

Payment System Gaps and Opportunities

Ken Isaacson

Federal Reserve Banks

Chicago Payment Symposium

September 25, 2013

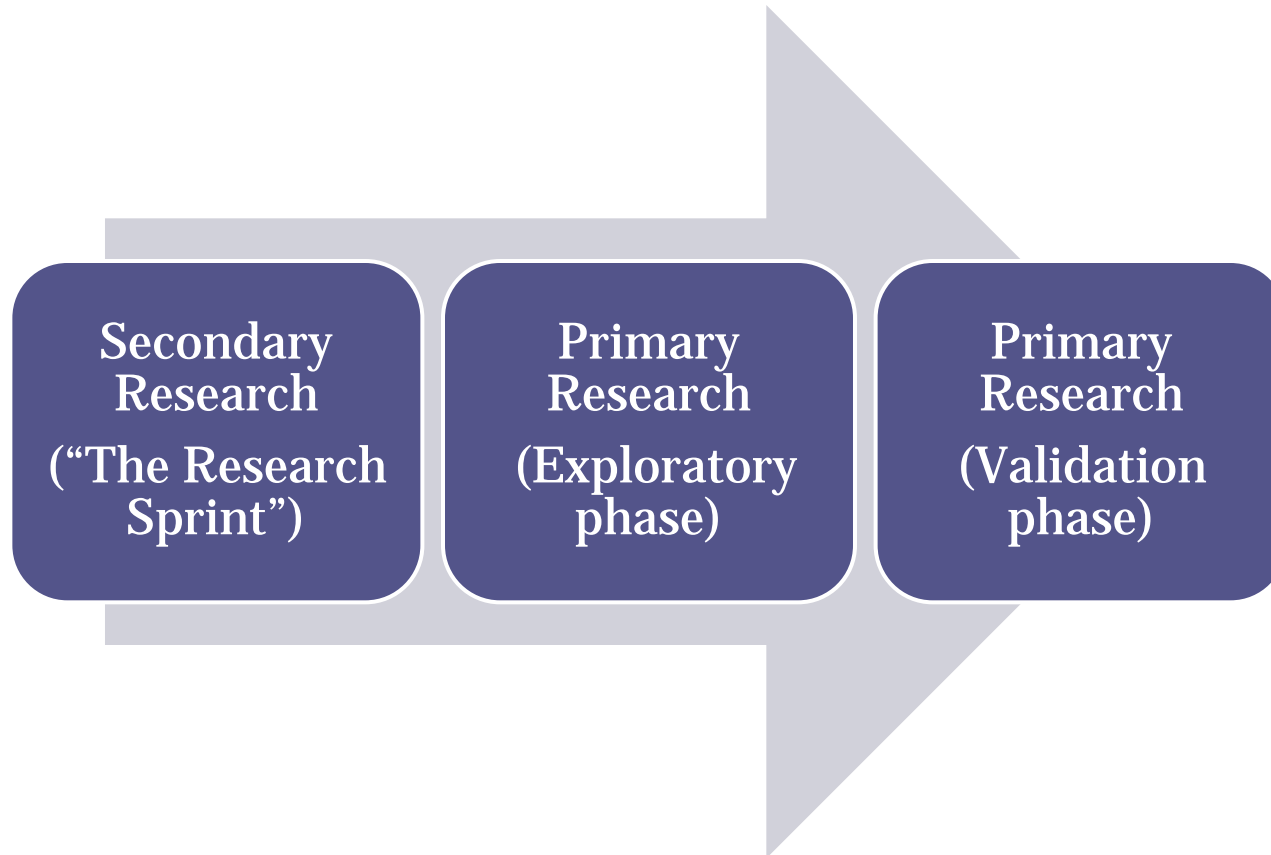
Agenda

- **Future Payment Team Overview**
- **Research Sprint Process Overview**
- **Gaps / Opportunities**

