

# Active posters: the physical storefront for digital goods

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An area of growth for MVNOs is the up-coming mobile ‘wallet’ applications, such as enabled by Smart Posters, based on NFC (*Near Field Communications*). The Smart Poster uses NFC technology in both passive and active mode. The passive mode enables users to read a tag into the handset, giving product information or coupons. The active NFC poster can read information from the handsets and continue to interact with the user - initiate a transaction, download files etc. Such NFC facilities can increase the store revenues per square footage, reduce waiting time at the till, enhance accuracy and speed of processing bills and payments and extend the reach for promotions that may entice users to buy.



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## Introduction

Mobile payment technology is an expanding field, and Near Field Communication (NFC) is an emerging solution that may represent an improvement over conventional payment processes. Retailers are using technology to solve challenges and make the buying experience enjoyable in many ways. For example, retailers have applied technology to banking, security, advertising and sales, all to facilitate how consumers ‘go to market’. Now, the introduction of Smart Poster technology can address some of the business obstacles that retailers are facing, such as yield management, line busting and advertising. NFC has the ability to change the traditional retail business transaction completely.

## What is NFC?

NFC is a technology that allows a device to share and access data over a short distance to simplify a transaction. With the support of both handset manufacturers and telecommunications carriers, retailers are able to use mobile devices as a payment mechanism for goods and services.

The primary business driver for NFC technology is mobile commerce. The focus for mobile payments is Point of Sale (POS) at the retail level. According to Gartner, the mobile payments industry hit US\$32B in 2010, and that number is expected to rise to US\$245B in 2014. The current user experience is based on a ‘tap-and-pay’

model, using your new mobile wallet. The process is similar throughout the industry: The user has an NFC-enabled device that can be used to trigger the payment mechanism. This ‘wallet’ resides either on the mobile device or in the ‘Cloud’. During the buying process, the user taps the device against the POS device, creating a transactional link and completing the sale.

According to estimates from IMS Research, the number of worldwide locations accepting NFC payments will grow to more than 12.5 million by the end of 2013. Operators are launching their own versions of mobile wallets, thus making more services available for purchase via a mobile device. For example, with Airtel Money, Airtel (India’s number one network

operator) subscribers are able to use their handsets as a mobile purchasing system.

## Is mobile payments a clear business driver since nothing is really 'broken'?

Some contend that the NFC mobile payments model described above is trying to fix something that is not broken. That said, the NFC-based payment initiatives are under way and, as indicated, very influential players are participating. At the same time, there are aspects of the payment process today that are 'broken' and that NFC can fix, without waiting for the rest of the ecosystem to catch up. They involve operating costs and various obstacles that the IT teams expect wireless technology innovation to eliminate. Some of the solutions being rolled out today are getting a clear definition of how wireless services can address existing problems. For example, mobile advertising has evolved into a very personal and targeted delivery channel for reaching consumers.

## Smart posters: The other NFC business case

An NFC Smart Poster is a touch point that carries a readable NFC tag or an NFC reader. Smart Posters can be either passive or active. Passive Smart Posters include an embedded NFC tag to be used in conjunction with the end-user's hand-held reader. There are many different types of passive posters. A magazine page could serve as a passive poster, as could a billboard. In the realm of Near Field Communication, the NFC tag stores the pertinent information until such time that the NFC-enabled mobile device can read and emit the tag. This information could be in the form of a redeemable coupon or a website URL.

The advantages for the business owner make a strong case for the technology. Everything from lower cost of entry compared to other means of communicating to customers, or the relative ease of implementing the service, have a positive impact on the business user and the consumer. The explosion of capabilities is in the offing, and critical mass appears to be one or two years away.

Active Posters do it in reverse. The poster is embedded with an NFC reader and the user has the NFC tag. However, the Active Poster doesn't just pass information to the consumer. It allows the consumer to perform a transaction, make a purchase, recharge an account, redeem a coupon, or even request a meeting. The self-service experience gives the brand or retailer control over the

interaction with the consumer, rather than leaving it to the clerk.

## Yield management

The National Association of Convenience Stores estimates that convenience stores average nearly 2,700 sq ft. in size, with average annual revenue per store ranging from US\$1.1 to US\$2.2 million and average revenue per sq ft ranging from US\$366 to US\$458. The challenge is to fit higher margin goods into a smaller space to enable revenue maximization. Smart Posters can 'sell' digital goods like prepaid recharge, debit card recharge and other prepaid products and services, increasing retailers yield per square foot. A market research firm based in Maynard, Massachusetts estimates that the total Prepaid Market size in 2012 is now forecasted to reach US\$549.7 billion (Source: Mercator Advisory Group's Prepaid Market Forecast 2010 to 2013).

Not only will a Smart Poster bring in new revenue streams from new services to the retailers, it will also help them tackle existing problems. With a Smart Poster the retailers can now store 500 700+ prepaid SKUs (*Stock Keeping Units*) instead of the previous 25-50 SKUs. This increase of stock will drive traffic to the stores and lead to increased revenues and profits. Second, a Smart Poster is customisable. Retailers can increase visibility of certain high-margin, low-volume digital goods such as online game recharges. Third, since products bought using a Smart Poster have to be activated either during purchase or post purchase, the instances of theft and fraud will decline to practically nothing. An Active Poster could deliver five additional square feet of retail space to a convenience store, providing these stores with an additional US\$1,830 to US\$2,290 in annual revenue.

## Line busting

Long lines and mixed-up orders distress retail business. They diminish customer satisfaction and have a direct effect on revenues and profits. There's an industry maxim that for every seven-second reduction in drive-through service time, sales will increase one per cent over time. In a June 2011 QSR Magazine focus group, accuracy is cited as the most important consumer demand by quick service restaurant consumers, even over speed.

To address this, businesses are looking at potential solutions. Smart Poster technology could be the answer to speed and accuracy

problems. A Smart Poster can be used as a physical storefront for ordering/selling physical or digital services. A Smart Poster that could be used as a touch point to purchase transportation tickets or movie tickets, could also be configured to take food and drink orders. The flexibility of a Smart Poster would enable it to go beyond open retail environments to closed environments like corporate offices or hospitals. For example, a hospital deploys Smart Posters at various strategic points inside the hospital to enable professionals to order food in advance without having to wait in a line. Once the order is ready, staff can go to the cafeteria to collect the food.

## Extending reach

Retailers wait until the consumer arrives at the POS terminal or after the consumer makes a purchase to offer discounts and coupons. This is too late as the purchase decisions are made and the transaction is already over. A Smart Poster will enable retailers to offer coupons and discounts to consumers in advance of the transaction, encouraging them to make additional purchases.

A grocery chain could have an Active Poster co-branded with a mobile network operator (*MNO*). For every US\$100 worth of groceries purchased, the consumer can redeem US\$1.00 of MNO currency. To redeem this, the consumer merely has to walk to the poster and tap their NFC tag that has been linked to the consumer loyalty account at the grocery chain. The Active Poster then prompts the consumer to direct the US\$1.00 (or total amount) of stored currency toward the purchases made by the consumer. A more compelling conclusion would be that the stored dollar value is offered to purchase a virtual product, such as downloading music or a video.

## Conclusion

Mobile payments are now arriving on the scene quickly. The full scope for consumers and retailers is yet to unfold. However there are many existing issues currently facing retailers that Active Posters can solve today. Smart posters usher in a new era of interactivity for retailers and offer increasing revenues for Mobile operators. ●