Digital & Physical Infrastructure

Unreliable Payment System & Network

This barrier refers to limited or unreliable access to mobile networks and internet services, which constrains women's ability to access digital financial services and undermines consistent use and trust in those services.

Why is this barrier important?

Reliable transaction systems are critical for building trust and enabling sustained use of digital financial services, particularly among women. When transactions fail, are delayed, or require multiple attempts, users may lose confidence in digital channels and revert to cash-based alternatives. These disruptions not only affect user experience but also weaken trust in the broader financial system, limiting adoption and long-term engagement. For financial service providers, unreliable transaction performance reduces system credibility and can slow uptake, particularly in contexts where users have limited tolerance for risk or uncertainty.

Connected Barriers

Product & Market Collaboration
Low scalability of products
Lack of reliable & high quality in-person services

Consumer Protection
Difficulty resolving complaints

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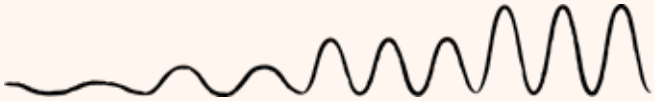
Distance from financial service point
Lack of inclusive and instant payment services
Lack of diversity in distribution channels
High mobile internet cost

Most Relevant Segments

1	2	3	4
Excluded, marginalized	Excluded, high potential	Included, underserved	Included Not underserved

Customer Journey Relevance



Phase 1:	*Phase 2:*	*Phase 3:*	*Phase 4:*
Account Ownership	Basic Account Usage	Active Account Usage	Economic Empowerment

Key evidence relevant to this barrier

Reliable payment systems are critical to the effective use of digital financial services. Outages and disruptions lead to failed transactions and interruptions in economic activity. These failures disproportionately affect low-income women, who typically have lower levels of digital financial capability but rely on digital channels for small, time-sensitive transactions linked to informal work and micro-enterprises. Repeated transaction failures can erode trust and confidence in digital systems, discouraging continued use and reinforcing reliance on cash.

Reliable infrastructure underpins not only access to DFS but also user trust and sustained use. Disruptions in connectivity and transaction performance influence provider choice, reduce confidence, and can drive users - particularly women - back to cash-based alternatives.

- Digital payment systems depend on reliable infrastructure; failures in connectivity, system uptime, or transaction processing reduce trust and uptake, particularly among first-time users. Evidence from government payment programs shows that transaction failures and delays discourage continued use and can lead beneficiaries to revert to cash. World Bank n.d.
- The shift toward digital payments increases reliance on internet-connected systems, meaning that individuals without reliable access or consistent service face barriers to participating in the digital economy. As transactions move online, lack of reliable infrastructure can restrict access to economic opportunities and delay adoption of digital financial services. (IAD 2025).
- Network quality and provider reputation matters to customers choosing a mobile money provider. Survey respondents' (users of DFS) in Kenya reported that access has been concentrated almost exclusively on the M-Pesa platform in mobile money, and that impacted their choice of digital credit providers. (IPA, 2021)
- Respondents reported that the main reasons to choose a mobile money provider are based on having a better network quality/coverage and the reputation of the mobile providers (37%). (IPA, 2021)
- Just over 72% of mobile banking users surveyed in Kenya as part of FSD Kenya's FinAccess Household Survey cited the "inability to access account through mobile/internet banking/ATM/system downtime" as a challenge. (FSD Kenya, 2021)
- Recent studies indicate that technical failures – not just user skills or social norms – drive many women back to cash. In rural India, network and system reliability problems were top barriers to UPI (Unified Payment Interface) and other digital payments. For example, a survey of 40 rural consumers in Himachal Pradesh found poor internet connectivity to be the biggest obstacle to UPI usage. The study emphasizes that addressing server failures is critical: "reducing UPI downtime and technical failures will enhance user experience," since unreliable transactions push people away. (Aishwarya, 2025)
- A 2024 Uganda survey ranked "poor mobile network" as the main barrier. Female users reported that weak signals frequently delay or interrupt transactions, forcing them to restart or give up. For example, one woman said "when withdrawing money [the transaction] can fail... it says connection error". Such long delays are untenable, especially for time-sensitive needs, and cause women to avoid mobile channels. (AfricaNenda, 2024)
- Distrust among participants in the different aspects of a mobile money provider's service leads to a variety of impacts. For example, observed distrust in the reliability of mobile money services in Nigeria led to users abandoning use of mobile money, resulting in declining account ownership. (GSMA, 2024)

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Key evidence relevant to this barrier

When transaction systems are unreliable, users lose confidence in digital financial services. Failed or delayed transactions, unclear confirmations, and service interruptions create uncertainty, often leading women to revert to cash-based alternatives. This undermines not only adoption but sustained use, particularly in contexts where trust is fragile and tolerance for risk is low. Addressing this barrier requires improving system reliability while also ensuring customers can complete and verify transactions - even during outages - to maintain trust and continuity of service.

- **Provide multiple transaction confirmation options**, such as SMS, USSD, and printed receipts, to allow customers to verify transactions even during service disruptions. Train agents to handle outages effectively, including recording transactions and reconciling them once systems are restored.
- **Communicate transparently with customers about service interruptions**, including expected resolution times and available alternatives. Offer customer training on completing transactions in low-connectivity areas to help maintain trust and usability during downtime.
- **Design financial services that can work offline**, such as batch reconciliation or via Bluetooth device, to ensure payments, deposits, or account updates are not interrupted by network failures. This can be especially valuable for rural or low-connectivity regions where women are more likely to transact in local markets.
- **Offer Wi-Fi in physical branch locations**. This approach is relatively low-cost for FSPs but can have a significant impact on adoption, especially for rural or low-income women who often cite affordability and connectivity as barriers to digital finance.