

A Look at Apple Pay

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About COCC

- Established in 1967
- Client owned, cooperative structure
- Provider of fully integrated core banking technology services
- Fastest growing financial data processing company in the U.S.
- Servicing banks and credit unions in the Northeastern U.S.
- 402 employees
- New headquarters in Southington, CT
- New virtual banking platform launched in early 2014



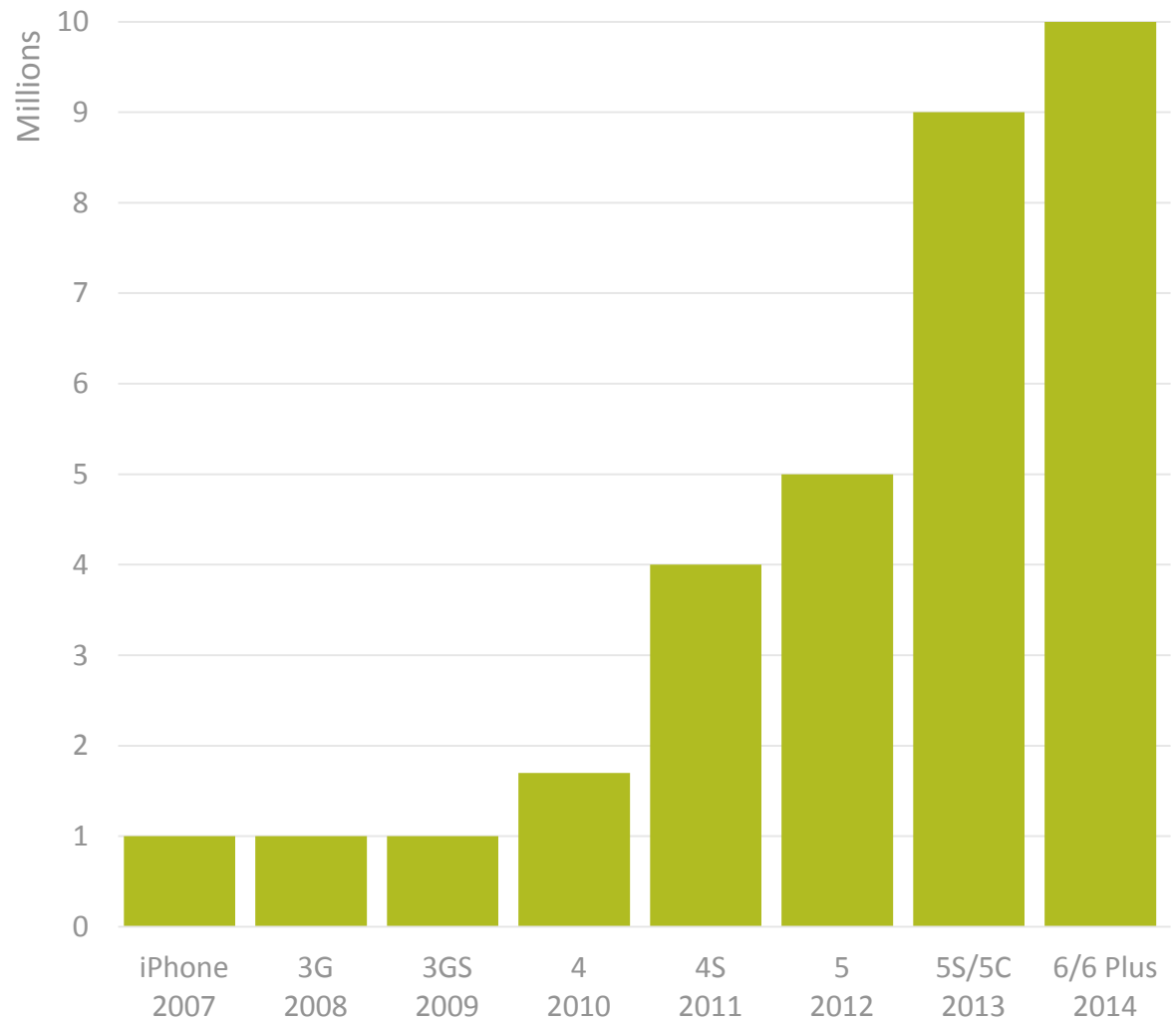


Agenda

- Key Features
- How It Works/Security
- Costs & Benefits
- Terms & Conditions
- Competition
- What's Next?

