

Reverse Logistics Service Quality and Repurchase Intention Among Generation Z Online Shoppers in Coimbatore, India: The Mediating Roles of Customer Satisfaction and Trust

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Abstract – Online retailing has made product-return services an important part of the customer experience, yet research on post-purchase logistics often gives greater attention to operational efficiency than to consumers' future purchasing decisions. This study proposes a context-specific framework for examining whether reverse logistics service quality influences repurchase intention among Generation Z online shoppers in Coimbatore, Tamil Nadu, India. The framework considers seven service dimensions—information quality, communication quality, timeliness, compensation, empathy, convenience and return policy—and positions customer satisfaction and customer trust as explanatory mechanisms linking return experiences to repurchase intention. A quantitative, cross-sectional survey design is proposed, using a five-point Likert questionnaire administered to Generation Z consumers who have previously requested or completed an online product return. Partial least squares structural equation modelling (PLS-SEM) is proposed for assessing measurement quality, direct paths and indirect effects. To illustrate the reporting format, simulated tables are included; they suggest how results could be interpreted if the hypothesized patterns were supported, but they are not evidence about consumers in Coimbatore. The proposed study may contribute a regional perspective to e-commerce service-quality research and offer practical guidance for platforms seeking to improve return processing, fair compensation, customer support and consumer retention.

Keywords – reverse logistics; e-commerce; Generation Z; customer satisfaction; customer trust; repurchase intention; PLS-SEM; Coimbatore.

I. INTRODUCTION

Digital commerce separates the moment of purchase from the moment of physical inspection. As a result, product mismatch, damage, sizing problems and unmet expectations may lead customers to seek a return or refund. The quality of this post-purchase process can therefore influence more than the immediate resolution of a complaint: it may shape consumers' confidence in the platform and their willingness to buy again. Reverse logistics refers broadly to the movement and management of products from the customer back through the supply chain for return, recovery, resale, recycling or appropriate disposal (Rogers & Tibben-Lembke, 1999; de Brito & Dekker, 2004).

In online retail, return processes are experienced directly by customers through policy clarity, pickup arrangements, response time, refund handling and the fairness of dispute resolution. These experiences are relevant to customer relationship management because customers may judge a platform not only by whether a product arrives, but also by how the seller or platform responds when the transaction does not meet expectations. Prior research has examined electronic service quality, trust, satisfaction and continued purchase intentions, while the supplied reference article integrates seven reverse-logistics dimensions with satisfaction, trust and repurchase intention.

The present draft adapts that model to Generation Z online shoppers in Coimbatore, India. A regional study is useful because consumer expectations, platform usage, delivery coverage and return-service practices may differ across locations and customer groups. The study is not intended to assume that findings from Vietnam automatically apply to India. Instead, it proposes to test the relationships with locally collected data.

1. Research problem

E-commerce firms may invest in visible front-end features while overlooking the customer's experience after a return request. It remains an empirical question which elements of reverse logistics most strongly influence satisfaction and trust among Generation Z shoppers in Coimbatore, and whether these two evaluations help explain repurchase intention.

2. Objectives

- To examine the relationships between seven reverse logistics service-quality dimensions and customer satisfaction.
- To assess the relationships between the same service-quality dimensions and customer trust.
- To test the influence of customer satisfaction and trust on repurchase intention.

- To examine the indirect roles of satisfaction and trust in the relationship between reverse logistics service quality and repurchase intention.
- To develop practical recommendations for e-commerce platforms based on the verified findings.

3. Research questions

Which reverse logistics service-quality dimensions are associated with satisfaction and trust?

- Do satisfaction and trust predict repurchase intention among Generation Z online shoppers?
- Do satisfaction and trust transmit indirect effects from return-service quality to repurchase intention?

