

## RETAIL FINANCE DISTRIBUTION: EVIDENCE BRIEF

# Consumer Protection and Risk Management: Does It Improve Customer Experience?

## Background

Digital payment technologies and mobile financial services have changed how unbanked and underbanked populations reach financial services, cutting transaction costs, raising transaction speed and extending access beyond bank branches (Shahen & Sharaf, 2025; Tun, 2020; Torres Ortega et al., 2024).

That expansion has also enlarged consumer risk. Low digital literacy, unclear agent commission structures, limited interoperability and fraud — vishing, phishing, identity theft and overcharging — erode trust and degrade customer experience (Ali et al., 2020; Ghana Mobile Money Study, 2024).

Consumer protection and risk management therefore condition whether digital financial services are safe, reliable and used repeatedly.

## Scope of the Synthesis

This brief synthesises six studies published between 2020 and 2025 — Ali et al. (2020), Tun (2020), Torres Ortega et al. (2024), the Ghana Mobile Money Study (2024), Raphael (2025) and Shahen & Sharaf (2025) — covering Ghana, Uganda, Tanzania, Myanmar and Colombia. Methods include structural equation modelling, stratified and district-level surveys, a systematic literature review and mixed-methods analysis.

The interventions examined are consumer protection and risk management measures: multi-factor authentication, transparent agent commission structures, instant-payment interoperability and digital literacy programmes. The outcomes of interest are customer experience and satisfaction, perceived security, trust and agent compliance. No study in this set evaluates a consumer protection measure against a customer-experience outcome experimentally, so the pathways below are associational rather than causal.

## 2. Synthesis of Findings

Table 1. Studies included in the synthesis

| Study and country                      | Method and sample                                                           |
|----------------------------------------|-----------------------------------------------------------------------------|
| Ali et al. (2020) — Uganda             | Survey of registered users, agents and IT officers on mobile money security |
| Tun (2020) — Myanmar                   | Structural equation modelling of trust development, N = 250                 |
| Torres Ortega et al. (2024) — Colombia | Study of microenterprises and payment infrastructure access                 |
| Ghana Mobile Money Study (2024)        | Agent survey with objective testing of commission knowledge, N = 116        |
| Raphael (2025) — Tanzania              | District survey and regression analysis of TIPS interoperability, N = 385   |
| Shahen & Sharaf (2025) — multi-country | Systematic literature review of digital payment technologies                |

Designs are as reported by the authors; no study in the set evaluates a protection measure experimentally.

### 2.1 Security Risk Management and Customer Trust Development

Managing security risk is closely tied to trust and satisfaction. In Uganda, Ali et al. (2020) find security vulnerability to be the leading brake on adoption, with identity theft, authentication attacks, phishing, smishing and vishing identified as the principal threats. Vishing is the most prevalent — 49.8% of respondents strongly agree it is common — while 34.7% strongly acknowledge identity theft as a critical risk and 33.4% report that PIN sharing is routine, driven by low literacy or fear of transaction error.

In Myanmar, Tun (2020) models trust among 250 users. Trust is driven directly by customer satisfaction ( $\beta = 0.584$ ) and service quality ( $\beta = 0.295$ ), both shaped in turn by supportive enabling conditions ( $\beta = 0.451$  and  $\beta = 0.628$ ). The classic Technology Acceptance Model

variables — perceived usefulness and perceived ease of use — are statistically insignificant. Investment in app functionality without matching risk mitigation does not build durable trust.

The review evidence points the same way. Shahan and Sharaf (2025) find that digital payment technologies advance inclusion only where trust, security and supporting infrastructure are in place, and identify security and privacy concerns as recurrent constraints. Read together, these sources present risk management less as a compliance obligation than as a precondition for the customer experience that sustains use.

## 2.2 Agent Contract Transparency and Customer Conduct Gaps

Contract clarity between providers and front-line agents is an under-examined arm of consumer protection, and agents are the interface most customers actually meet. The Ghana Mobile Money Study (2024) tested 116 agents and found a large comprehension deficit: 27% believed they understood how cash-in commissions are calculated, only 5% could explain the computation correctly and completely, and 51% could not describe it at all. Expectations diverge accordingly, with 91% reporting commissions lower than expected.

The downstream effect is measurable in conduct. While 75% of agents agree that tariff posting is good practice, only 9% were observed displaying tariffs and 35% admitted overcharging customers to recover opaque deductions. Upstream contractual opacity converts into unauthorised pricing at the counter. The study also reports the converse: greater commission transparency is associated with higher likelihood of tariff posting, greater work satisfaction and longer working hours.

Two implications follow. Disclosure obligations directed only at the customer interface will not reach the pricing behaviour customers encounter, because that behaviour is set by what the agent understands about their own remuneration. And agent-facing remedies — written commission schedules, itemised deduction statements, functioning complaint channels — are consumer protection instruments, not merely channel-management tools.