First Weekend iPhone Sales


Except for the 2007 iPhone, these figures represent sales through the first weekend following launch. The initial iPhone took 74 days to reach 1M in sales.





Key Features

- Contactless payment solution using the Near Field Communications (NFC) capabilities of the iPhone 6, iPhone 6 Plus and Apple Watch
- eCommerce (mobile app) NFC checkout feature enabling consumers to purchase without entering payment info

Cart subtotal	\$599.00
Your cart qualifies for free shipping	
Buy with other payment options	Buy with  Pay





Merchant Acceptance

- Less than 10% of merchant terminals are NFC-enabled today
- 220,000 locations
- Less than 150 merchants
- McDonalds, Whole Foods Market, Panera Bread, Walgreens, Subway, Staples, Bloomingdale's, Disney Store, Duane Reade, Macy's and Sephora



“That’s about 2.4% of the roughly 7 million to 9 million [merchant locations] in the U.S. that accept credit cards. The remaining 97.6% of businesses do not have point-of-sale systems that work with [NFC], the technology Apple Pay relies on.”

– (Time.com/Money, Sept 9, 2014)



Card Issuers

- Visa, MasterCard, American Express and Barclaycard
- Bank of America, Capital One, Chase, Citi, Navy Federal Credit Union, PNC, USAA, U.S. Bank and Wells Fargo
- 54 Issuers as of January 21, 2015
- Visa lists ~550 banks to have Apple Pay “in the coming months”
- MasterCard’s October 2014 press release listed 14 FIIs

“We’re working with more banks to support Apple Pay. If you don’t see your bank below, check back soon.”

<http://support.apple.com/en-us/HT6288>



Consumer Adoption

- Apple pay launched October 20, 2014. It is still far too early to hold stock in statistics related to usage rates and transaction volumes
- InfoScout surveyed 400 Apple Pay users on Black Friday, 2014
 - 10 percent of all iPhone 6 users have ever tried Apple Pay
 - On Black Friday, 4.5 percent of those who could have used Apple Pay actually did

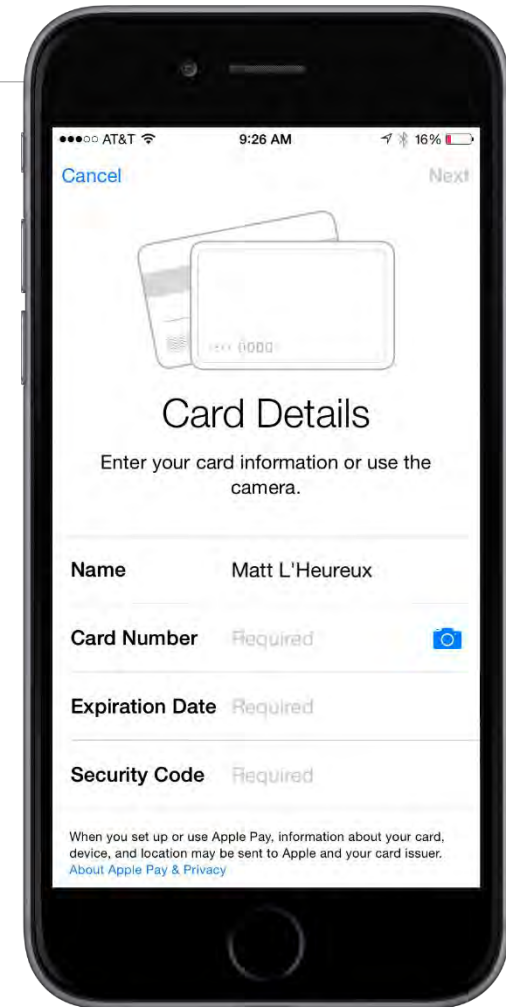
45 Day Health Check: 6 out of every 1,000 shoppers will use Apple Pay when they are in a store that accepts NFC payments.

Source: Pymnts.com "How Many Consumers in Apple Pay's Bushel Basket?"
– Karen Webster (Dec, 2014)



Card Setup

- iPhone 6, 6 Plus, iPad Air 2 or iPad Mini 3
 - iOS 8.1 or later
 - Touch ID or Passcode enabled
 - iCloud account
- Settings > Passbook & Apple Pay
- 'Use Card on File with iTunes' or 'Use a Different Credit or Debit Card'
- Snap a Photo or Enter Card Details
- Click Next...