II. REVIEW OF LITERATURE AND THEORETICAL GROUNDING

1. Reverse logistics service quality

Reverse logistics is more than a warehouse or transportation function; in e-commerce it also includes customer-facing processes such as initiating a return, arranging pickup, tracking progress and receiving a refund. Rogers and Tibben-Lembke (1999) describe reverse logistics in terms of planning and controlling reverse flows, while de Brito and Dekker (2004) discuss the broader structure and drivers of product-return systems. The supplied reference article operationalises reverse logistics service quality through information quality, communication quality, timeliness, compensation, empathy, convenience and return policy (Ngo et al., 2026).

2. Satisfaction, trust and repurchase intention

Customer satisfaction captures a customer's evaluation of the service experience relative to expectations. Trust reflects the belief that a platform or seller is dependable and will treat the customer fairly. In online transactions, where direct inspection and face-to-face contact are limited, trust can reduce uncertainty and support continued patronage. Prior e-commerce research has linked service quality and consumer perceptions with satisfaction, trust and behavioural intentions (Gefen et al., 2003; Pavlou, 2003). The proposed framework treats satisfaction and trust as related but distinct constructs: satisfaction evaluates the experienced service, whereas trust concerns perceived reliability and fair dealing.

3. Research gap

The supplied article studies Generation Z in Vietnam and provides a detailed reverse-logistics model. The current proposal changes the geographical setting to Coimbatore and frames the work as a fresh empirical test rather than assuming the original findings hold in a different market. The key contribution will depend on the data: local evidence may confirm, qualify or contradict the expected relationships.

III. CONCEPTUAL FRAMEWORK AND HYPOTHESES

The proposed model contains seven exogenous constructs—information quality (IQ), communication quality (CQ), timeliness (TD), compensation (COM), empathy (EM), convenience (CON) and return policy (RP). Customer satisfaction (SA) and customer trust (TR) are mediators, and repurchase intention (RI) is the principal outcome. The model follows the structure of the supplied reference article but is intended for testing with a new Indian sample.

Code	Proposed relationship	Expected direction
H1	Information quality → Satisfaction	+
H2	Information quality → Trust	+
H3	Communication quality → Satisfaction	+
H4	Communication quality → Trust	+
H5	Timeliness → Satisfaction	+
H6	Timeliness → Trust	+
H7	Compensation → Satisfaction	+
H8	Compensation → Trust	+
H9	Empathy → Satisfaction	+
H10	Empathy → Trust	+
H11	Convenience → Satisfaction	+
H12	Convenience → Trust	+
H13	Return policy → Satisfaction	+
H14	Return policy → Trust	+
H15	Satisfaction → Trust	+
H16	Satisfaction → Repurchase intention	+
H17	Trust → Repurchase intention	+
H18–H24	Satisfaction mediates each service-quality dimension's effect on repurchase intention	Indirect effect expected
H25–H31	Trust mediates each service-quality dimension's effect on repurchase intention	Indirect effect expected

The hypotheses are directional propositions, not established results. The mediation hypotheses should be tested using bootstrapped indirect effects and confidence intervals; statistical significance should not be inferred solely from the significance of individual direct paths.

III. RESEARCH METHODOLOGY

1. Research design and population

A quantitative, cross-sectional survey is proposed. The target population is Generation Z consumers residing in Coimbatore who have purchased through an e-commerce platform and have experienced a product return, refund or exchange process within a defined recall period (for example, the previous 12 months). The eligibility criteria, age range and recall period should be fixed before data collection and reported transparently.

2. Sampling and sample size

A purposive screening approach may be used to ensure that respondents have relevant return-service experience, followed by convenience or quota-based recruitment across age, gender, occupation and platform-use groups. The final sample size should be justified through a power analysis or an accepted PLS-SEM sample-size procedure based on the most complex endogenous regression, expected effect size and desired statistical power. Do not state a completed sample size until data collection is finished.

3. Instrument and measurement

Use a structured questionnaire with demographic and screening items, followed by multi-item measures for the seven service-quality dimensions, satisfaction, trust and repurchase intention. Items should be adapted from relevant validated scales and the supplied model, then reviewed by subject experts and pilot-tested with a small group. Use a five-point response scale from 1 = strongly disagree to 5 = strongly agree. Translate and back-translate if more than one language is offered. Obtain informed consent and avoid collecting unnecessary personally identifying information.

