistan's Manufacturing And Retail. *Journal Of Political Stability Archive*, 4(1), 401–415. <https://doi.org/10.63468/Jpsa.4.1.23>
- Saljoughian, M. "Mike," Hewett, K., Van Heerde, H. J., & Rand, W. (2025). How Firms Can Steer Social Media Conversations. *Journal Of Marketing Research*, 62(6), 1003–1025. <https://doi.org/10.1177/00222437251329816>
- Sarwar, A., Khan, I. U., & Khalid, Z. (2025). Influencer Marketing's Trust Crisis: The Impact Of Fake Followers, Paid Reviews And Non-Disclosure Of Sponsorship On Brand Reputation Damage. *Journal Of Social And Organizational Matters*, 4(1), 674–687. <https://doi.org/10.56976/Jsom.V4i1.381>
- Shehzadi, I., Khan, I.-U., Ul Rehman, A., Shafia, & Sarwar, A. (2026). How Hr Practices Reduce Turnover Intention: Examining The Mediating Role Of Work-Life Balance. <https://doi.org/10.5281/Zenodo.18953671>
- Sri.D, L. E., Dassucik, D., & Mujianti, S. A. (2025). The Role Of Personalization And Online Store Trust On Purchase Intention Mediated By Customer Satisfaction. *International Journal Of Multidisciplinary Sciences And Arts*, 4(3), 93–100. <https://doi.org/10.47709/Ijmdsa.V4i3.6544>
- Wattoo, M. U., Ma, G., Nawaz, I., Kadirova, Z., Azizova, N., & Gaziyeva, S. (2026). Exploring The Impact Of Ai -Driven Marketing Strategies On Customer Engagement And Loyalty In Pakistan's Online Shopping Sector. *Knowledge And Process Management*, Kpm.70064. <https://doi.org/10.1002/Kpm.70064>