The Rise of Digital Identity Networks to Combat Fraud

May 23, 2017

Rob Harris, VP Product Strategy, FIS
Rich Huffman, VP Product Development, Equifax

May 23, 2017
• Digital Identity Network—video introduction
• Consumer experience in the digital identity network—how could it work?
• Architectural overview
• Use Cases, Benefits, Go to Market Plan 2017-18
• Q & A
Challenges with today’s consumer Digital ID experience

Follows Centralized Model

- Consumers must type in personal information to complete their first transaction or establish an account

- Each business entity has its own authentication protocol / requirement (inconsistent)

- Different consumer credential established with each business entity

- ID/Password fatigue has led to adoption of more consumer friendly techniques but still insecure and inconsistent across business entities

- Account lockouts and password resets are painful

- Account freezes due to false suspicious behavior alert leave consumers with a bad experience that typically affects relationship in a negative way
What if the consumer could...

- Provide their authenticated credential to a new business entity without needing key in or supply their personal information?

- Use a single, secure credential to authenticate the same way for every business entity?

- Be required to take extra steps to verify their identity only when the context or risk of the transaction justified it?

- Receive alerts every time their credential was being used?

- Immediately notify every business entity they have a relationship with when their identity has been compromised?

- Instantly and securely confirm that they are legitimately on the other end of a suspicious transaction?
Sign in without passwords…
Sign in without passwords...

Awaiting consumer approval...

Need a new phone?

Special 2017 financing available.

Special low rates available.

Let us help you get a new car.

News & Information

Today in banking and the Financial industry.

Security Tips

Tips for everyday security. How secure are you?
Consumer approval of push notification...
Touch ID authentication option
**Welcome to Financial West**

<table>
<thead>
<tr>
<th>Account</th>
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</table>

Want to **transfer** some funds?
Transfer funds with the Digital Identity Network

Transfer funds

SELECT THE SOURCE AND DESTINATION ACCOUNTS

*From Account
Savings

*Amount
$ 100.00

*To Account
Checking
Checking
Savings
Credit Card

SUBMIT  CANCEL
Funds transfer notification on the mobile device

Transfer funds

SELECT THE SOURCE AND DESTINATION ACCOUNTS

*From Account
Savings

*To Account
Checking

$ 100.00

SUBMIT  CANCEL
Consumer accepts/rejects the transaction
Transfer is successful

Transfer funds

Success

Transaction Reference Number  54344239834284235
Date  05/05/2017 10:16 AM EST

FINISHED
Begin another higher-value transaction
Accept transaction with fingerprint (biometric)
Transaction denied because biometric not used.

Transfer Failed - Denied
Architectural Overview
Architectural overview

Device Data
IP Address, Geotrace, many other unique identifiers

Consumer Data
PII data: name, add, DoB, SSN, DL plus e-mail, phone, etc.

Secure Channel (X.509 Cert) to Mobile Devices
Enables secure step-up authentication (push messaging, out of band, biometrics, etc.).

Digital ID Network
Back Office
- Device Person Binding
- IDV Services
- Analytics Engine
- Fraud Services

Mobile App Security & UI

Enables secure step-up authentication (push messaging, out of band, biometrics, etc.).

FIS Platforms

Online Financial Institution A
Online Financial Institution B

Online Retailer A
Online Retailer B

And @ retailer sites
Consumer able to open and access online accounts at participating financial institutions

FIS Data
EFX Data
Other Data

Enables secure step-up authentication (push messaging, out of band, biometrics, etc.).
Use Cases, Benefits, Go to Market Plan 2017-18
Digital ID networks streamline user interactions

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Scenario Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO-FILL PERSONAL DATA</td>
<td>- Auto-populate address/payment info when purchasing as a visitor</td>
</tr>
<tr>
<td>Secure way to provide personal</td>
<td>- Auto-populate personal info when establishing a new account</td>
</tr>
<tr>
<td>/ sensitive data (no keyboard entry)</td>
<td>- Auto-populate personal info on applications</td>
</tr>
<tr>
<td>ADD NEW CUSTOMERS</td>
<td>- Streamlined identity verification compliance checks (network already knows consumer and has performed checks previously)</td>
</tr>
<tr>
<td>Streamlined new customer /</td>
<td>- Streamline first time authentication (consumer is vouched for)</td>
</tr>
<tr>
<td>account onboarding</td>
<td></td>
</tr>
<tr>
<td>FRICTIONLESS LOGIN ACCESS</td>
<td>- No more ID/Passwords to remember or enter</td>
</tr>
<tr>
<td>Provide improved consumer</td>
<td>- Reduced ‘man-in-the-middle’ and key logger security vulnerabilities</td>
</tr>
<tr>
<td>experience + better security</td>
<td>- Instant, secure communication &amp; interaction with consumer</td>
</tr>
<tr>
<td>HIGH RISK TRANSACTION</td>
<td>- Instantly interact with authenticated consumer to verify suspicious activity before locking account or disallowing card transaction</td>
</tr>
<tr>
<td>Enhanced security for high-risk</td>
<td>- Instantly verify with authenticated consumer any high risk activity that signals account takeover</td>
</tr>
<tr>
<td>transactions</td>
<td></td>
</tr>
</tbody>
</table>
Predicting the Future
Consumer-centric Digital ID Networks