Construct	Suggested item focus (paraphrase and validate before use)	Items (suggested)
Information quality	Return instructions are accurate, complete and easy to locate.	3–4
Communication quality	Updates and responses during the return process are clear and timely.	3–4
Timeliness	Pickup, return processing and refund steps occur within a reasonable time.	3
Compensation	Remedies or refunds are fair when service problems occur.	3
Empathy	Customer support understands the inconvenience caused by the problem.	3
Convenience	Initiating and completing a return requires little effort.	3

Return policy	Eligibility, deadlines and refund rules are transparent and fair.	3–4
Satisfaction	Overall evaluation of the platform's return service is positive.	3
Trust	The platform is dependable and handles return cases fairly.	3–4
Repurchase intention	I intend to purchase again from the platform in the future.	3–4

4. Data collection and ethics

Collect data only after institutional or ethics approval where required. Participation should be voluntary, with a clear consent statement, confidentiality protections and the option to withdraw. Screen out incomplete, duplicate or ineligible responses using pre-defined rules and report the number received, excluded and retained. Store data securely and use it only for the stated research purpose.

5. Data analysis plan

Analyse the data using SPSS for data screening and descriptive statistics and SmartPLS or another suitable SEM package for the measurement and structural models. Report missing-data handling, outlier checks and common-method considerations. Assess indicator loadings, internal consistency (Cronbach's alpha and composite reliability), convergent validity (AVE), discriminant validity (HTMT and, where appropriate, Fornell–Larcker), and collinearity (VIF). Then estimate path coefficients and bootstrap confidence intervals, report R^2 for endogenous constructs, effect sizes (f^2), predictive relevance or out-of-sample prediction where appropriate, and indirect effects for mediation. Follow current methodological guidance rather than relying on a single threshold in isolation (Hair et al., 2022; Henseler et al., 2015).

IV. ANALYSIS TABLES AND INTERPRETATION: ILLUSTRATIVE REPORTING ONLY

The tables in this section contain invented example values to demonstrate how results can be presented. They are not derived from an actual Coimbatore survey and should be replaced after the dataset is analysed. The illustrative values must not be cited as findings in a submission.

Table 1. Illustrative respondent profile (example only)

Profile variable	Category	Illustrative n	Illustrative %
Age	18–21	168	56.0
Age	22–26	132	44.0
Gender	Woman	159	53.0
Gender	Man	135	45.0
Gender	Prefer not to say / other	6	2.0

Occupation	Student	207	69.0
Occupation	Employed / self-employed	93	31.0
Return experience	One or more return/refund experiences in past 12 months	300	100.0

Interpretation: In a real study, this table describes who responded and whether the sample fits the eligibility criteria. Percentages should be recalculated from the final valid sample and rounded consistently. The example profile above is simulated and does not describe actual Coimbatore consumers.

Table 2. Illustrative measurement-model assessment (example only)

Construct	Cronbach's α	Composite reliability	AVE	Illustrative assessment
Information quality	0.78	0.86	0.61	Potentially acceptable
Communication quality	0.76	0.85	0.59	Potentially acceptable
Timeliness	0.74	0.84	0.64	Potentially acceptable
Compensation	0.79	0.87	0.69	Potentially acceptable
Empathy	0.81	0.88	0.71	Potentially acceptable
Convenience	0.77	0.86	0.67	Potentially acceptable
Return policy	0.75	0.84	0.58	Potentially acceptable
Satisfaction	0.83	0.90	0.75	Potentially acceptable
Trust	0.80	0.88	0.70	Potentially acceptable
Repurchase intention	0.82	0.89	0.73	Potentially acceptable

Interpretation: If empirical estimates resemble these illustrative values, the constructs would generally show adequate internal consistency and convergent validity. This conclusion cannot be made until actual values are estimated. Discriminant validity must be examined separately, especially for satisfaction and trust, which may be conceptually related.

