

Mediators as Enablers: Bridging Digital Access and Sustained Use for Women

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Background.

In urban India, 52% of women have ever used the internet, compared to 72% of men ([NFHS, 2021](#)). The gender digital divide and differential access to ICTs have hampered women's ability to participate meaningfully in the digital world because women remain at a disadvantage in terms of digital literacy and confidence ([UNICEF, 2023](#)). Women face discouragement and risk acrimony and ridicule from their families when approaching new services as they are perceived as less experienced in worldly affairs and susceptible to fraud ([LIRNEasia, 2022](#)).



This leaves women outside the digital world with no helping hands to usher them into the opportunities it presents.

Secondary data, market research and [IIHS's previous work](#) over the last decade on gig workers, including women in India's platform economy, inform us that unlike the imagined ideal single-user of technology— **women exist within relational power structures and outside this imagination of the ideal single-user of technology**. This leads to poor user experience resulting in trust deficits, lower adoption and drop-outs from digital platforms and services. In this context, we measured women's device ownership, shared usage, and whether trust and literacy are shared attributes as well.

Shared literacy and trust are potential pathways to accelerate women's uptake of e-government services, or digital services accessed through digital public infrastructure, be it in livelihoods, health, or other sectors. IIHS conducted a learning study on women's independent and aided use of digital and platform services to explore how different kinds of mediators in women's lives impact the awareness, uptake and successful usage of e-government and commercial digital platforms. By measuring the relationship to mediators, what trust they embody, and how often women go to them we focused on three key pillars of understanding digital connectivity: **Accessibility, Digital Literacy and Norms**.

The digital transformation of the labour market is a meaningful site to understand the adoption of digital services by women users and what influences their behavior. In India and the Global South, women's work has largely been concentrated in the informal economy, in sectors such as domestic work, small manufacturing, street-vending and home-based work. These self-employed and wage workers do not have direct labour platforms impacting their work at scale, but they do have opportunities available from payment, credit, social media, and communications platforms that they can use in their work.



This study examined women's digital literacy and confidence with a focus on their independent or aided use of smartphones, and their ability to successfully use digital platforms such as YouTube and WhatsApp for communications or payment applications like Gpay or PhonePe in their livelihoods. To do so, we explored institutional, community and household mediators that shape user behaviour, governing device and account sharing (a key feature of existing digital practices in India - is dictated by economic constraints and cultural values), reservations regarding online transactions (issues of trust, and attitudes towards online frauds), and help-seeking patterns of women etc.



Research objectives.



Investigate the practices of women's device ownership and platform usage individually and within the household.



Examine the role of mediators in building trust in women's interactions with digital and offline services (both shared and individual access) and their role in women being end-users of digital and platform services.



Adapt women's behaviours around trust and safety to new digital open ecosystems whose governance structures are being developed to encourage women's empowerment and sustained technology usage.

Approach.

To this end, we developed an overall approach



IDENTIFYING THE MEDIATORS

We observed the patterns of women's usage of smartphones, platforms and digital services, following which, we determined the role of mediators in the digital skilling and employability ecosystem by determining how informal women workers approach mediators in instances of setting up accounts, being defrauded, accessing new opportunities, troubleshooting and learning new skills.



QUANTIFYING RELATIONSHIPS BETWEEN WOMEN AND MEDIATORS

We bucketed mediators in women's lives into four institutional categories: households, social enterprises, worker associations, and unions across three sectors of work - domestic work, street-vending, and self-employed tailoring.

The study used a mixed-methods approach to understand both individual and shared use of smartphones and platforms by women. We conducted a survey with 719 women, In-depth interviews with 31 women, and Focused Group Discussions with 30 women who also participated in the survey. The study was conducted across five cities: New Delhi, Anekal (Karnataka), Jaipur (Rajasthan), and Hosur and Puducherry (Tamil Nadu) with the membership base of three distinct organizations – Self Employment Women's Association, Delhi, the Rajasthan Mahila Kamgar Union, Jaipur and LabourNet Services Private Limited representing the institutional forms of worker association, union, and social enterprise.



These institutions maintain regular contact with women workers. In our sample of 719 survey participants, institutional mediators had been of help to workers in four kinds of work and non-work contexts.

