

The Impact of Emerging Payment Technologies on Retail and Hospitality Businesses



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Making the customer payment process convenient, quick, and secure is about as close to a "business basic" as it's possible to be. Retail and hospitality companies have the added incentive of minimizing transaction costs whenever and wherever possible, while at the same time mitigating their own risks around data security and loss liability.

The payments landscape has grown increasingly crowded over the past several years, with new entrants and new technologies seeking to leverage the popularity of smartphones and other connected consumer devices. Additionally, the rapidly approaching advent of global EMV standards in the U.S. market will affect traditional card-based payment systems, forcing merchants to bring their point of sale (POS) and payment systems in line.

This e-Book will discuss several key emerging payment technologies, exploring their pros and cons for retail and hospitality enterprises.

# 1 The Advent of EMV

EMV, an acronym for its original founding companies Europay, MasterCard, and Visa, is not a payment technology per se. Rather, it's a set of global standards that encompasses chip-based payment cards as well as contactless payments, payment applications, personalization, and security solutions such as tokenization. These specifications are designed to allow interoperability between integrated circuit (IC) or "smart chip"-enabled payment cards and POS terminals worldwide.

These chip-enabled cards, which offer more secure transactions than traditional magnetic stripe debit and credit cards, are already being distributed to consumers in the U.S. – the last major global market to be penetrated. Chip cards' improved security comes from their ability to dynamically generate a unique identifying code for each transaction, which can be read by EMV-capable terminals. In contrast, magnetic stripe cards' static identification structure means that if their data is stolen, it can be used to either clone a new card or for Card Not Present (CNP) transactions like phone and e-commerce purchases.

For retail and hospitality enterprises, the key factor around EMV is the coming October 2015 liability shift. Normally, a payment card's issuer is liable for fraudulent transactions. However, merchants that have not upgraded their POS systems to handle EMV-compliant cards from American Express, MasterCard, Discover, and Visa by next October will be held responsible for such transactions.





#### **EMV Transition: Pros**

#### **More Secure Transactions:**

The increased security features enabled via chip cards will help reduce fraudulent transactions. Merchants themselves will suffer fewer losses, and they will also limit the exposure of honest customers' card data to thieves who "skim" information from magnetic stripe cards. Even if a merchant's fraud numbers are currently low, they may rise – particularly if U.S. retailers are slow to implement EMV standards.

#### **Relief from PCI Compliance:**

Major card issuers have incentivized merchants to make the EMV switch by eliminating annual qualifications for PCI-DSS (Payment Card Industry Data Security Standard) compliance. Visa's Technology Innovation Program, launched in October 2012, exempts merchants with 75% of their terminals chip-capable. Savings from these and similar programs will offset some of the costs of POS upgrades, particularly for larger retail and hospitality companies that have had to devote considerable resources to proving their PCI compliance year after year.

#### **Contactless and Mobile Payment Capabilities:**

Chip-enabled terminals open the way for contactless payments, conducted either via the chips embedded in the cards or via smart mobile devices. While mobile still only represents a small percentage of U.S. payments, they are on a growth path. These "tap to pay" transactions will also take less time than card swiping, speeding checkouts and improving customer service.



### **EMV Transition: Cons**

#### **POS Upgrade Costs:**

Magnetic stripe readers have proven to be long-lasting pieces of hardware, with some merchants still successfully using equipment that is 30+ years old. EMV-capable terminals will be more expensive to manufacture (at least until economies of scale begin kicking in), limiting the ability of providers to offer free or subsidized POS hardware. Internal payment systems will also need to be upgraded, and retailers will need to offer both traditional "swipe" and chip options for the foreseeable future.

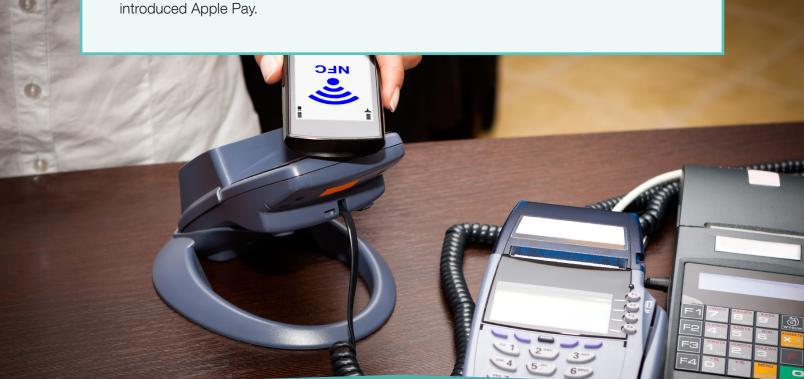
#### Additional Employee (and Customer) Training:

New payment options mean additional training of both new hires and existing employees. And because these payment options will also be new to many U.S. consumers, cashiers will need to learn enough about them to help customers, including key "talking points" about security improvements.

# Mobile and NFC-Enabled Payments

## What is NFC?

Near Field Communications (NFC) support the "contactless" payments that are made possible with smartphones and other connected devices. As with EMV, its use for payments is already popular outside the U.S., particularly in Europe and Asia, but it's on a steep growth curve in this country as well. NFC is a key enabler of mobile wallet and emerging payment infrastructures including Google Wallet, PayPal, and the recently introduced Apple Pay.



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## **NFC: Pros**

#### Versatility:

As a basic communications standard, NFC's applications go well beyond the payments sphere. It's key to connecting the world of apps to the physical world, for example enabling customers and diners to "check in" via Foursquare, as well as for transit passes, event ticketing, and reward systems. Increased use cases will encourage more consumers to explore NFC-enabled functions, such as payments, on their smartphones.

