

CSE 490D, Winter 2016  
Readings in Digital Financial Services

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# Topic Overview

Improved access to financial services is recognized as an important mechanism for raising people out of poverty

- Financial Services for the Poor
  - Remittances
  - Savings accounts
  - Government payments
  - Digital payments

# Computing and FSP

- Mobile Computing
  - Smartphone applications
  - GSM Applications: SMS/USSD
- Security
  - Design of secure applications
  - Development of robust systems
- Human computer interaction
  - Usability

# Why this might be interesting

- New technical domain
- Start of new research effort
- Combination of technology and development
- “Full stack” problem
  - From clients to telcos

# ICTD @ UW

- Long running research effort in computing for the developing world
  - Open Data Kit
  - Projecting Health
  - Community Cellular
- Change seminar - Tuesdays

# 490 D Administration

- One credit, graded CR/NC
- Weekly readings and discussion
  - Short answer quiz on reading due Tuesday night
- Required
  - Lead one presentation (as part of a group)
  - Submit seven of nine quizzes

# Readings

Week	Date	Discussion Leaders	Topic	Paper
1	January 6	Richard Anderson	Course introduction	
2	January 13		mPesa	Designing Mobile Money Services: Lessons from M-PESA( <a href="#">pdf</a> )
3	January 20		Cellular Communication	Digital inclusion and the role of mobile in Nigeria (GSMA) ( <a href="#">pdf</a> )
4	January 27		Customers	Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks (CGAP) ( <a href="#">PDF</a> )
5	February 3		Technology (USSD)	Promoting Competition in Mobile Payments: The Role of USSD (CGAP) ( <a href="#">PDF</a> )
6	February 10		Rural Agents	Spotlight on Rural Supply: Critical factors to create successful mobile money agents (GSMA) ( <a href="#">PDF</a> )
7	February 17		Government Payments	Electronic G2P Payments: Evidence from Four Lower-Income Countries ( <a href="#">PDF</a> )
8	February 24		Risk Analysis	Proportional risk-based AML/CFT regimes for mobile money A framework for assessing risk factors and mitigation measures ( <a href="#">PDF</a> )
9	March 2		Payment Platforms	The Level One Project Guide Designing a New System for Financial Inclusion ( <a href="#">PDF</a> )
10	March 9		Application security	Mo(bile) Money, Mo(bile) Problems: Analysis of Branchless Banking Applications in the Developing World (USENIX Security) ( <a href="#">PDF</a> )

# Leading a presentation

- Presentation of about 10 minutes, and about four slides based on a template
  - Moderate discussion
  - Group of three students – all should participate in the planning, although not all need to present
  - Meet with instructors prior to presentation
  - Submit preferences for week/topic in catalyst survey
  - Need volunteers for January 13 now



# Basic Financial Services

- Mobile Money
  - Send money to remote location
  - No bank accounts, but mobile phones
  - Rely on basic mobile phones



# DFS Challenges

1. Fraud and cyberattacks
2. Proximity payments user experience
3. Mobile phone infrastructure
4. Extending beyond established networks
5. Identity and on-boarding
6. Analytics for product development, risk scoring, and fraud detection
7. Cash-in/Cash-out (CICO) agent recruitment, training, and management
8. Financial management for end users