Nearly 80% of the sample said they would reach out to them again, and most women said they knew the name of the local representative from the institutional mediator who they could reach out to. Several factors cause difficulties in organising and collectivizing women workers – often the need to earn outweighs collective concerns, differences in community identities such as caste status create fissures in collectives, women are burdened with home, childcare and paid work leaving them no time for political action or even collective presence. For women to report active membership, trust, and accessibility of these three institutions is an incredible feat making these important mediators who can contribute to equitable digital transformation for women.

Drawing on insights from our in-depth interviews, we reviewed global frameworks for measuring digital literacy and found them unsuitable for populations with limited prior exposure to technology. The framework we use adapts the Lahore University of Management Sciences (LUMS) approach ([Ali, Raza, and Qazi 2023](#)) and incorporates **modules on internet terms, digital literacy, platform-neutral and platform-specific literacy, and added modules on online safety and accessibility features.**

Insights.

We yielded valuable insights on informal women workers' use of smartphones and digital services for livelihood, their digital literacy and confidence, and help-seeking patterns.

1 Smartphone Ownership, Access and Shared Usage

Women in our study are long-time residents of metropolitan India, regions like Puducherry, which are known to have higher rates of smartphone usage, and women who have had access to public benefits schemes where they have received smartphones like in Rajasthan. **Access to a smartphone with steady internet was nearly universal, and reported usage was fairly high (84%), but ownership was not (64%).** Ownership varied by ability and choice to spend on smartphones, age, sector of work, and more. Most households reported (80%) two or more smartphones. **We found that a smartphone becomes a shared device in a low-income household regardless of whether the primary owner is an adult woman or a man.** Both of these characteristics, along with limited literacy, limit women's ability and confidence to explore their devices. Instead, they were doing it more often in the company of their children or a known acquaintance.

2 Identified Uses of Digital Services in Livelihoods

These practices were made apparent by peer workers, clients, or people in the supply chain who were not available to workers in their proximity. The most common **uses reported in the in-depth interviews include: sending and receiving payments, upskilling and market research, communication (with clients and suppliers), marketing goods, time management and scheduling.** For street vendors, both mobile vendors and those with stationary set-ups, payment platforms were crucial for sending and receiving payments from clients and suppliers. For domestic workers, communications platforms were important for scheduling jobs with clients and managing free time between shifts. For tailors, social media platforms such as Instagram emerged as sites of commercial activity, including market research, creating communities of buyers, selling and marketing their products.

3 Evidence of Familiarity and Use of Digital Devices, Features, and Platforms

Women were surveyed for their confidence and comprehension of platform-specific and platform-neutral terms. We found that women are more familiar with smartphone-specific terms (such as SMS, internet, screenshots) and the familiarity with common digital terms began to dip as website-based terms were introduced (such as URL, bookmark). **In terms of platform-neutral use of the smartphone, most women used digital devices for personal communication and leisurely entertainment.** Women on the platform Sahi.ai (developed by Labournet) which was running an 'earn-while-you-learn' program also had learning as one of the prominent uses. Women across the board showed greater and more independent uses of basic phone features like audio calls and voice messages. Only a quarter of the sample had developed their own uses of digital platforms in their livelihoods. YouTube was the most leveraged platform which acts as a source of learning as well as market intelligence on trends across geographies. WhatsApp and Facebook followed next – acting as a channel of communication for logistics, finding work, as well as marketing. These findings suggest that women's awareness and proficiency are built around the **relevance of use cases and diffused through social and decentralized learning channels.**

4 Indian women users in our study ranked higher as ‘passive users’ than active users

A finding that is acknowledged in industry practice. Passive users scroll, read, listen, and watch versus active users who filter and sort information, who engage in transactions, grievance sharing, and input information into accounts. Women who were engaged by clients or customers (domestic work and vending, tailoring respectively) to cook particular items, to design and tailor to fit new trends were more likely to become active users because they saw a chance to increase their earnings and maintain relationships with clients.

5 Help-seeking in services – who mediates?

Spouses are the most important mediators, with 32.4% of respondents stating that they are the first to interact with when dealing with **any issue**. This was followed by sons (8.91%) and other male members of the household (7.95%). Institutional actors like the union and friends or colleagues in the neighbourhood followed very closely after family (7.84% and 6.67%), indicating their importance, respectively. Relevant government offices and service kiosks like E-Mitra were also cited as important mediators outside the family. Inter-generational mediators, friends, fictive kin, and others in the neighbourhood are important, though less so than family, for day-to-day troubleshooting on the phone, which includes basic functionalities, messaging, social media, and privacy-related issues.

