

# Paper, Plastic, or Phone...

A conversation with FSTC

September 27, 2007

Terri Bradford

# Setting the Stage

- Significant migration from paper-based payments to electronic
- Significant adoption of mobile devices
- Innovation has spurred growth and adoption
- Now it may well be that adoption is spurring innovation

# Types of Mobile Payments

- There are essentially two categories of mobile payments
  - Remote – facilitated by SMS and WAP technologies
  - Proximity – facilitated by NFC technology

# Remote Payments

- Mostly P2P
- Registration required
- Providers are largely nonbanks
  - PayPal Mobile
  - OboPay
  - Feed/Mocapay

# PayPal Mobile

- SMS-enabled payment product
- Both the payer and payee must be PayPal customers
- Enables users to make purchases or send money using their PayPal accounts by registering their phone and creating a PIN
- Text-to-buy “opportunities” featured in magazines, on posters, and in other outlets

# Obopay

- SMS, WAP, or application download enabled payment and money transfer
- Both the payer and payee must be Obopay customers
- Utilizes a prepaid MasterCard account, which is established with Obopay online, requires registration of your mobile device and creation of a PIN
- A prepaid card feature enables use at retail locations that accept MasterCard

# Feed/Mocapay

- Boulder, Co-based company
- SMS-enabled payment product
- Customer registers mobile device online, creates a PIN, funds an account from checking or savings accounts
- Merchants register online, establish an account, either download application to POS reader or get a new terminal
- Customers text feed to initiate a payment; receive an authorization code, which they then provide to the merchant to complete the transaction
- Approximately 200 merchants (coffee shops, fast & casual dining, movie theaters) in Colorado accept this payment

# Proximity Payments...a complex landscape



# Challenges

- Relationships
  - Stakeholders
  - Customers
- Standards
  - handset technology
  - point of sale devices
  - security

# Proximity Payments in Other Countries

- Pilots
  - Austria, France, Germany, The Netherlands and Taiwan
- Advanced adoption
  - South Korea and Japan

# Proximity Payments in Japan

- Carriers were instrumental in deploying devices
- Businesses were instrumental in developing platforms enabling payment acceptance
- Financial institution involvement was minimal at best

# Proximity Payments in South Korea

- Mobile carriers were the first to introduce
- Financial institution involvement proved critical to adoption
- Financial institutions control at least a portion of the “chip” management
- Carriers are gaining more control as new handset devices are being deployed

# Developments in the U.S.

- There are developments in the payments landscape that may facilitate deployment of proximity payments
  - Deployment of contactless cards
  - Merchant acceptance of contactless payments
  - Mobile banking

# Federal Reserve Perspective

- A safe, efficient, and accessible payments system is crucial for a smoothly functioning economy and, hence, is one of the primary missions of the Federal Reserve
- The Federal Reserve has promoted these objectives in multiple ways: through regulation, as a service provider, and through research and monitoring
- The U.S. retail payments system is in the midst of a transformation; the Federal Reserve must remain informed and involved

# Contact Information

- Email
  - [terri.r.bradford@kc.frb.org](mailto:terri.r.bradford@kc.frb.org)
- Web
  - [www.kc.frb.org](http://www.kc.frb.org)
- Phone
  - 816-881-2001

# Resources

- September Payments System Research *Briefing* article
  - Complex Landscapes: Mobile Payments in Japan, South Korea, and the United States  
<http://www.kansascityfed.org/home/subwebs.cfm?subweb=9>
- Smart Card Alliance
  - Proximity Mobile Payments: Leveraging NFC and the Contactless Financial Payments Infrastructure  
<http://www.smartcardalliance.org/pages/publications-proximity-mobile-payments>