Review: Design Studies for a FMS for Micro-credit Groups in Rural India

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General Overview

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• Design a User Interface
  – Needs Analysis
  – Iterative Process
  – Prototyping

• Target – Community based micro-credit groups

• Focus – Rural India (Aurangabad, Madurai)
Micro-Finance in India

- Self help group (SHG)
  - 10-20 women
  - Basic transactions
    - Payments
    - Loans
    - Deposits
  - Monthly meetings
  - Community liability (high repayment rates)

- Micro-finance institution (MFI) are NGOs
  - Create, Support
  - Training
  - Linkages within & with banking sector
Micro-Finance Issues

• High Illiteracy (43% - 286 million Adults)

• Documentation at various levels
  – Tracking finances, credit
  – Better management of funds
  – Law requirements
  – High volume (small transactions)

• Remote Areas

• Technology limitations
Numeric Interfaces – Field Visit 1

• Genesis at Self-employed Women Association (SEWA) bank in Ahmedabad
  – “Oh, we can understand numbers fine, We can even do most simple calculations ourselves. It is only text and words we have a lot of difficulty with.”

• Field Visit 1 : Aurangabad
  – Contextual Studies
    • Notebooks & Ledgers
    • Help for educated kids attending school
    • Sequential entries (tabular, ordered by name)
  – Paper prototypes
Field Visit 1

• Paper Prototype
  – Understood well
  – Good Feedback

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Field Visit 2 – Madurai, TamilNadu

• More Mature SHGs managed by CCD (Covenant Centre for development)
  – Started 150 SHGs, 4 Federations

• Context
  – Studied all levels, spending more time
  – Verification of learnings from Aurangabad
  – Relatively higher literacy
  – Schools kids and literate man involved

• Prototype
  – Interactive prototype (laptop) testing
  – People familiar with computers
  – Quick learners, ability to use touch device
Field Visit 2

- Prototype feedback
  - Does not match notebook format
  - More colors
  - Thrown off by Abrupt menus

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Figure 5 – “An interactive prototype...”
Field Visit 3 - Madurai

• Extended 2 month study
  – Focused groups (32 women, A to D – order of literacy)

• Icons correlated to ideas are better!
  – Led to new interactive prototypes
  – Frequent sessions, rapid development
  – Direct feedback from users

• Final Design emerged
  – Well understood by 3 groups, D got quite familiar
Final Design

- Tabular Data Organization
- Numeric Data Formats
- Icons
- Iconic Legends (audio feedback)
- Discrete Task Spaces
- Color

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Figure 6 – “One of the final successful designs…”
Conclusions

• Context is very important!
• Numeric to Iconic Correlation
• Importance of physical models and tangible artifacts (touch & feel)
• Learnt the entire system – MIS being developed
• Hybrid technologies (paper using RFID etc)
Questions

• Why not just Ahmedabad (first study)?
• Quest for focused lead Users?
• Does this help? – Study was not for mobile phones
• Experiences with UI design so far?