## 2.3 System Interoperability, Accessibility and Financial Convenience

Interoperability is among the strongest available levers on consumer cost and convenience. In Tanzania, Raphael (2025) examines the Tanzania Instant Payment System (TIPS) across 385 respondents: interoperability improves ease of access ( $M = 4.32$ ), cost reduction ( $M = 4.10$ ) and trust and reliability ( $M = 4.05$ ), with positive and significant estimates for financial access ( $\beta = 0.412$ ,  $p < 0.01$ ) and for usage and user trust (both  $\beta = 0.298$ ,  $p < 0.05$ ). Removing network exclusivity lets rural users

transact across competing platforms and eases agent float constraints.

Integration remains partial. While 71% of respondents report fully functional mobile-to-mobile transfers, only 48% report smooth mobile-to-bank transfers and 33% find bank-to-fintech integration non-functional. In Colombia, Torres Ortega et al. (2024) report a strong positive association between payment infrastructure accessibility and the social impact of microenterprises, mediated by financial inclusion ( $\beta = 0.26$ ,  $p = 0.005$ ) and social support networks ( $\beta = 0.31$ ,  $p < 0.001$ ).

Together the Tanzanian and Colombian evidence separates two claims that are often conflated. Connectivity between providers lowers the price and friction of a transaction; whether that translates into use depends on mediating conditions — literacy, trust and social networks — outside the payment system itself. The partial-integration figures make the same point from the supply side: a consumer whose bank leg fails is not protected by the existence of a national switch, and the residual friction falls hardest on those who most need low-cost transfers.

**Table 2. Direction of evidence in this cell**

| Pathway                                                  | Direction of evidence      |
|----------------------------------------------------------|----------------------------|
| Security risk management and user trust                  | Positive (SEM)             |
| Satisfaction and service quality as drivers of trust     | Positive (strong)          |
| Perceived usefulness and ease of use as drivers of trust | Not significant            |
| Commission transparency and agent tariff compliance      | Positive (association)     |
| Opaque commissions and consumer overcharging             | Negative                   |
| Interoperability and access, usage and trust             | Positive                   |
| Infrastructure access and microenterprise outcomes       | Positive (mediated)        |
| Authentication upgrades and fraud reduction              | Recommended, not evaluated |
| Long-term retention effects of protection measures       | Not tested                 |

*Directions reflect six studies only; “not evaluated” and “not tested” denote absence of evidence, not evidence of absence.*

## 3. Cross-Cutting Trends and Insights

*Several systemic patterns recur across the six studies:*

- Provider-agent relationships shape consumer protection:** poorly structured commission arrangements push agents to overcharge or conceal fees to defend margins, transferring an upstream contracting failure onto the consumer (Ghana Mobile Money Study, 2024).

- b. **Trust rests on service quality and security, not usability:** reliable service, responsive support and transaction security matter more than interface design (Tun, 2020; Raphael, 2025), so support capacity and uptime belong in protection frameworks alongside disclosure and authentication rules.
- c. **The dominant security risks are human:** phishing, vishing, identity theft, PIN sharing and thin digital literacy expose consumers to loss more than technical failure does (Ali et al., 2020; Shahan & Sharaf, 2025). Protection designed for a technically fluent user mis-targets the risk.
- d. **Interoperability lowers consumer cost:** limited interoperability imposes cross-network fees on low-income users; instant-payment platforms and standardisation reduce those costs and widen access (Raphael, 2025).
- e. **Protection measures are recommended more often than evaluated:** authentication upgrades, complaint mechanisms and literacy campaigns are widely advocated, but none is tested against a measured change in customer experience, which limits what can be claimed about effect size or durability.

## 4. What Works

*The evidence supports four approaches:*

- a. **Transparent agent commission structures:** clear written terms and accessible complaint channels improve agent understanding, raise tariff display and reduce arbitrary overcharging (Ghana Mobile Money Study, 2024).
- b. **Multi-factor authentication and biometrics:** PINs combined with one-time passwords or biometric verification strengthen accounts against unauthorised access (Ali et al., 2020; Shahan & Sharaf, 2025).
- c. **National interoperability frameworks:** platforms such as TIPS connect operators and banks, improving convenience, reducing transfer fees and increasing competitive pressure (Raphael, 2025).
- d. **Digital literacy and awareness campaigns:** community-based programmes help consumers recognise vishing, avoid PIN sharing and transact with confidence (Ali et al., 2020; Torres Ortega et al., 2024). The Colombian evidence suggests delivery through existing social networks outperforms stand-alone provider messaging.