Future Payment Team

- Created in the Fall of 2012 to gather intelligence in support of the Federal Reserve's refreshed strategic direction in payments
 - Improve the safety, speed, and efficiency of payments from end to end

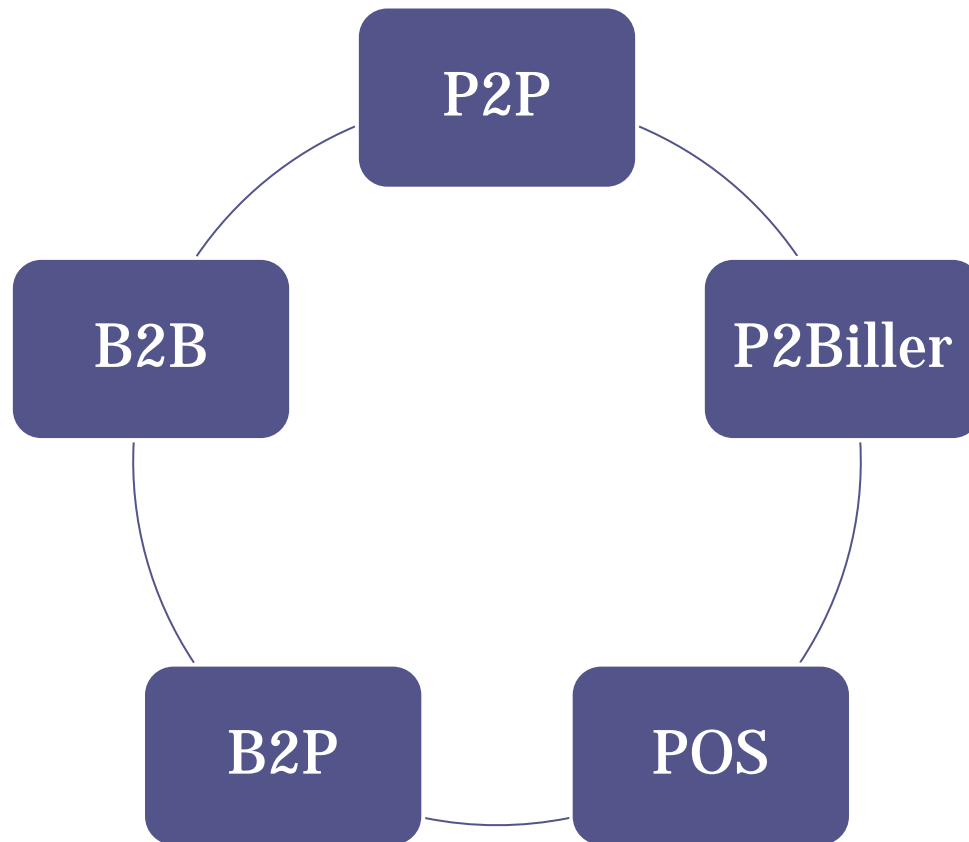
Research Phases



FPT Approach

- **Research Priorities**
 - **Needs Assessment**
 - Broken down by use case and attribute
 - **Gap Assessment**
 - **Barrier Identification**
 - **Barrier Resolution**
 - **Informed by Case Studies**
 - **With insights applied to current categories of emerging payment areas**

Use Cases Studied



Research Sprint Process Overview

- Gathered available secondary research sources that relate to payment attributes
 - Consulted close to 300 sources
- Organized the research into “stories”
 - Stories explain the needs of end users for speed and efficiency of payments in different circumstances (use cases)



Gaps / Opportunities

Continued End-User Check Writing

- While tremendous progress has been made electronifying interbank clearing and settlement of checks
 - End users are still writing paper checks by the billions
 - Across many different use cases, especially B2B, bill payment, business to person, and P2P
 - Checks continue to provide important features that are not replicated by electronic alternatives including:
 - **Ubiquity** – Where senders and receivers can reach nearly everyone without signing up for multiple services
 - **Convenience** - where payer doesn't have to know the payee's account information