6 In sensitive and crucial cases, women turn outside the family to trust communities of women, such as unions and associations

In sensitive cases of domestic violence and financial fraud, women turn to unions and associations before police and government authorities. These communities manage grievances, actions, and outcomes. In crucial aspects of life where expert knowledge is required again women turn to unions and associations – such as if they are facing harassment at work, wage negotiations, advice on children’s education, upskilling, and accessing government services. **These communities are vital for women to feel safe while trying new things** without knowing the outcome.

7 Financial services are widely adopted but have restricted use

53% of women use their wages independently, but when it comes to digital financial services, we see this drop to 33%. There is a split in usage—women receive payments independently but do not make payments without the support of peer workers, family, or unions. There is a generalized fear around this, apart from family constraints, although those are key in shaping this behaviour. Many vendors developed practices to assure themselves of the receiver’s identity – such as sending 1 Re before sending more money. For low-income families, one wrong transaction impacts their income security.



This when matched with unreliable information about grievance redressal within the UPI ecosystem, the family, peer worker and neighbour women are left restricted in their use.

Figure 1: Women share their phones with household members more than adult male counterparts

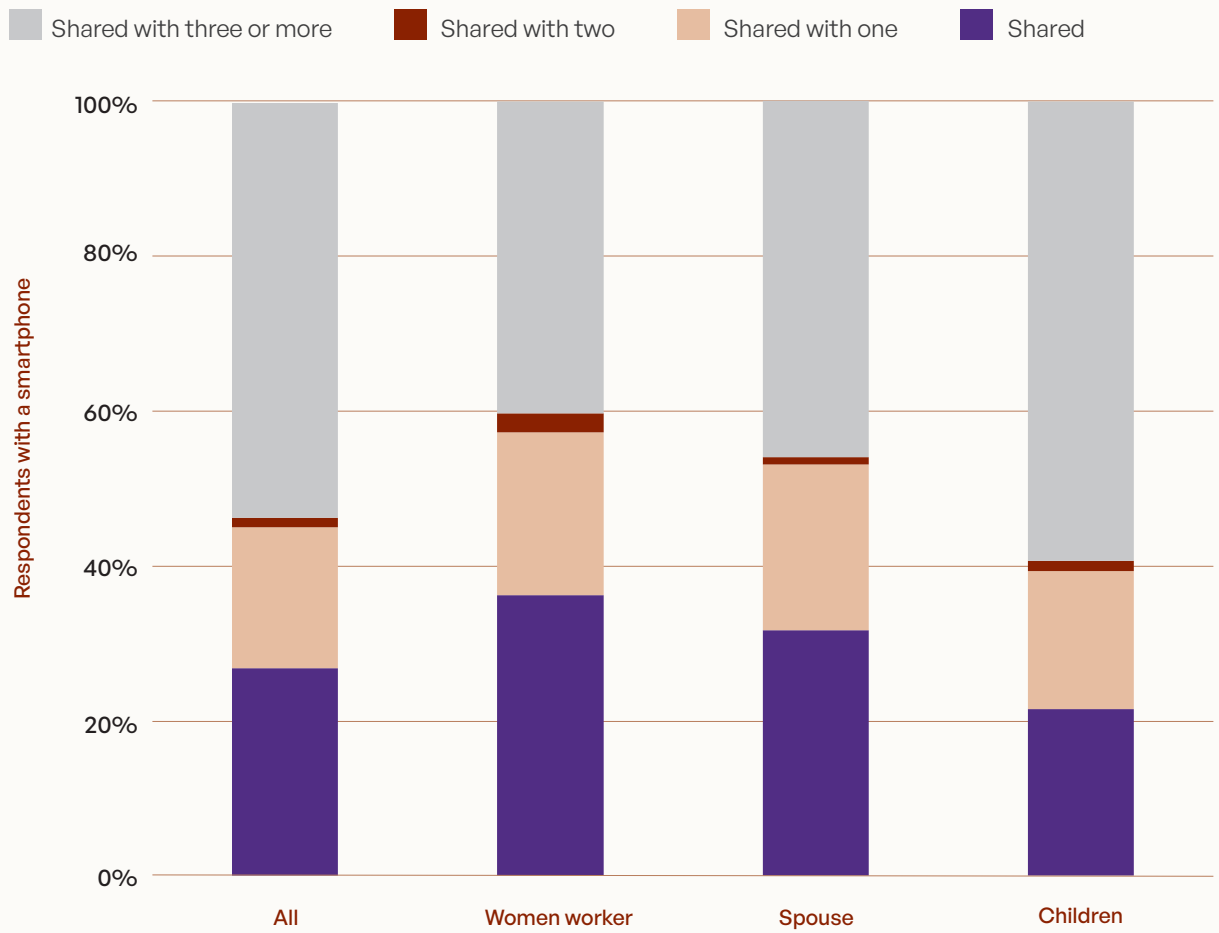


Figure 2: Women have strong relationships to mediators

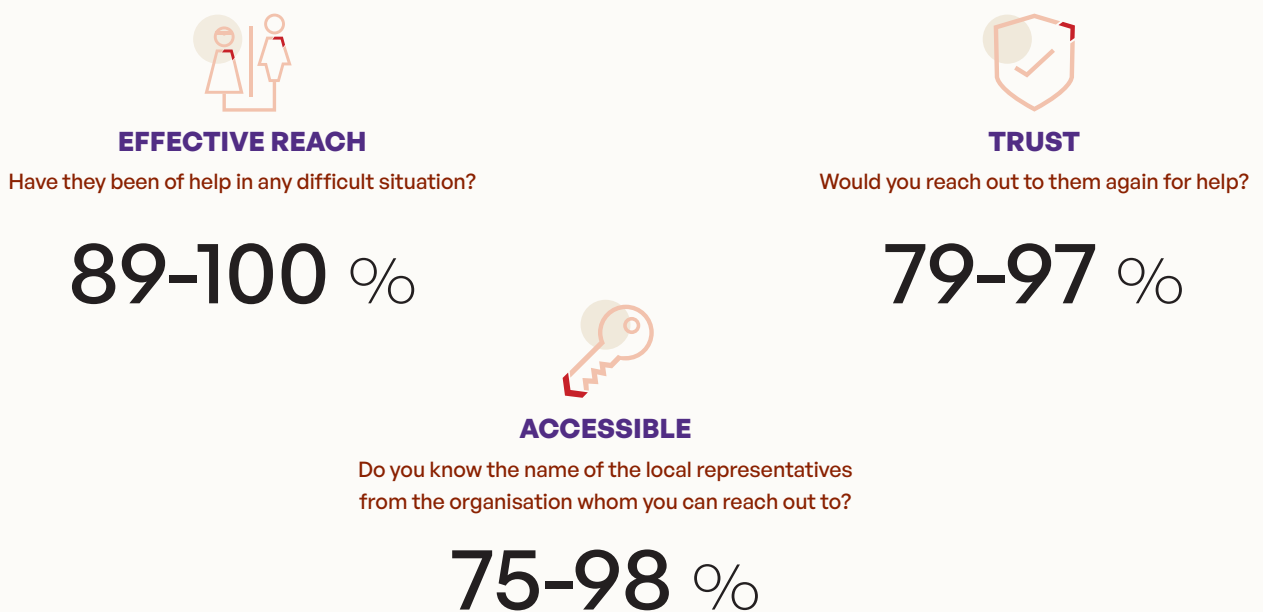
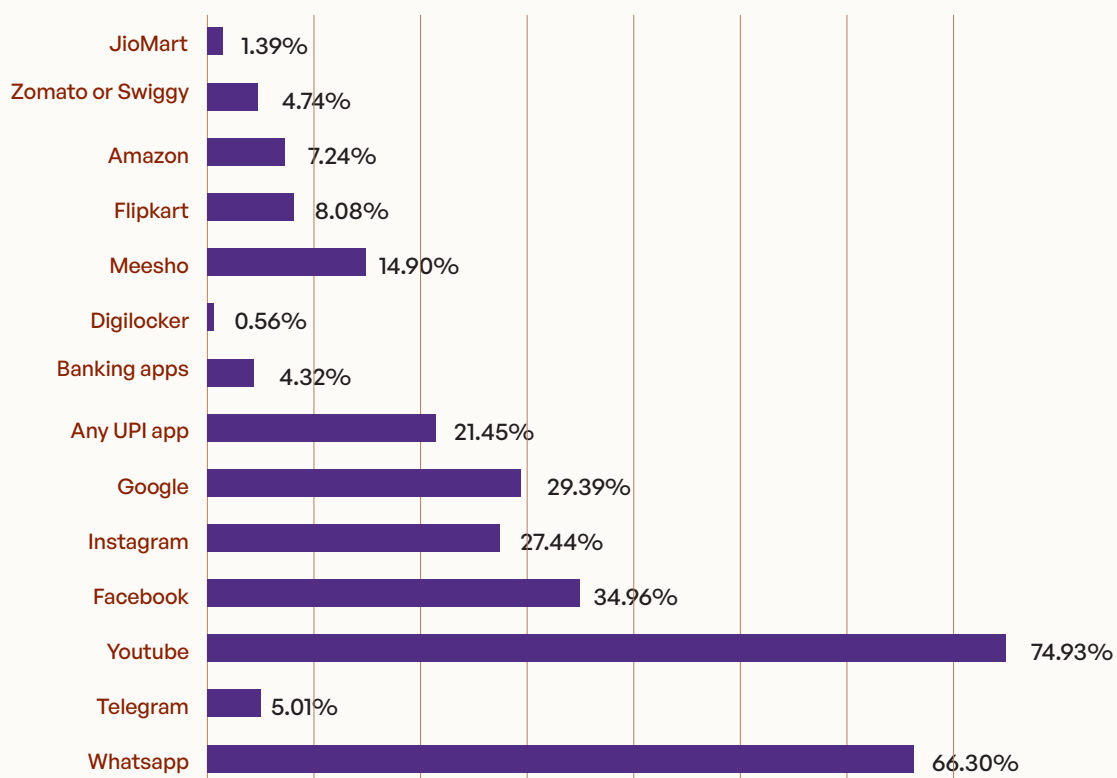