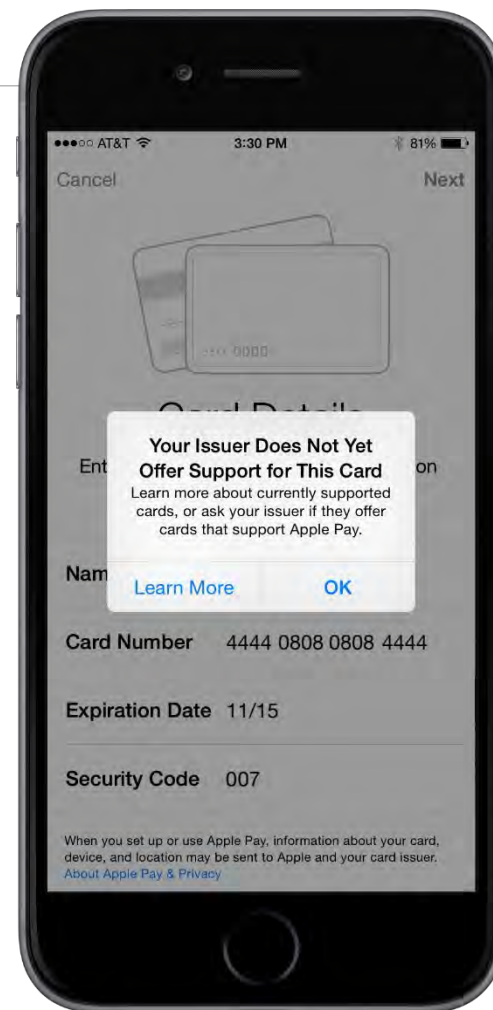




Issuer Not Supported

- “500 New Banks Supporting Apple Pay” – Apple, October 16, 2014
- Upon attempting to add an unsupported card, users are presented a list of institutions already supporting Apple Pay

“Supported banks include; American Express, Bank of America, Capital One Bank, Chase (Visa only), Citi, Merrill Lynch (Credit only), U.S. Trust, and Wells Fargo.”





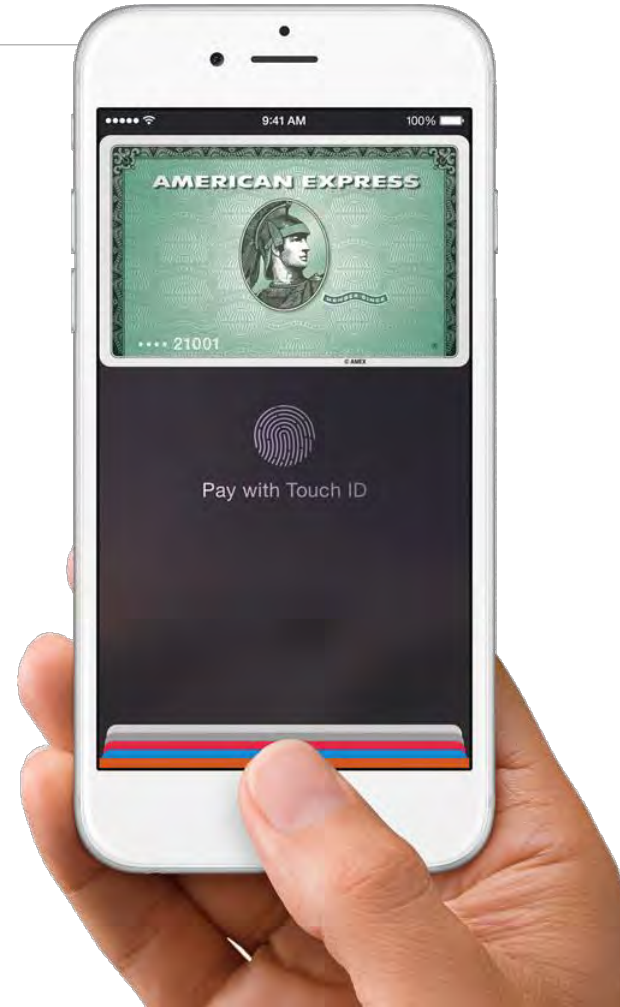
Card Setup

- Cards are added to the Passbook App during the one-time provisioning process
 - Take a photo of the card or manually enter card details
- Easiest method: Agree to use the card already associated with your iTunes account
 - Apple has 800 million iTunes accounts with payment cards tied to them
- Apple passes card details to the card network
- Card network returns a Device Account Number (device-specific token) that is stored on a secure element of the mobile device
- None of the user's financial information is stored in the cloud (ex. iCloud) or on the mobile device



