AGENDA

• The B2B Directory: what is it and why is it needed?
• A brief history: who’s involved
• The approach: key principles
• Current status
• Next steps
B2B DIRECTORY: BACKGROUND

- Businesses are making many more electronic payments
- However, significant issues still remain
  - Larger businesses: plurality of all payments still checks
  - Smaller businesses: mostly all checks
  - Risk exposure: account data, fraud
- The high cost of paper checks
  - 8 billion check-based invoice payments every year
  - $10 billion - $20 billion in annual costs
B2B DIRECTORY: WHY IS IT NEEDED?

• Even when payers have full access to electronic payment options…
  • ACH credit push, Wires, MasterCard InControl, VISA Payables Automation, PayPal, PayMode-X, etc.
• …they struggle to
  • Know who accepts electronic payments
  • Manage the information associated with each payment option
  • Validate that the information is accurate and trustworthy
  • Keep up with emerging payment options

The B2B Directory is a public phone book containing the payment identities of payees that accept electronic payments
B2B DIRECTORY: WHAT IS IT?

- A public utility
- Enables payees to register their Electronic Payment Identity (EPI)
- Enables payers to retrieve EPI to facilitate electronic payments
- Supports multiple payment types
- Not a payment system
- Scalable, trustworthy, secure

The goal of the B2B Directory is to enable business payers – small and large – to make more electronic payments to vendors and other payees
B2B DIRECTORY: A BRIEF HISTORY

• Sponsored by the Remittance Coalition

• Diverse industry participation
  • Federal Reserve Bank
  • NACHA
  • Large and small corporations
  • Large and small financial institutions
  • Payment processors and solution providers
B2B DIRECTORY: KEY PRINCIPLES

- Electronic Payment Identity (EPI)
  - Defines payee’s payment preferences
  - Each EPI has a unique Directory ID (DID)
  - Portable, belongs to payee

- Distributed topology and architecture
  - Central Access Node
  - Multiple directory nodes

- Trusted, with operating rules
  - All EPIs are verified
ELECTRONIC PAYMENT IDENTITY (EPI): WHAT IS IT?

EPI: Everything a payee needs wants to declare about receiving electronic payments

Unique ID (DID)

Name, address, contact phone number

Credit Card

Biller Portal

ACH

RTN, DDA STP 820

PayPal

PayPal ID
DISTRIBUTED ARCHITECTURE AND TOPOLOGY

Directory Node (Node operator: Bank)

Directory Node (Node operator: Payment Service Provider)

Directory Node (Node operator: Corporation)

Central Access Node

EPI lookup: API or trusted application

The Remittance Coalition: B2B Directory Project
INVITE, ENROLL PAYEES, VERIFY PAYMENT IDENTITIES

Invite: Initial directory entry for payee is created

Enroll: Payee enrolls and agrees to public listing

Validate: Payee’s EPI is validated

Validated and trustworthy, Not validated with certainty, Incorrect and invalid

Expire: Payee status changes, directory entry expires
Financial Institutions can be Node Operators, and invite their clients to register as payees.

Once verified, clients are part of the B2B Directory Network.
Similarly, large corporations can be Node Operators and invite their vendors to register to receive electronic payments. Once registered, vendors can opt to make their EPIs public.
Payment Service Providers can be **Node Operators**, and offer vendor enrollment services to payers. This enables smaller payers to invite their vendors to register their payment profiles and become part of the public B2B Directory network.
Accepted electronic payment methods are a key element of a payee’s Payment Identity.
Every accepted payment method may require the payee to specify additional information.

Payees agree to terms of use.
EPI verification can take many forms, and each Node Operator free to chose any appropriate method.

Payment Service Providers can verify through micro-deposits. Financial Institutions can check their core banking applications.
Once terms are accepted and EPI is verified, the payee’s EPI is now public, and can be accessed through the B2B Directory API, or other trusted application.
B2B DIRECTORY: THE SUM OF MANY PARTS

Directory Node (Node Operator: Bank)

Directory Node (Node Operator: Payment Service Provider)

Directory Node (Node Operator: Corporation)

Central Access Node

EPI lookup: API or trusted application

The Remittance Coalition: B2B Directory Project
B2B DIRECTORY: CURRENT STATUS

- 2014: released concept paper
- 2015: making it real
  - Proof-of-concept / working prototype: AFP 2015
  - Business model
  - Operating principles
B2B DIRECTORY: PROOF-OF-CONCEPT HIGHLIGHTS

- AFP 2015 (October 2015): proof-of-concept demonstration
- Show how two key business payment workflows are supported
  - For the payer: Invoice-to-Pay
  - For the payee: Order-to-Cash
- Define core elements of Electronic Payment Identity
- Demonstrate how trust is engendered
- Demonstrate how security is ensured, risk mitigated
- Demonstrate distributed architecture and operation
**DRIVING DIRECTORY CRITICAL MASS TWO-SIDED MARKET**

**Payee focused: Build it, & they will come – the “Field of Dreams” approach**
- Evangelize directory benefits to payee
- Drive self-enrollment of payees
- Existence of payee critical mass drives payer usage of directory

**Payer focused: “Islands of Automation” approach**
- Payers influence their payees (vendors/trade partners) to enroll into directory
- Payers & their payees represent an “island of automation”
- Each payer served by a node-operator

**Both approaches can co-exist**
- An FI can be a node operator serving its payee account holders
- A Payment Service Provider can be a node operator serving a payer & its payees
- Enrollment Companies can enroll payees directly
B2B Directory:
Actors and their Roles: Central Directory

Enrollment & Validation

Search

Query

Payee#1
Bank
Node
Service Provider
Node

Payer#1

Payer#2

Payee#2

Payer#3

Enrollment & Validation
Directory Association
Central Access Switch

Enrollment
Company

Node 23

Payer#1

Payer#2

Payer#3

- Enrollment & Validation
- Search
- Query

- Payee#1
- Bank
  - Node
  - Service Provider
    - Node
    - Payer#1
    - Enrollment Company
    - Node
    - Payee#2
    - Payer#1
    - Central Access Switch
    - Directory Association

- Payer#2
- Payer#3
B2B Directory:
Actors and their Roles: Payees & Enrollment
OPERATING RULE CATEGORIES: ROLES & RESPONSIBILITIES

Payee Enrollment & Validation

• Payees enroll directly through Node-operator
• Payers may wish to invite their suppliers; select an enrollment service provider
• Electronic Payment Identity (EPI) is owned by the Payee

Node-Operators

• Certified Banks, Service Providers, & Corporate Node-operators
  • Standards set by Directory Association
• Validation
  • Must meet minimum KYC requirements for all payee enrollments

Central Node Operator

• Provides query service to/from Payers & Node-operators

Payers

• Initiate queries to retrieve Payee EPI records
• Access security to adopt FRB Faster Payment taskforce recommendations
COMPLIANCE & OPERATIONAL ISSUES

Potential areas requiring further analysis:

• Compliance Risks
  • KYC - Know Your Customer
  • GLBA – Gramm Leach Bliley Act
  • OFAC – Office of Foreign Asset Control
  • AML - Anti-Money Laundering
  • PCI – Payment Card Industry Data Security Standard

• Operational Risks
  • Security: Application Code Vulnerability
  • Security: Hacker Attacks
  • Security: Identity Theft
  • Performance: Disaster Recovery
  • Performance: Service Level Agreements
QUESTIONS?