Figure 3: Women are more likely to be using smartphones for personal communication and entertainment. Smartphones are used for communicating with clients and suppliers, and for learning in the context of work and livelihoods

| Usage | All |
|---|------------|
| Entertainment | 75% |
| Personal communication - text message | 34% |
| Personal communication - voice message | 39% |
| Personal communication - audio call | 77% |
| Personal communication - video call | 56% |
| Personal communication - share/send images and videos | 37% |
| Non-personal communication - text message | 13% |
| Non-personal communication - voice message | 14% |
| Non-personal communication - audio call | 31% |
| Non-personal communication - share images & videos | 8% |
| Non-personal communication - advertise online | 3% |
| Learning | 41% |
| Shopping - Personal | 15% |
| Shopping - Household | 16% |
| Payments - Send | 15% |
| Payments - Receive and verify | 12% |
| Accessing government services | 4% |
| Other | 5% |

Figure 4: Women's use of commercial platforms



Propositions and Pathways of Action.

- 1 Community organisations have deep insights that early-phase digital services can leverage:** Associations, self-help groups and cooperatives can create a human layer that can aggregate adoption, needs, skills, and grievance redressal when digital systems are in the learning phase. For this, it is imperative to create a digital role for mediators to access and use the digital platform in aiding women but limit their accessibility through features and duration.
- 2 Create multiple formats of information, accessible in and outside of the digital platform.** Q & A in “user language”, multi-language support, audio options, and guided-usage options to absorb content. This not only helps mediators to gain clarity and resolve but also can build women’s agency to access information and build confidence. Current information asymmetry or misinformation does not allow women or mediators to gain enough clarity for adoption.
- 3 Build access to help for mediators and women users through social proof across the digital platform journey.** This will encourage high agency users who build familiarity over time to become resources for other users. Second, investing in marketing and outreach campaigns that build trust is key. It will impact mediators’ confidence and trust as much as women. Challenges around potential loss, digital error or fraud, which cause a lack of trust and poor social perception of digital services, can be overcome with this.
- 4 Institutional and community mediators can provide** continued motivation for women users to increase retention on the digital platform for usage and leverage, troubleshooting issues, and navigating opportunities/ challenges in an offline context. **They can support women users to become more independent over time, through human-to-human engagement which cannot be replaced with single touchpoints like workshops, or videos.** Institutional mediators can adopt a training approach, group learning (institutional + peer learning approach). Individual mediators will adopt social learning and encourage self-learning.
- 5 Adapting programmes around smartphone usage to sectoral needs:** Women’s journeys of building agency and digital proficiency are complex and starkly different from men’s digital proficiency journey in the Indian context. Skilling interventions around smartphones should be tailored towards enhancing women’s livelihoods. Promising examples include SEWA’s financial and digital literacy interventions and LabourNet’s employment-oriented skill-building program. For example, LabourNet conducts training on how to leverage UPI for business as part of their tailoring course through instructor-led blended training. Programmes based on livelihood tasks ensure that the support provided aligns with women’s capabilities and enhances their overall productivity.