Networks Create More Holistic Insights
- Network vouches for the consumer
- Continuous learning across network participants enhances security for all
- Context-based, smart authentication

Mobile Connects Consumer’s Identity
- Ease of use
- Private, secure communication channel
- Puts consumer in control
- Loyalty Rewards?
### FIS platform integrations

<table>
<thead>
<tr>
<th>Platform</th>
<th>Product / Authentication Scenario</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>eZCard</td>
<td>Credit / Logins, Step Up Authentication</td>
<td>Q2 2017</td>
</tr>
<tr>
<td>IdP</td>
<td>Wealth Management / Logins, Step Up</td>
<td>Q3 2017</td>
</tr>
<tr>
<td>ScoreCard</td>
<td>Loyalty / Login, Step UP</td>
<td>Q4 2017</td>
</tr>
<tr>
<td>Originate</td>
<td>Mortgage Loans / New Account Opening</td>
<td>Q4 2017</td>
</tr>
<tr>
<td>ClearCommerce</td>
<td>Retail / Logins, Step Ups, Payments</td>
<td>Q4 2017</td>
</tr>
<tr>
<td>Horizon</td>
<td>Banking / Login, Step Up</td>
<td>2018</td>
</tr>
<tr>
<td>OAC</td>
<td>DDA Origination / New Account Opening</td>
<td>2018</td>
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**Targeting large FI’s & Retailers with direct integrations…**
A successful Digital ID Network will...

<table>
<thead>
<tr>
<th>For Businesses</th>
</tr>
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<tbody>
<tr>
<td>✓ Improve consumer experience in all interaction channels (call center, in-store, online)</td>
</tr>
<tr>
<td>✓ Improve security (thwart man-in-the-middle and key logger attacks)</td>
</tr>
<tr>
<td>✓ Treat new customers like a known entity instead of like an unknown stranger</td>
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<tr>
<td>✓ Provide instant alerts to when customer identity is under attack or at risk</td>
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<td>✓ Minimize need to collect and retain PII data</td>
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<table>
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<th>For Consumers</th>
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<tr>
<td>✓ Improve consumer experience</td>
</tr>
<tr>
<td>✓ Deliver context-based authentication</td>
</tr>
<tr>
<td>✓ Improve protection from identity theft</td>
</tr>
<tr>
<td>✓ Empower consumer to:</td>
</tr>
<tr>
<td>• Track use of their identity credential</td>
</tr>
<tr>
<td>• Specify alert rules when identity is used</td>
</tr>
<tr>
<td>• Instantly alert network participants when identity is being misused</td>
</tr>
<tr>
<td>✓ Include ancillary identity protection services</td>
</tr>
</tbody>
</table>
New sign in option
Download the Digital Identity Network app in the iTunes App Store or Google play Store.
Pair consumer’s device to <Insert Bank> site

Message on phone confirms image was captured…

…and consumer continues to <INSERT BANK> web site
Digital Identification Network is activated for consumer of <Insert Bank>

Welcome to Financial West

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Want to transfer some funds?
Learn more. Sign in next time with Digital ID Network.

Welcome to Financial West

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Interested in using Digital ID Network to log in next time?
Transfer is successful

Transfer funds

Success

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Date: 05/05/2017 10:16 AM EST

FINISHED
FIS eZCard Card Holder Response Platform

- Account summary information to consumers for credit and prepaid cards
  - 18 months transaction history
  - Make payments, balance transfers
  - Card activation, Tran disputes

- 2,700 Financial Institutions, 2.35M users

- Problem
  - User name password and KBA quiz fatigue
  - Clients asking for convenience/security improvements

- Plan
  - Integrate Digital ID Newark with eZCard Credit platform in June 2017
  - Support log-in, higher risk transactions (e.g., account balance transfers, etc.)