Making a Purchase

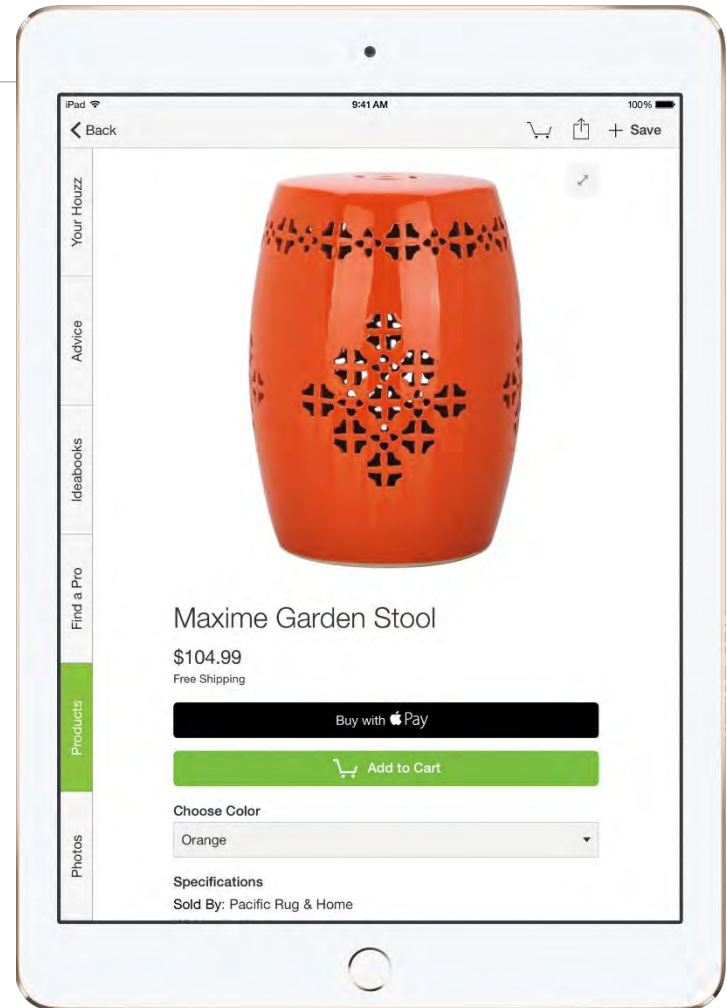
- Hold your device near the terminal and touch the fingerprint reader
 - You do NOT need to unlock the phone.
- Merchant does not need to know Apple Pay is being used
- Token (not the card number) is provided to the merchant
- PAN is retrieved by the card network and passed on to the card processor