Faster Payments

- In a world where many other countries are moving to ubiquitous near real-time retail payment systems...
 - UK, Australia, Mexico, Switzerland, Singapore, etc.
- ...that support near real-time transfers (from the end user perspective) from any bank account sender to any bank account receiver...
- ...the U.S. payment systems remain slow by comparison

Limited Participation Payment Communities

- Many recent payment innovations involve closed communities where both the sender and receiver must join
- This phenomenon exists across several use cases
 - P2P systems (Paypal, Dwolla, etc.)
 - B2B (Paymode X, Xign, PayNetExchange, etc.)
 - Bill payment (Online resources, FIS, Fiserv, RPPS, etc.)
 - Mobile payments (LevelUp, Square Wallet, etc.)
- Legacy payment systems have broader participation, allowing payments from nearly any sender to nearly any receiver

Legacy payment instruments lack features desired by end-users

- In today's world, end users increasingly expect certain features at the time they are transacting the payment:
 - A real time validation process assuring the payee that an account exists and it has enough funds to cover the payment
 - Assurance that a payment will not be returned or reversed
 - Timely notification to the payer and payee that the payment has been made
 - Near-real-time posting / availability of funds to both the payer's and the payee's accounts
 - Masked account details
- Payment cards and wire transfers possess some but not all of these features
- ACH payments generally lack these features

International Payment Challenges

- In general, international payments are slow, inconvenient, and inefficient
- This is especially true for bank account-centric international payments
- Closed networks have made advances in this space, but their networks are not as ubiquitous as open banking networks.

The Mobile Technology Revolution

- **Mobile devices may transform wide ranging aspects of business and commerce**
 - **Digital wallet apps provide merchants with valuable contextual information**
 - Location based info, prior purchase patterns, coupons, etc.
 - **Payment instrument is often selected during the initial set-up phase**
 - Payment takes place in the background thereafter
- **Payment service providers are seeking to define their service offerings in this new world**

Converting Businesses to Electronics

- **Businesses (especially large ones) have accounting systems that are complex and costly to change**
 - Makes it difficult to achieve automated, straight-through processing of invoices, payments, and remittance information
 - Legacy systems built surrounding the check are relatively inexpensive at the margin; new systems require capital outlay
 - Legacy standards (like EDI) are entrenched among large businesses and may inhibit adoption of more modern standards that are attractive to large and small businesses alike
 - Coordination challenges are daunting
 - Business case must be positive for all parties

Safety and Security

- **Work still underway to evaluate the gaps and opportunities in this category**

Feedback Summary

High Level Reactions

Prevalent Views

Real-time information , mobile enablement and ubiquity are high priorities.

Persistence of end-user check-writing is not a high priority pain point.

Divergent Views

Faster payments: evoked strong and diverse opinions. There is a divergence of views regarding what needs to be faster: clearing and settlement or information.

All agreed that international payments present challenges, but prioritized differently relative to their international volume.

Feedback Summary

Summary Segment Priorities

High Medium Low

	Financial Institutions	Alternative Payment Providers	Technology Solution Providers	Corporate/ Merchant	Government/ Regulatory
Mobile Technology Revolution	H	H	H	H	L
The Need for Faster Payment Information	H	H	H	H	M
The Need for Faster Payment Transactions	M	H	H	M	M
Closed Loop Challenges	H	M	H	M	L
International Payments Issues	M	M	M	M	L
Business Check Writing	L	L	L	M	H
Continued End-User Check Writing	L	L	L	L	H

Questions for discussion:

- Do you agree or disagree that the issues noted are gaps or opportunities that should be addressed to achieve enhanced payment system speed and efficiency?
- How would you rank order the gaps / opportunities from highest priority to lowest priority?
- Are there other gaps or opportunities that we have not identified?