

Bridging Gender Gaps in Digital Inclusion

Drivers, Barriers, and Opportunities

for Women's Adoption of DPI



3ie - International Initiative for Impact Evaluation

Background.

The pace of digitalization in India is unprecedented. However, there remain disparities in the adoption of digital platforms by men and women. This stems from several socioeconomic factors, including costs, infrastructure development across regions, prevailing gender norms, level of knowledge and training, safety and security, and access to the Internet and mobile phones.

Between 2018 and 2022, there was a 170% growth in internet users in India. Over the same period, the proportion of rural households with smartphones doubled from 36% to 74.8%. However, the National Family Health Survey (NFHS) 2019-2021 shows significantly large differences between male and female usage of mobile phones, Internet and digital financial transactions. In fact, only one in three women have access to the internet. As per the GSMA 2024 report, the gender gap is especially wide in mobile money account ownership—it stands at 56 percentage points.



For women to become equal stakeholders in India's digital ecosystem, it is imperative to address the critical barriers by looking at key digital platforms—how they are designed, developed, implemented and used—from a gender-intentionality perspective. 3ie's study aims to understand the main barriers to women's uptake of India's digital public platforms (DPPs) and identify solutions to help increase the adoption of digital public services among women.



Based on insights from our landscape analysis and key interviews with stakeholders, including Gates Foundation, government and private entities, and academics, we are conducting an in-depth study focusing on Unified Payments Interface (UPI) to understand the gender-intentional design, barriers and facilitators in the women's uptake and use. Launched in 2016 by the National Payments Corporation of India (NPCI), UPI has emerged as a crucial driver of digital financial inclusion. Over 40% of all payments made in India are digital, with UPI accounting for 80% of those payments. However, several challenges persist towards its wider adoption and expansion in India, especially among women—who currently make up less than 30% of UPI users.

3ie's mixed-methods study aims to provide policy-oriented actionable findings to address the gender gap and to inform systemic change across the design and delivery of UPI services. In the first phase, we identified several key themes that emerged from a literature review, analysis of NHFS data and key informant interviews. These themes include affordability, accessibility, digital and financial literacy, relevance or perceived utility, safety, and norms. In the ongoing phase, the project will delve into these thematic areas through quantitative and qualitative surveys to understand how these have an impact on women's adoption of UPI.

Objectives.

Through our study, we seek to understand the following:

1 Gender-intentionality in platform design

- What assumptions are made at the design stage of these digital platforms for gender access and inclusivity?
- Has the platform been designed to mitigate limitations like access, digital literacy levels, interest and relevance for women?
- What are the gender sensitivity aspects built into the platform, if any? Including data safety, privacy etc.

2 What constraints do women face in accessing/using these platforms from the supply side?

- Gender norms
- Lack of access
- Lack of training
- Trust and privacy issues

3 What makes the platform user-friendly for women?

4 Do women have better bargaining power, negotiation skills, and decision-making moments in their workplace, families, and community after the adoption of this platform? If not, what can be done to facilitate this?

Approach.

In the first phase of our study, we conducted scoping calls and interviews with organizations working in the space of digital and gender research, including several GxD hub partners, organizations delivering UPI services and researchers, as well as ONDC and tertiary organizations supporting the onboarding of users on ONDC.

Through this approach, we have gained insights and access to a wider set of government and private stakeholders who have shared details about their interventions and potential areas of collaboration to study their effectiveness.

We have identified broad thematic areas for research that we are keen to focus on during the next research phase as we plan for the fieldwork. The research will be collaborative and designed to support the work being done by implementation partners. Insights from the research process will provide a feedback loop to implementers and the government, who can mitigate challenges as they scale up their program.

The mixed methods study will use:



QUALITATIVE METHODS

We will use qualitative research methodology and human-centered design to understand the barriers and facilitators in the uptake of the digital application, both from the beneficiary and the practitioner's perspective. Our approach will include group discussions, in-depth interviews and key informant interviews with various stakeholders and users.



QUANTITATIVE METHODS

We will conduct surveys to collect gender-disaggregated data of users to understand their preferences and challenges faced in usage of platforms. This survey will also focus on understanding interface-related challenges in the platform and how it can be adapted to the specific needs of women users.

The survey will complement and augment the qualitative study in two main ways:

- Provide a large sample size
- Help us quantify preferences and observe patterns of interest in the data that shed light on drivers of adoption of digital platforms.



To gain community-level insights and understand the enablers and barriers to women's uptake of UPI in Telangana and Andhra Pradesh, 3ie has partnered with Yugantar, an NGO that trains women in conducting digital transactions. Based on our discussion with policy stakeholders, we will expand this to understand women's uptake of UPI in other key states.



Key Insights and Emerging Recommendations.

Based on the landscape analysis and KIIs conducted during the first phase of 3ie's study, here are some emerging insights:

- 1** Stakeholders tend to consider gender-inclusive design only if there is a mandate to enhance uptake among women. Limited representation of women during the planning, implementation and design phase of a platform may further result in a smaller female voice in crucial decision-making processes. It was highlighted by government stakeholders that when women are involved in the design and testing stage, the uptake is higher. Thus, the design of products and services may not fully consider the specific needs and preferences of women. To address this challenge, some stakeholders highlighted the importance of initial handholding support (training) and onboarding of women.
- 2** While gender data is potentially available, it is not actively analyzed and used. Collecting and analyzing gender disaggregated data can help understand the difference in usage and impact of digital platforms among men and women. However, due to concerns associated with safety and privacy, policymakers avoid collecting individual-level personal data, especially related to financial transactions.
- 3** Women find it difficult to trust platforms due to a general lack of technical know-how. Implementers underscore that women's uptake is contingent on recommendations. They are more likely to join a digital platform if someone from their family or social network is using it. Women prefer cash to avoid surveillance and exercise greater control over their spending. An organization working and researching in the UPI space found that if the transactions can be done through incognito mode, it could lead to an increase in women's digital uptake.
- 4** It is important to establish both online and offline infrastructure and support structures. Women require training and onboarding support to use online platforms. An organization facilitating interventions to enhance women's adoption of fintech highlights the need for training women since they heavily rely on male and younger members of the household to conduct digital transactions. Having trainers from their local context is helpful as they provide mitigation strategies and relatable examples to trainees.