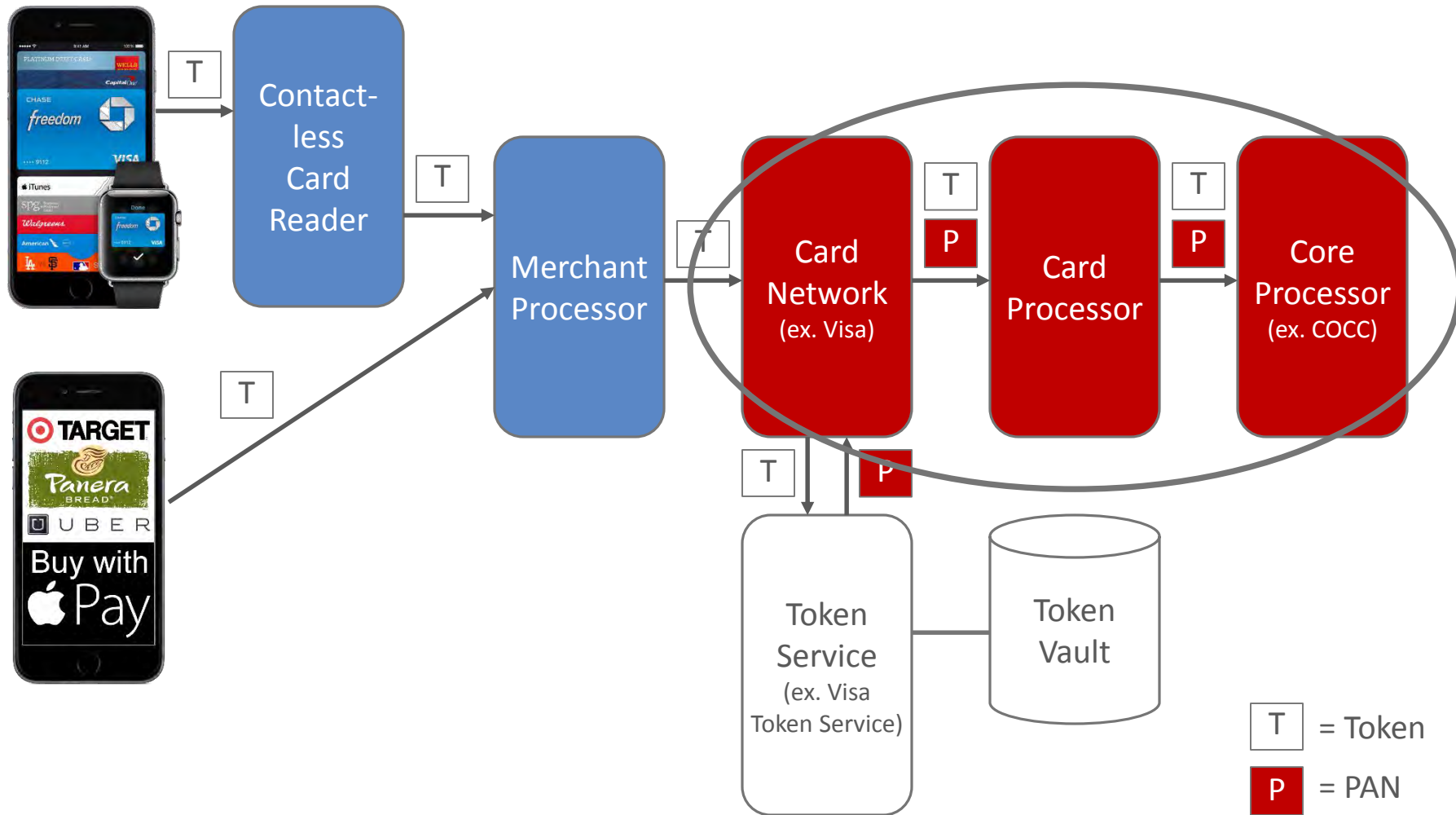


Making a Purchase

- eCommerce mobile apps can enable purchases without registering an account, entering personal information or entering payment details
- The latest iPad models include NFC for purchases through mobile apps, but they do not support NFC at POS terminals
- Target, Panera Bread, Apple Store, Uber, Disney Store and more



Apple Pay Purchase





Costs

- Consumers purchase one of the latest iOS devices
- Merchants upgrade to NFC point-of-sale terminals (\$300 - \$500 per terminal plus integration fees)
- Card processors develop and certify to support tokenization
- Financial institutions pay for tokenization services
 - Visa Token Service (~ \$0.07 per token issue plus monthly carrying fees*)
 - MasterCard Digital Enablement Service (MDES) (~ \$0.50 per token issue plus monthly carrying fees*)
- Financial institutions give up 15 basis points (.15%) on purchases

* CU Times: “Everything You Wanted to Know About Tokenization” - Robert McGarvey (Dec 07, 2014)



Benefits

- Get positioned alongside the highest profile brand in consumer technology
- Reduce fraud losses
- Process fewer chargebacks
- Increase the volume of card transactions
- Increase mobile shopping
- Weigh the risks of decreasing or deferring costs associated with EMV card deployment as mobile payments evolve
- Enjoy the decline of the plastic card while maintaining the usage of your debit or credit cards as the underlying payment vehicle