#### **Improved Customer Service:**

Once the learning curve with mobile payments flattens, transaction times should decrease, shortening checkout lines. Mobile wallets also offer shoppers the ability to pre-load coupons and receive frequent shopper discounts without adding steps to their checkout. In addition, NFC-enabled tags placed on store shelves can provide deep product information, encouraging purchases when an associate is not available to explain an item's features and benefits.

## **NFC: Cons**

#### Costs:

NFC-enabled hardware and systems are not cheap, and companies will need to make sure they have a solid business case and an acceptable time to ROI before investing. In the case of POS systems, adding NFC capabilities to EMV compliance upgrades may be a way of making these changes cost-effective.

#### Has a Consumer Tipping Point Been Reached?

The number, and percentage, of NFC-enabled smart devices is on the rise, but it had not been a feature of Apple's products until the recent iPhone 6 release. Wired magazine projects that even by 2016, as few as 25% of American consumers will be using NFC-enabled smartphones. Merchants won't want to get too far ahead of offering payment methods that only a small number of their customers will want – or be able to – take advantage of.





Two of the biggest players in the mobile payments field are Apple and Google. The popularity of the former's products, and consumers' loyalty to them, made the October 2014 introduction of Apple Pay big news. Google Wallet is an industry "veteran," having debuted in 2011, but its longer experience has allowed the company to bring the app more in tune with consumer and merchant preferences.

With Apple Pay, a wireless mobile wallet solution using NFC technology to support contactless payments, users select a default card that is charged when the consumer brings their phone near a payment terminal.



# **Apple Pay: Pros**

#### Convenience and Ease of Use:

At checkout stations and within a variety of apps, consumers can select the Apple Pay option by pressing a single button and verifying their identity by putting a finger on the Touch ID button. Apple has a head start with its Passbook, on which users can store boarding passes, tickets, and coupons; users can simply add the credit or debit card that pays for their iTunes account, or add new cards by taking a picture of them with the phone's camera.

#### **More Secure Payments:**

Apple Pay makes use of tokenization to improve transaction security. Rather than providing actual credit or debit card numbers to merchants, Apple Pay assigns a unique Device Account Number that is encrypted and stored in a dedicated chip within the iPhone. Additional security is provided with the generation of a transaction-specific dynamic security code. If a phone is lost or stolen, users can use the Find My iPhone feature to put a device in Lost Mode, suspending Apple Pay privileges, or wipe the iPhone clean completely.



# **Apple Pay: Cons**

#### No Relief from Interchange Fees:

Apple Pay encompasses major credit cards but not those from smaller banks or credit unions, nor debit cards, meaning retail and hospitality companies must pay the high credit card interchange rates on these transactions. While increased business from Apple Pay users may make up for these costs, retailers must weigh whether shoppers would have made the same purchase anyway and paid for them via another method.

#### **Limited to Apple Devices and Participating Retailers:**

Apple products are popular but they are still outnumbered by Android operating system devices. In addition, while Apple boasts an impressive collection of participating retailers, drugstore chains Rite Aid and CVS – both members of the MCX retailer consortium – have announced that they will not accept Apple Pay.

#### **Little Support for Merchants' Customer Programs:**

As noted, Apple Pay removes customers' card data from transactions as a security measure, but it also limits the amount and type of customer data retailers have traditionally gleaned from these transactions – data that helps them improve their marketing and merchandising. In addition, Apple Pay does not easily interact with merchants' customer loyalty programs.

# Google Wallet: What Is It?

Google Wallet was introduced in 2011 – ages ago in the fast-moving world of mobile payments. As its name implies, it's an electronic version of the consumer's wallet, storing payment cards as well as gift cards, coupons, etc., and enabling contactless payments at a number of retail and hospitality locations.



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# **Google Wallet: Pros**

#### **Encompasses a Wide Range of Payment Cards:**

Google Wallet works not only with the major national card issuers but is also open to credit (and debit) cards issued by smaller banks and credit unions. In addition to expanding usability for customers, retailers have an opportunity to encourage customers to choose payment methods with lower interchange fees.

#### Easy Integration with Gift Cards, Loyalty Cards, and Coupons:

The Google Wallet can store gift cards and display the balances remaining on them along with electronic coupons. The application also interfaces with a number of retail and hospitality customer loyalty/rewards programs.

#### **Available on More Smartphones:**

As noted, Apple Pay is limited to the latest version of the iPhone, while Google Wallet is accessible to devices running on iOS and Android operating systems, as well as those offered by BlackBerry and Microsoft. Mobile payments are still seeking a consumer acceptance "tipping point," so widespread availability is critical to the success both of individual apps and of the technology in general.

# **Google Wallet: Cons**

#### No Border Crossing:

Currently, Google Wallet is only supported in devices purchased within the U.S. This makes it unappealing/unavailable to foreigners shopping or dining here, and limits its usability for U.S. residents traveling abroad.

#### No Relief on Interchange Fees:

As with traditional payment card transactions, merchants need to pay credit card-level interchange fees on each transaction that occurs with a Google Wallet. This makes it difficult for retail and hospitality companies to offset the costs involved in accepting this new technology.



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## Conclusion

We're in a period of sometimes confusing change when it comes to payments, both with traditional credit and debit cards catching up to global EMV standards and with still-emerging mobile technologies. And even as consumers adopt new payment methods, most retailers will need to continue accepting older forms so as to serve the widest possible customer base.

Retail and hospitality companies will need to exploit their own knowledge about their customers' current (and potential) payment preferences and choose POS payment solutions that maximize functionality and flexibility, while continuing to offer reliability and ease of use.



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