Challenges of Mobile Payments Technologies & Adoption

There are many merchant-centric payment technologies in the industry today including wireless POS (used for reaching mobile merchants) contactless & micro payments (which allow traditionally cash-based companies to accept payment cards) and virtual POS (a cost-effective way to accept payments from a PC-based platform). But these all keep the consumer completely off the playing field.

However, two of the most relevant mobile payment technologies in the United States market that level the playing field for consumers and puts control and convenience into their hands. These are Near Field Communications (NFC) and Short Message Service (SMS - aka text message). But, two important factors that still continue to put a hitch in the proverbial get-along are:

1. Security vs. Convenience
2. Merchant / User Adoption

**NFC-based payments focus on convenience.**
A customer can hold his/her phone in front of a NFC-enabled card reader and complete a transaction with just a few key entries. This is simple and efficient in practice. However, Adding security features reduces both the speed and the convenience of that payment option.

**SMS-based platforms offer the polar opposite to NFC-based payments: security at the cost of convenience.**
Since there is typically a multi-step, PIN-based process to authenticate a payment, it takes more time and effort for the consumer at the POS, thus considerably reducing the convenience factor. SMS-based offerings will have to find a way to speed up the process for adoption to occur. Consumers don't like standing in lines and they don't want to spend a lot of time at the POS.

The secret ingredient, of course, is the delicate balance between the two factors. But another challenges in doing so includes merchant participation and merging consumer education with cellular habits.

**Merchant participation** of NFC payment acceptance could be slowed due to the expense of installing NFC enabled terminals while consumer adoption could be hindered by the lack of mobile devices that support the technology today.

**Educating Americans** about Contactless Technologies is a key factor for adoption. For instance, although there are already a number of security measures in place for NFC-based payments such as chip-generated security codes, distance requirements, and zero-liability
assurances similar to most credit card programs—most Americans just don’t yet feel comfortable with the technology.

**Yet some statistics indicate that mobile financial services (MFS) & Mobile Payments are taking flight worldwide:**

- **There will be around 1 billion people accessing financial services by mobile by 2015.** The MFS market will be dominated in Asia, driven by mobile operator-led initiatives in developing nations to bank the unbanked.

- **Remittance/transfers by mobile is growing three times faster than m-banking.** Will MFS be mobile’s killer application?

- **Up to 50 percent of the world’s mobile subscribers could be making payments by mobile (m-payments) in 2014.**

- **M-commerce is predicted to reach US$119 billion in 2015.** Japan remains king.

- **Top m-commerce retailers globally include: Taobao, Amazon and eBay.**

- **74 percent of online retailers in the US are planning for m-commerce.** On average, retailers were spending US $170,000 on their mobile sites in 2010. But today mobile only generates low proportion of revenue.

- **M-ticketing will be used by more than 1 in 10 mobile subscribers in 2014, particularly in the transport sector.**


- “…Mobile payment transactions are expected to catapult to nearly 4.5 billion in 2012 -- a 429 percent increase from an estimated 850 million in 2009”

- “…an upswing in Near Field Communication (NFC), which could make up 1.3 billion mobile payments in three years.”

- Among the worldwide adoption of mobile payment technology, the burgeoning numbers in Asia would cause it to "lead the world in the number of mobile-payment users and transactions in 2012."


With these numbers, combined with a current mass addiction to cell/smart phone technology, it seems to make sense for merchants and consumers to at least understand the ins and outs of emerging mobile payment technologies.