Terms & Conditions

- Three year term with automatic annual renewals
- Apple can modify terms at any time
- Apple can discontinue or suspend Apple Pay at any time. It must do so for all issuers and provide advanced notice
- FI can only terminate or suspend if:
 - Data breach is not cured in 30 days
 - Failure of the platform to comply with the law
 - FI finds that a change of terms is “materially impracticable”
- No warranties, including non-infringement indemnity
- FI must offer the service to at least 95% of your card base





Terms & Conditions

- Fees are defined and the FI cannot pass them on to cardholders
- Apple can use aggregated cardholder data to improve the platform and other Apple products and technology provide the data is de-identified
- FI must supply reports and data if and when requested by Apple
- FI grants Apple a license to use FI trademarks





Additional Requirements

- FI must furnish Apple with evidence of successfully completing a growing number of mandated test cases
- Train the call center to handle Apple Pay questions
 - Apple Pay FAQ provides many answers
- Many FIs are reporting that the level of effort was greatly minimized on account of tasks performed on their behalf by the card processor
- Visa, MasterCard and card processors are working through the process as FIs get queued up by Apple
- Apple is controlling the rollout with quality of service being the highest priority





Apple Pay's Competition

- Key differences between Apple Pay and most competing solutions include:
 - Apple controls the hardware and software
 - Apple is not a party in the transaction data flow
- Softcard
 - Backed by the major (MNOs) Mobile Network Operators
 - Payments, offers, and loyalty rewards
 - “Pay with Softcard anywhere you see the contactless symbol.”
 - Available for Android and Windows Phone
 - Google + Softcard ?





Apple Pay's Competition

- CU Wallet
 - 65+ Credit Unions
 - Powered by Paydiant
 - QR Codes
 - Pilot launch planned for early 2015
- PayPal
 - Mobile payment accepted at Home Depot, JC Penney, Toys 'R' Us and several other national stores
 - At the register, select PayPal then enter your phone number and PayPal PIN



Google Wallet

- Google Wallet
 - Released 2011
 - Unlike Apple, tokens are stored in Google's cloud and Google is directly involved in the purchase process
 - Google endures additional compliance concerns such as PCI
 - The high volume of hardware manufacturers leave Android to be a much more fragmented market
 - Google's iOS Apps cannot access the iPhone NFC chip



Apple does not allow developers to access the NFC chip or otherwise add Apple's POS payment capabilities to a mobile banking app.



MCX (Merchant Consumer Exchange)

- Association of Merchants that will not accept Apple Pay and instead will only use their CurrentC mobile wallet (coming in 2015)
 - Wal-Mart, Best Buy, Target, CVS, Rite Aid, Sears, Lowes, Kmart and more
- Powered by Paydiant
- Uses a QR code displayed on the cashier's screen and scanned by the consumer's phone
- Uses ACH to access the user's checking account while avoiding interchange
- Provides retailers unprecedented access to data such as what the shoppers bought, their names, addresses, emails, phone numbers and location
 - By contrast, Apple took itself out of the transaction flow and therefore does not have access to this type of data



What's Next

- Apple needs to focus on merchant acceptance
- Apple needs to convince consumers that Apple Pay solves a problem
- Card processors have already certified or will soon certify with tokenization services
- Institutions will contract for tokenization
- FI's card network or card processor will help the FI get queued up for the Apple Pay network
- Apple will announce future phases of their mobile wallet strategy (ex. loyalty rewards)
- MCX and other digital wallets will compete, cooperate or both
- Big players will to adapt in pursuit of the more fragmented Android market



Apple Pay Recap

- A win for banks and credit unions
 - Uses existing debit and credit cards
- Adds additional security features
 - NFC, Tokens & Biometrics
- Costs to be incrementally offset with decreased fraud related expenses and increased transaction volume
- Still in its infancy stage
- Raises the intensity of competition in mobile payments





Resources

- Apple Pay Support
 - <http://www.apple.com/support/iphone/apple-pay/>
- Apple Pay FAQ
 - support.apple.com/en-us/HT201469
- Apple Pay Security & Privacy Overview
 - support.apple.com/en-us/HT203027
- Apple Pay Participating Issuers
 - support.apple.com/en-us/HT6288
- Visa's List of Banks Coming Soon to Apple Pay
 - usa.visa.com/clients-partners/technology-and-innovation/apple-pay/financial-institutions/index.jsp

Thank you