## 5. What Doesn't Work

*Three approaches show limited or adverse results:*

- a. **Numeric-only PIN authentication:** short numeric PINs leave users open to brute-force attempts, shoulder surfing and vishing (Ali et al., 2020).
- b. **Opaque commission processes:** calculating commissions without clear and timely information breeds mistrust, weakens tariff compliance and encourages overcharging (Ghana Mobile Money Study, 2024).
- c. **Technology-led adoption campaigns:** promoting usefulness and ease of use without addressing service quality, support and transaction security does not establish trust or sustained use (Tun, 2020). Messaging that outruns service reliability also raises expectations the system then fails to meet.

## 6. Challenges

*Five constraints limit scale-up:*

- a. **Infrastructure deficits and network inconsistency:** timeouts, double charging and slow settlement, particularly in remote areas, damage trust and push users to cash out at the first opportunity, draining the float agents depend on (Ali et al., 2020; Raphael, 2025).
- b. **Large-scale digital illiteracy:** limited digital and financial literacy restricts safe self-operation, forces reliance on intermediaries and raises exposure to agent-driven fraud and social engineering (Ali et al., 2020; Torres Ortega et al., 2024).
- c. **Severe agent training gaps:** 30% of Ghanaian agents received no formal training before starting operations, producing procedural error and non-compliant pricing (Ghana Mobile Money Study, 2024).
- d. **Fragmented regulation and partial integration:** cross-platform integration between operators and banks lags, and enforcement rarely compels full interoperability at bank and merchant level, holding fees high for the poorest segments (Raphael, 2025; Shahan & Sharaf, 2025).
- e. **Uneven evidence quality:** the six outputs include a working paper, an unpublished market study and a secondary review, and several reported associations have not passed external peer review. Samples are modest and single-country, so Table 2 should be read as provisional rather than settled.

## 7. Areas for Further Research

*Five gaps stand out:*

- a. **Longitudinal impact of protection measures:** how agent applications or biometric authentication affect satisfaction, transaction frequency and retention over time.

- b. **Non-adopters and rejectors:** the trust, security and cultural barriers that keep non-users out, rather than further study of existing adopters (Tun, 2020; Ali et al., 2020).
- c. **Comparative regional analysis:** cross-country panel studies of whether regulatory frameworks reduce fraud and protect rural consumers across differing institutional capacities (Shahen & Sharaf, 2025; Raphael, 2025).
- d. **Cryptographic and machine-learning fraud detection:** feasibility of biometric template protection, automated transaction monitoring and real-time detection of vishing and smishing patterns (Ali et al., 2020).
- e. **Consistent measurement of customer experience:** the six studies proxy experience through satisfaction scores, trust indices, mean ratings and self-reported compliance, none comparable across studies. A shared measurement framework would allow future work to pool findings rather than accumulate them.

## 8. Conclusion

Consumer protection and risk management are central to customer experience in digital financial services. Evidence from Colombia, Myanmar, Uganda, Tanzania and Ghana converges on one point: technology alone does not resolve financial exclusion. Where security is weak, commissions are opaque or networks do not interconnect, expansion produces registered accounts rather than trusted, repeated use.

For providers, the implications are concrete: strengthen authentication beyond numeric PINs, monitor high-value transactions, and make agent contracts and commission computations explicit and verifiable. For policymakers and central banks, they are enforceable conduct rules, interoperability mandates that reach bank and merchant level, and sustained investment in digital literacy. Where enforcement capacity is thin, publishing agent commission schedules is the cheapest of these measures and the one with the clearest documented link to consumer outcomes.

Two qualifications should travel with these conclusions. The geographic spread is thin — five countries, one study each, with no replication of any finding in a second setting — so the consistency observed reflects agreement between different questions rather than confirmation of the same one. And the strongest quantitative results, the Myanmar trust model and the Tanzanian interoperability estimates, rest on cross-sectional data, which cannot separate the effect of protection measures on trust from the tendency of trusting users to report better experience.

The weakest link is causal attribution. The studies establish that trust, transparency and interoperability move together with satisfaction, but none tests a protection measure against a customer-experience outcome over time. Measuring success by trust, transparency and continued use — not by accounts opened — remains the appropriate standard, and the appropriate research agenda.

For programme design, the sequencing implied by this evidence is clear even where causal estimates are missing: settle the terms on which agents are paid, then the authentication and monitoring that protect the account, then the interconnection that lowers the price of using it, with literacy support running alongside rather than afterwards. Each step addresses a failure the studies document directly, and each can be measured without waiting for the longitudinal work this cell still lacks.

### About this Evidence Brief

This evidence brief is a cell-wise summary of studies of the cell “Consumer protection and risk management → Customer experience and satisfaction” from ICED’s Evidence and Gap Map of the Retail Finance Distribution Initiative. It brings together the available studies within this intervention–outcome relationship to set out what the evidence says about how consumer protection and risk management relate to customers’ experience of retail financial services.

For the full map, visit [www.iced-eval.org/evidence-and-gap-maps](http://www.iced-eval.org/evidence-and-gap-maps)

### References

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