The Mobile Revolution

Why the rise of mobile payments matters to all CIOs

The concept of using a mobile device to initiate or process a financial transaction has been around for some time, but the explosion in mobile device adoption has triggered the entry of some well-funded market participants who are combining technology and product innovation to transform the payments industry.

Every CIO, whether with a retailer, a financial institution, or a B2B company, needs to pay close attention to this space because these changes will likely impact nearly every company and individual in the coming months and years.

HOW WE GOT HERE
The recent surge in interest is driven by a confluence of factors:

1. Quality of user experience
Functionality-rich mobile apps on popular mobile devices and websites are finally providing the kind of on-the-go user experience that consumers have come to expect. The explosion of tablet usage continues this shift towards mobile-centric user experiences.

2. Increasing comfort with the security of financial transactions on mobile devices
Consumers who are comfortable making financial transactions online (card transactions, PayPal, ACH) are better able to accept mobile devices as an alternative channel for payments. Banks and credit card networks, trusted by consumers to handle financial information securely, are creating their own mobile payment services. Technology alternatives, such as a secure element on a mobile device or payments credentials stored in the cloud, provide further possibilities for building secure services with a level of risk the same or better than current payment alternatives.

3. Unique value-added services
New services leverage the context and immediacy that is unique to mobile devices. These include product information, price comparison, location-based promotions, access

1AlixPartners Financial Services Franchise Health Study June 2012.
to loyalty programs, permission-based targeted marketing, etc.

As a result, expectations for the growth of mobile payments continue to be very high. Market analysts predict as many as 450 mobile-payments users to drive $617 billion in payments by 2016.²

DEFINING THE TERMS
While experts are familiar with the various types of mobile payments being discussed today, CIOs can benefit from a quick recap, since “mobile payments” covers a broad area of different user experiences enabled by various technologies. These include:

1. Digital Mobile Wallet
A digital wallet stores payment credentials (such as credit or debit card information) and can, in some cases, communicate with the payment infrastructure in a store to enable payment. In an in-store setting, the transaction might use technology alternatives such as near-field communication (NFC) or quick response (QR) codes. In a remote payment situation, an existing network connection could be used to transmit payment credentials to a payment processor via a payment gateway. If it functions purely as a repository for other payment instruments, the digital wallet may not have a separate, additional payment instrument associated with it.

2. Mobile Payment Instrument
This is typically a separate payment instrument (such as a stored value account, e.g. PayPal) that can be funded by various sources such credit or debit cards, bank accounts, etc. The mobile payment instrument has the ability to hold some economic value which largely simplifies services such as person-to-person payments and reduces processing cost for the issuers of these instruments. Closed-loop payment instruments can only be used only at a specific merchant (e.g. Starbucks card). These store-specific mobile payment solutions drive efficiency and speed during the checkout process and are usually tied to a merchant loyalty program.

3. Mobility-Enabled Point of Sale (POS)
   Card-reader enabled
   These are typically mobile devices (smartphones or tablets) with card readers. These allow small merchants to accept credit cards without incurring a lot of the fixed charges associated with card acceptance. (Fixed charges typically don’t matter as much for larger merchants because they get amortized over a large number of transactions.) Smaller merchants, for whom fixed charges can represent a significant percentage of their overall cost, would rather have a (primarily) variable cost structure where fixed costs are kept to a minimum. Square, Inc. accelerated growth in this category when it launched its Square card reader in 2009/2010. Today there are several similar products from Intuit, PayPal and iZettle.

   NFC-enabled
   Near-field communication enables radio communication between devices that are in very close proximity to each other. Traditional POS terminals need to be NFC-enabled to communicate with NFC devices for in-store mobile payment. Merchants, already having to upgrade their POS terminals to comply with Europay, MasterCard, and Visa (EMV) requirements, may now need to plan for an NFC upgrade as well.

4. Direct Carrier Billing
In direct carrier billing, consumers charge purchases to their mobile-phone bills.

Traditionally, this method has been reserved for low-value digital goods and other small-ticket payment items.

