Status and trends for deployments and adoption of mobile payments

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Smart Card Alliance

Preamble

"It's still early"

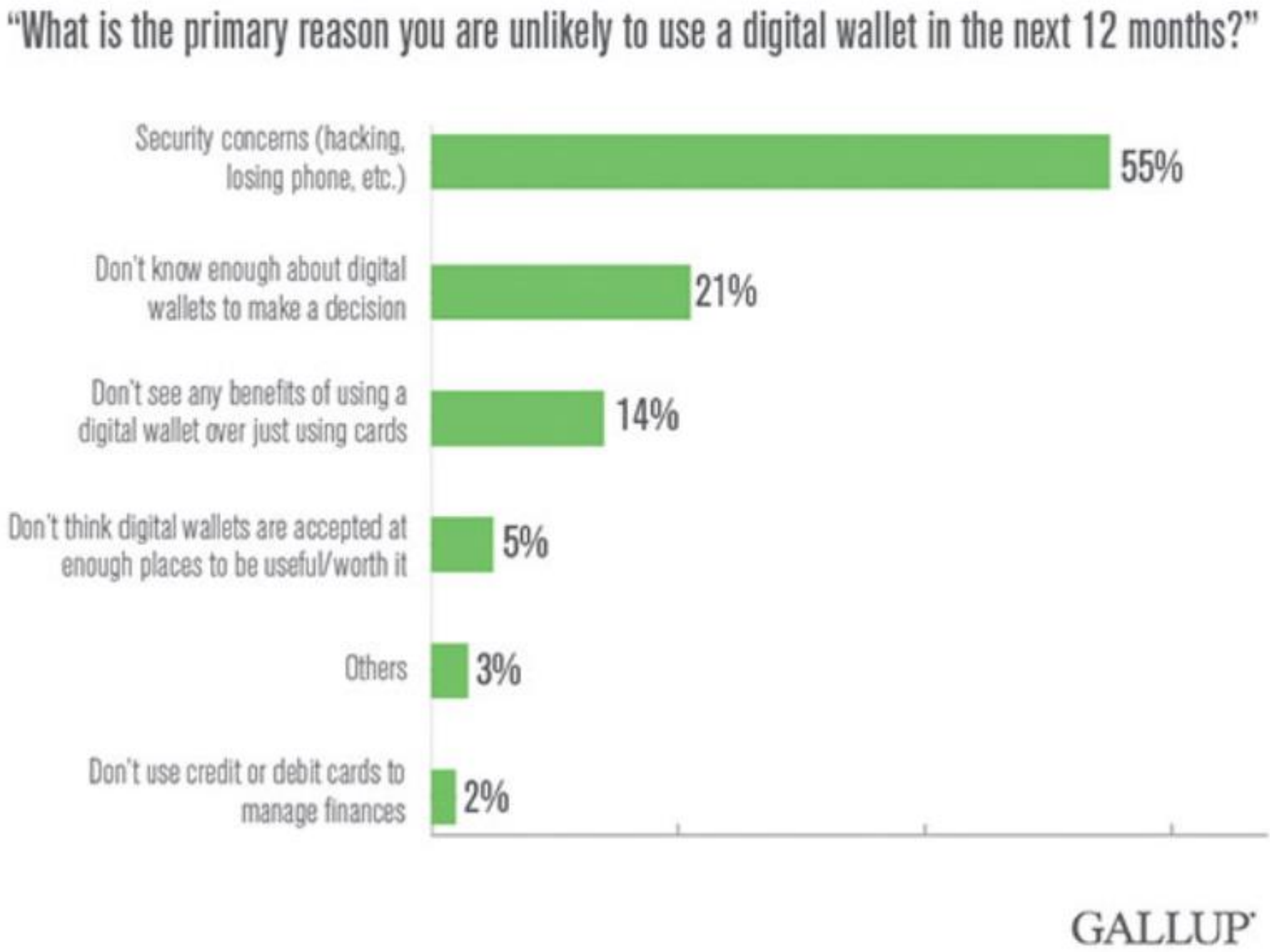
Agenda

- Market Info
- NFC Proximity Deployments
- Barcode Proximity Deployments

Market Info – Gallup Poll

- Only 13% of U.S. adults with a smartphone have a digital wallet on their device.
- 76% of those with a digital wallet have never used it or have almost never used it to make a purchase from a retailer in the past 30 days.
- 11% of men and 11% of millennials use it every time or almost every time if they can to make a purchase.
- 38% don't see any benefits of using the technology.
- 91% of consumers who don't have a digital wallet say they are very unlikely or unlikely to start using one in the next 12 months.

Barriers to Adoption – Gallup Poll



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NFC Proximity – Apple Pay

- **Gold standard for ease of use**
  - Card enrollment
  - Tap to pay with a fingerprint
  - Automatically detects field entry no matter what application is active and uses the default card
- FI participation via direct integration to all major PNO token platforms
- SE based payment credentials globally
- Live in the US and UK. China talk is growing
- Loyalty and prepaid with IOS 9
- 15 basis points for 3 years

NFC Proximity – Samsung Pay

- **Wallet application is not preinstalled on most US devices**
- Security concerns: HCE in the US via PNO token networks, SE based in Europe
- Addition of MST to enable broader acceptance points
  - Adds merchant acceptance but also eco-system confusion
  - Only allows payment use case via proximity
  - Not compatible with all mag-stripe readers
  - Clerk swipe is a cumbersome use case
- Live in South Korea and the US
- Consumer must swipe to launch wallet as an NFC field not automatically detected
- Potential for FI participation via direct integration to all major PNO token platforms in the US
- No interchange fees at launch

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NFC Proximity – Android Pay

- **Preinstalled on new devices by most US carriers**
- **Loyalty and couponing supported via proximity using Smart Tap technology acquired from Softcard**
- Replaces Google Wallet for proximity payments
- PIN is used if a fingerprint sensor is not available on the device
- Android 4.4 (KitKat) or above required due to the need for HCE support
- Potential for FI participation via direct integration to all major PNO token platforms in the US
- No interchange fees

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Barcode Proximity – MCX

- **Reverse barcode system that utilizes cloud stored transaction credentials to fund transactions. (ACH – others not known)**
- The mobile wallet uses the device's camera to capture a merchant displayed QR that represents the pending transaction
- Currently in a beta launch in Columbus Ohio
- Many MCX merchants are now accepting NFC proximity payments
- Loyalty and couponing are included in the marketing materials but usage details are not yet known
- Couponing partnership announced with Inmar

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Barcode Proximity – Starbucks

- Android and IOS barcode based payment application
- Readers deployed in the stores for this specific use case. Mobeam not required
- 6 million plus average weekly transactions in the U.S.
- Accounts more than 20% of transactions made at the U.S. Starbucks-operated stores this August.
- QR code represents the gift / loyalty program card that already existed.
- Closed loop payment clearing
- Support for in-app top-up with Apple Pay and Android Pay
- Simplicity works

Thank You!

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