



A Platform for Uncovering Indian Users' Decision-Making Process in UPI Apps

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Motivation

Billions of transactions occur each month in India



RQ: How do we ethically uncover decision-making process of Indian Users while using UPI apps?

Research Challenges

How to understand decision making process in financial apps without harming users in any way?

- Collect UPI usage statistics → Missing user consent
- Track/ Fetch transaction details from user's UPI app → Reveal financial transactions
- Install an instrumented app on user's device → Non-flexible for design changes

Our Solution

Uncovering deeper decision making process (not behaviour)

SIMULATED UPI APP

- Runs on desktop
- Emulate popular UPI apps

- RESEARCHER OBSERVING
- USER THINKS ALOUD
- FOCUS ON THE DESIGN

USABILITY TESTING



- Adheres to official NPCI guidelines for design

Look and feel like real world apps

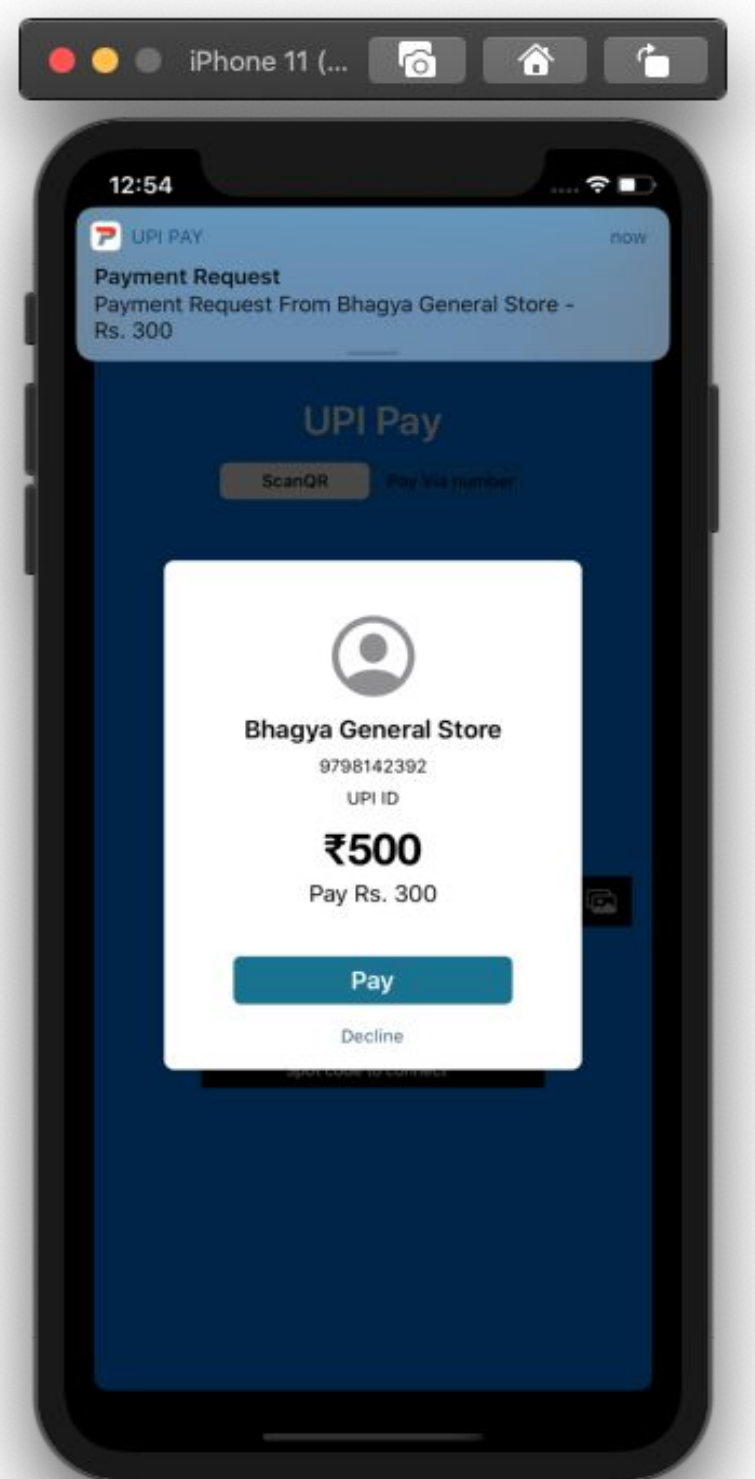
Allows rapid update of UI elements

Exploring Decision-making Using Our Simulator

- IRB APPROVED
- THINK ALOUD
- SCENARIO BASED
- VIA QR CODE
- VIA CONTACT NO.
- ANALYSE TRANSCRIBED RESPONSES

TWO PERSON PILOT STUDY SCENARIO:

- QR code encodes transaction amount and message
- Mismatch between the transaction amount and the message
- Actual Rs. 500 but the message says Rs. 300
- Common fraud technique where both participants got trapped



"INATTENTIVENESS" A KEY REASON OBSERVED FOR FALLING PREY TO FRAUDS

- MISMATCH IGNORED
- NOTIFICATION OVERLOOKED
- POTENTIAL FATIGUE

Ongoing Work

- Extensive surveys on participants from diverse socio-economic and educational backgrounds
- Design a variety of malicious and non-malicious scenarios targeting different mental models
- Experiment and analyse the impact of user interface design elements

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