**COMPLICATED ECOSYSTEM**

At a basic level, the transaction in question is simple: A consumer pays a merchant for some product or service through a payment ecosystem, including a payment processor and a payment network, issuer, acquirer, etc. In addition, to enable this transaction, a set of capabilities around risk management, fraud monitoring and management, authorization, clearing, settlement of funds, etc. is needed.

Different players in the mobile payments ecosystem are vying for a role in enabling this transaction. These include banks, payment networks, telecom carriers, alternative payment providers, mobile device manufacturers, mobile operating system providers, chip vendors, POS terminal vendors, and trusted service managers – to name only a few of the many different stakeholder groups involved.

Needless to say, this is a complicated, evolving ecosystem where most participants are extremely well funded. Incumbents are entrenched, have considerable market power, and will defend their existing revenues with their considerable resources. The more prominent challengers have a history of using technology, product or business-model innovation to disrupt other industries. An important aspect to remember is that this ecosystem is evolving within controlled regulatory frameworks which govern financial services in most countries across the developed or developing world. Mobile payment providers must conform to key requirements around transaction security, data privacy and protection of consumer information.

**WHAT TO EXPECT**

Large-scale adoption of mobile payments will likely be driven by tangible value for the consumer.
Swiping a physical card is not a significant pain point for consumers in countries where card payments are commonly used, so replacing that swipe with the wave of a mobile device is unlikely to be a primary reason for consumers to adopt mobile payments on a massive scale. Instead, the convenience that digitization of payment credentials brings to consumers must be accompanied by context-specific services such as location-based offers, in-store shopping tools, targeted promotions, and so on. In addition, any mobile payment provider that seeks to drive large scale adoption must either find an innovative way to preserve the commonly used loyalty benefits (e.g. credit card points, airline miles, cash back, etc.) to which consumers have become accustomed or offer something of equal or greater consumer value. In developing economies, the value proposition is different. Mobile payments can help bring basic payment services to geographies (remote villages) or segments of the population (un-banked or under-banked) where traditional banking services are not available.

On the merchant side, adoption will likely be driven by the promise of a better top line through more effective customer targeting and acquisition. Analytics built on data pertaining to consumer location and wallet size alongside SKU-level data on products researched or bought can lead to a deeper understanding of consumer behavior and preferences. At the same time, mobile payments could drive down the cost of payment acceptance for smaller merchants by providing a (largely) variable cost structure.

On the technology front, expectations for large-scale NFC adoption have tempered in recent months. NFC-enabled mobile devices are not expected to reach the hands of a majority of consumers this year and might actually take a couple of years longer than initially expected. In the meantime, alternatives such as QR codes work pretty well and are being used by companies such as LevelUp.

Today there is no single ecosystem player that has the power to control the entire mobile payment value chain and provide a single, seamless, end-to-end transaction experience for consumers. For the foreseeable future, key ecosystem stakeholders that want to provide a credible consumer offering in the hope of generating real market traction will need to find a way to partner with other companies to bring a compelling mobile payment solution to market.

Mobile payments, and more broadly, mobile financial services are likely to become increasingly important to key industry sectors such as retail and banking. For banks, the ability to identify key consumer trends and user preferences will be critical in designing the most compelling mobile services in an effort to drive customer acquisition, cross-product revenue growth and competitive differentiation. Similarly, for retailers the ability to segment and target customers based on transaction, location and spend data will be critical in delivering the most consumer value including targeted offers, product information, shopping tools, payment integration and loyalty programs. Keeping an eye on this space will be critical for CIOs across these industries because change is coming. The only question is when.
For more information, please contact:

Ari Roy
Director
aroy@alixpartners.com
+1 (646) 746-2514

AlixPartners conducts a broad range of surveys and research in industries around the globe. To learn more about our publications, or to contact the AlixPartners professional nearest you, please visit http://www.alixpartners.com/whatwethink.aspx.

AlixPartners, LLP is a global business advisory firm offering comprehensive services in four major areas: enterprise improvement, turnaround and restructuring, financial advisory services, and information management services. The firm was founded in 1981 and can be found on the Web at www.alixpartners.com.