Motivation
Motivation

- **Cashless transactions** are more convenient and safer than cash.
- **Developed countries** invest in building infrastructures to support cashless transaction systems
  - More than 65% of U.S. transactions: cashless
- **Developing countries**, are facing challenges in adopting cashless systems despite advancements.

Related Work
Literature Review

**HCI, ICTD, and Money**
- Digital and Mobile Money
- Personal finance
- Financial literacy
- Human-Currency Interaction
- Materiality of money
- Financial digitization

**Privacy and Security**
- Cultural and societal values in privacy
- Security vulnerabilities of mobile monies
- Individual and household security
- Security stories

**Intermediaries**
- A standard mode of information access in developing regions
- Designing for Intermediated Transactions
Literature Review

HCI, ICTD, and Money

Intermediaries

Terrorist Assemblage

Re-Skilling
Research Questions

RQ1
What challenges do the financial sector employees and everyday users encounter in adopting cashless transactions within the context of the Global South?

RQ2
How do the financial sector employees and everyday users in the Global South address the challenges associated with adopting cashless transaction systems?
Methods
Methods

- 19-months long interview study in Dhaka, Bangladesh (Jan 2020 - Sept 2021)
- 38 Participants from diverse backgrounds
  - 26 everyday users
  - 12 bank employees
- Snowball sampling
- Semi-structured interviews
- Grounded theory approach in data collection and analysis
Findings
Findings: Overview

### Intermediaries

3 case studies:

- Streaming Services
- F-Commerce
- E-Commerce
Findings: Intermediaries

- Streaming Services

“I have been kicked out of my Netflix account several times while watching a show. I also remember many times when I wasn’t able to log in because “too many people were using the account”. These vendors sell one account to many people and hope they don’t use them at the same time!”

(P21, Female, 30s)
Findings: Intermediaries

- F-Commerce

“I ordered clothes from a well-known vendor on Facebook with good reviews and many followers. My order was defective. I sent the vendor a picture of the item and asked for a refund, but they didn’t respond to me. I tried leaving a bad review, but I ended up getting blocked from their page! I wish there was a way to dispute my transaction, but unfortunately, I paid with cash, and I’m left with no option!”

(P2, Female, 30s)
Findings: Intermediaries

● E-Commerce

“We ordered a camera from Amazon in the U.S. and it took a while to receive the package as it was stuck in customs for investigation. The package was torn, and some parts were missing when we received it. The package forwarder we worked with didn’t take responsibility for the item’s condition and said it was “normal”. We should’ve purchased the camera from the local shops!”

(P3, Male, 50s)
# Findings: Overview

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The Role of Intermediaries, Terrorist Assemblage, and Re-skilling in the Adoption of Cashless Transaction Systems in Bangladesh

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Findings: Terrorist Assemblage

- Restrictions on international transactions

“For every international transaction, I have to call my bank and ask them to open the international gateway for me. They ask me about the merchant’s website, the purpose of the transaction, and sometimes the items I want to purchase. Sometimes, I’m not able to access this service when I need it, especially after business hours when reaching the customer care becomes difficult.”

(P7, Male, 60s)
Findings: Terrorist Assemblage

- Discriminatory guidelines
Findings: Overview

**Intermediaries**
- 3 case studies
  - Streaming Services
  - F-Commerce
  - E-Commerce

**Terrorist Assemblage**
- Restrictions on international transactions
- Discriminatory guidelines

**Re-skilling**
- Inadequate and inconsistent trainings
- Challenges of the more vulnerable population
Findings: Re-skilling

- Challenges of the more vulnerable population

“I have five children, and I could really use a raise to provide a better life for them, but unfortunately, I can’t take extra hours to receive the training that increases my salary. With all my responsibilities as a mother and wife, I can’t afford to dedicate extra time to this training.”

(P30, Female, 30s)
## Findings: Overview

### Intermediaries

- 3 case studies
  - Streaming Services
  - F-Commerce
  - E-Commerce

### Terrorist Assemblage

- Restrictions on international transactions
- Discriminatory guidelines

### Re-skilling

- Inadequate and inconsistent trainings
- Challenges of the more vulnerable population

### Additional Challenges

- Access and Bureaucracy
- Financial Literacy and Confidence
- Religious Abstinence
- Infrastructures and Breakdowns
- Privacy, Security, and Trust
Findings: Additional Challenges

● Privacy, Security, and Trust
  ○ Security stories

“I heard from my cousin that someone changed her phone number from the bank and then requested a debit card with that phone number. The thief then took money from her account using the OTP sent to the new number. My cousin had no clue about it, which is really alarming!”

(P2, Female, 30s)
Discussion
Discussion

Design Implications

Raising Awareness for Terrorist Financing

Bureaucratic Processes

Source: https://uxdesign.cc/the-7-factors-that-influence-user-experience-28052826160

Source: https://www.coe.int/en/web/corruption/-/risks-of-misusing-npo-for-terrorist-financing-analysed

Source: https://cartoonmovement.com/cartoon/climbing-bureaucracy
Limitations and Future Work

Limitations:
● Participation and selection bias
● Our analysis may not be categorized as causal inference

Future Work:
● Conducting a study with the intermediate helpers or “intermediaries”
● Engaging with stakeholders to design more accessible solutions for the studied community
The Role of Intermediaries, Terrorist Assemblage, and Re-skilling in the Adoption of Cashless Transaction Systems in Bangladesh

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Thank you for your attention! Questions?