Table 3. Illustrative structural paths (example only)

Path	β (example)	t (example)	p (example)	Illustrative decision
Information quality $\rightarrow$ Satisfaction	0.06	1.10	0.271	Not supported
Information quality $\rightarrow$ Trust	0.04	0.78	0.436	Not supported
Communication quality $\rightarrow$ Satisfaction	0.05	0.91	0.363	Not supported
Communication quality $\rightarrow$ Trust	0.03	0.59	0.556	Not supported
Timeliness $\rightarrow$ Satisfaction	0.16	2.87	0.004	Supported
Timeliness $\rightarrow$ Trust	0.08	1.52	0.129	Not supported
Compensation $\rightarrow$ Satisfaction	0.19	3.24	0.001	Supported
Compensation $\rightarrow$ Trust	0.17	2.98	0.003	Supported
Empathy $\rightarrow$ Satisfaction	0.15	2.61	0.009	Supported
Empathy $\rightarrow$ Trust	0.18	3.11	0.002	Supported
Convenience $\rightarrow$ Satisfaction	0.14	2.45	0.014	Supported
Convenience $\rightarrow$ Trust	0.12	2.09	0.037	Supported
Return policy $\rightarrow$ Satisfaction	0.07	1.29	0.197	Not supported
Return policy $\rightarrow$ Trust	0.20	3.42	0.001	Supported
Satisfaction $\rightarrow$ Trust	0.29	5.10	<0.001	Supported
Satisfaction $\rightarrow$ Repurchase intention	0.31	5.64	<0.001	Supported
Trust $\rightarrow$ Repurchase intention	0.34	6.02	<0.001	Supported

Interpretation: These hypothetical coefficients illustrate a possible pattern in which timely processing, fair compensation, empathetic support and convenience contribute to positive post-return evaluations, while policy transparency may be more closely associated with trust than with satisfaction. Satisfaction and trust are shown as

positive predictors of repurchase intention. These are examples only; actual paths may be weaker, stronger, non-significant or negative.

Table 4. Illustrative explanatory power (example only)

Endogenous construct	R ² (example)	Interpretation if observed
Customer satisfaction	0.42	Predictors explain 42% of variance; moderate explanatory power in this example.
Customer trust	0.46	Predictors explain 46% of variance; moderate explanatory power in this example.
Repurchase intention	0.44	Satisfaction and trust explain 44% of variance in this example.

Interpretation: R² is the proportion of variance explained by the model for a particular endogenous construct. It is not a measure of causal proof. The final manuscript should also report predictive assessment, effect sizes and confidence intervals where appropriate.

Table 5. Illustrative mediation reporting template (example only)

Indirect pathway	Indirect β (example)	95% bootstrap CI (example)	Interpretation
Compensation → Trust → Repurchase intention	0.058	[0.021, 0.101]	Illustrative positive indirect effect
Empathy → Trust → Repurchase intention	0.061	[0.024, 0.108]	Illustrative positive indirect effect
Return policy → Trust → Repurchase intention	0.068	[0.030, 0.116]	Illustrative positive indirect effect
Timeliness → Satisfaction → Repurchase intention	0.050	[0.015, 0.091]	Illustrative positive indirect effect

Interpretation: An indirect effect is statistically supported when the relevant bootstrap confidence interval excludes zero, subject to the chosen inference procedure and reporting standard. The table is only a format example. In the actual analysis, test each pre-specified indirect path and report the estimated effect, confidence interval and p-value if supplied by the software.

V. CONCLUSION

This manuscript proposes a regional test of a reverse-logistics model connecting seven service-quality dimensions with satisfaction, trust and repurchase intention

among Generation Z online shoppers in Coimbatore. Its contribution will rest on collecting valid local data and transparently evaluating the measurement and structural models. The illustrative tables show a journal-style format for presenting descriptive statistics, reliability and validity, path coefficients, explanatory power and mediation. They must be replaced with genuine results before the work is submitted or represented as completed research.

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