

CASE STUDY • FINTECH AND DEVELOPMENT

# Taking Microfinance Collections Digital in Rural Maharashtra

Designing a field app for loan officers with poor connectivity

ORGANISATION

SECTOR

PREPARED BY

Gramin Pragati Finance (fictional)

Microfinance

Case writer: Your Name

# 1. AT A GLANCE

|                     |                                                              |
|---------------------|--------------------------------------------------------------|
| <b>Organisation</b> | Gramin Pragati Finance (fictional)                           |
| <b>Sector</b>       | Microfinance                                                 |
| <b>Location</b>     | Rural Maharashtra                                            |
| <b>Challenge</b>    | Cash collections, manual records and reconciliation delays   |
| <b>Solution</b>     | Offline-first field app, digital receipts and UPI repayments |
| <b>Timeframe</b>    | 12 months                                                    |

**-70%**

Reconciliation time (sample)

**46%**

Repayments made digitally

**12 mo**

Programme

*Organisation and outcomes are illustrative; figures are sample data for teaching and templating purposes.*

## 2. BACKGROUND

Gramin Pragati Finance provides small group loans to women entrepreneurs in villages. Loan officers collected repayments in cash at weekly group meetings and recorded them in paper ledgers.

Records were entered into the head-office system days later, causing errors and delays.

## 3. THE CHALLENGE

The company wanted to digitise collections, but many villages had weak mobile networks and borrowers had varying comfort with technology.

- Cash handling risks for loan officers
- Delayed and error-prone data entry
- No real-time view of collections
- Borrowers had no instant receipts

*Our officers were carrying cash and paperwork for hours every day.*

— Chief Operating Officer (fictional)

## 4. OBJECTIVES

1. Give borrowers instant digital receipts.
2. Reduce cash handling.
3. Get same-day visibility of collections.

## 5. APPROACH

The team co-designed the solution with loan officers and borrower groups.

### Phase 1: Field research

Observed group meetings and interviewed officers and borrowers about their needs.

- Ride-alongs
- Group discussions
- Connectivity mapping

### Phase 2: Offline-first app

Built an app that records collections offline and syncs when a network is available, with SMS receipts.

- Offline data storage
- SMS receipts
- Simple local-language interface

### Phase 3: Digital repayments

Introduced QR-based repayments for borrowers with smartphones while keeping cash as an option.

- QR repayments
- Awareness sessions
- Officer incentives

## Implementation Timeline

| Period      | Milestone                 | Notes              |
|-------------|---------------------------|--------------------|
| Month 1–2   | Field research            | Four branches      |
| Month 3–6   | App development and pilot | Two branches       |
| Month 7–10  | Roll-out                  | All branches       |
| Month 11–12 | Digital repayment push    | Awareness campaign |

## 6. RESULTS

Collections became faster and more transparent, and a growing share of borrowers repaid digitally.

| Metric                                     | Before | After |
|--------------------------------------------|--------|-------|
| Reconciliation time<br>(hours/week/branch) | 20     | 6     |
| Data entry errors (per 1,000 entries)      | 14     | 2     |
| Digital repayments                         | 0%     | 46%   |
| Borrower satisfaction (1–5)                | 3.4    | 4.2   |

Exhibit 1: Key metrics before and after (sample data)

Chart placeholder — insert a before/after chart

Exhibit 2: Trend over the implementation period (sample data)

## 7. LESSONS LEARNED

**Design for the field.** Offline-first design was essential.

**Keep choices open.** Allowing cash maintained trust while digital use grew.

**Involve officers early.** Officer feedback shaped a simpler app.

## 8. ANALYSIS

|                                                                                                                                  |                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>What worked</b> <ul style="list-style-type: none"><li>• Offline sync</li><li>• SMS receipts</li></ul>                         | <b>What was difficult</b> <ul style="list-style-type: none"><li>• Device costs</li><li>• Training older borrowers</li></ul> |
| <b>Opportunities</b> <ul style="list-style-type: none"><li>• Credit history for borrowers</li><li>• Insurance products</li></ul> | <b>Risks to sustain</b> <ul style="list-style-type: none"><li>• Network changes</li><li>• Fraud attempts</li></ul>          |

## | 9. DISCUSSION QUESTIONS

*Use these questions for classroom discussion or self-study.*

4. Why was an offline-first design important here?
5. How should the company balance digital adoption with inclusion?
6. What incentives would you give loan officers?
7. What new products could the data enable?

## | 10. CONCLUSION

Thoughtful, field-led design allowed the company to digitise collections while keeping borrowers at the centre.