

# The Goods, the Payment and the Mobile!

This whitepaper is an extract from:

**Mobile Payments for  
Digital & Physical Goods**  
*Analysis, Markets & Vendor Strategies 2011-2015*



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# The Goods, the Payment and the Mobile!

## I. Introduction

The definition of a mobile payment is often open to interpretation and can differ from source to source. Juniper Research has a simple definition of a mobile payment as **“payment for goods or services with a mobile device such as a phone, Personal Digital Assistant (PDA), or other such device.”** As is the case with other, older, payment schemes like cash, the current mobile payment market does not have a single, definitive, payment method and there is substantial variation between what particular scheme is adopted from region to region. Mobile payment schemes vary from the remote methods, such as PRSMS (Premium Rate SMS) schemes for paying for digital content dominating in Europe, to the physical, whereby, in regions such as the Far East & China, users take their mobile phone to the physical storefront to pay for goods via contactless credit/debit card schemes. There are many different and often competing categories of mobile payments currently available.

The distinction between the two main methods of mobile payment is based on the location of the mobile user in relation to the merchant:

- A remote mobile payment is when the storefront or retailer is remote to the mobile phone user, e.g. paying for digital goods by PRSMS (premium rate SMS) or physical goods via a mobile web enabled retailer.
- A POS (point of sale) or proximity mobile payment is when the storefront or retailer is physical and the user is located at or near to the storefront or retailer.

## 2. Remote Payment Schemes

We shall now explore mobile payment schemes in more detail.

### 2.1 Mobile Phone Bill – “direct to bill” (D2B) Payment

One of the simplest methods of paying for goods and services using a mobile phone is payment via a mobile phone bill. Operated by mobile phone operators, this is usually aimed at low-value micro-payments and is offered to account customers as an alternative to a credit card. It is also offered as an alternative to credit and debit card payments for online purchases in some markets, typically with a one-time SMS based authentication code. This has the advantage of convenience for users by adding the charge to the phone bill, and by removing the need to register a credit card on the site for what may be a one-time purchase.

## 2.2 Premium Rate SMS (PSMS)

PSMS is an mPayment method where merchants and retailers can offer services via SMS and for each SMS sent by the consumer, a premium rate is charged. Each party (the merchant and the operator) takes a share of the revenue from the messages, which is charged to the consumer on the mobile phone bill. With PSMS, the payment can be made in one of two modes, either using MT (Mobile Terminated) or MO (Mobile Originated).

## 2.3 Mobile Web & WAP Billing



Online payment for the mobile web is a payment method that enables retailers to bill goods or services from a mobile web or a web site. This is very similar to payment on standard eCommerce sites and usually allows consumers to pay via a variety of payment mechanisms that may not be unique to mCommerce – usually credit or debit card. Richer content such as gaming, music, and video is better paid for over the mobile web simply because of the ability to have previews before purchase, and because of the assurance of delivery.

## 2.4 SMS/Java/SIM Toolkit



SMS payments, excluding those under the banner of PSMS, are when the mobile payment is initiated using SMS and the funds are transferred from a registered account or a mobile wallet. The registered account could be debit or credit based or be based on a SVA (Stored Value Account). Scheme operators include PayPal Mobile, and SmartPay in China. The SVA is virtual money that sits either in the mobile phone's virtual wallet or on a server that the user can access through a wallet. The money is transferred from an existing bank account, credit or debit card and accessed using a PIN or password.

## 2.5 Person-to-Person (P2P) Payment



Another example of a remote mobile payment is P2P payment. P2P payments are when funds are transferred between mobile phone users and then the funds are redeemed for airtime, goods or cash at selected merchants.

## 2.6 Smartphone Apps



There is no shortage of examples in this category, right from paying by credit card at iTunes to download iPhone apps, through to apps resident on Smartphones that enable payment via credit card. With the growth of smart phones and the mobile web, many companies are developing their commerce applications for the iPhone, Android, Windows and BlackBerry Smartphones and for the mobile web.

## 2.7 Contactless Payment



With contactless payments, a Near Field Communications (NFC) chip is embedded into the phone and interacts with a payment application that is either pre-loaded onto the phone or downloaded OTA (over the air). The phone is then waved close to a contactless reader to make the payment transaction. Transactions are typically of small value – up to \$25. NFC is a standards-based, short-range wireless technology that enables simple and safe two-way interactions between electronic devices.

## 2.8 In Store



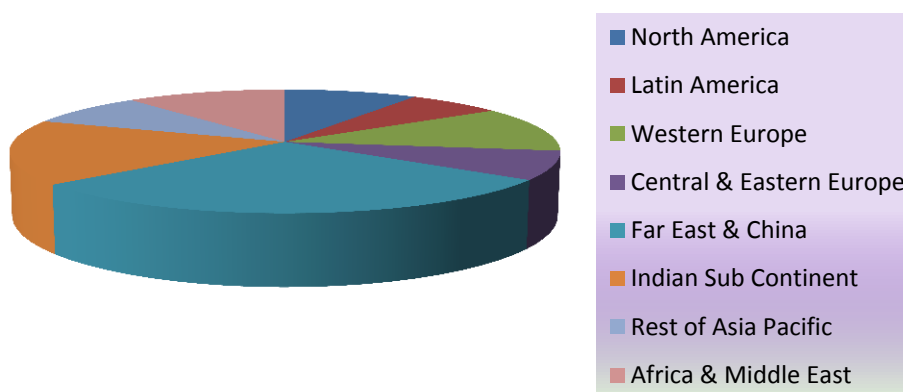
Increasingly we are seeing mobile offered as an alternative payment mechanism even in retail stores for physical good purchases. Mocapay has a mobile SaaS (Software-as-a-Service) platform that combines mobile payment transactions and loyalty; the platform can be downloaded onto the merchant's existing POS system.

## 3. Market Opportunity

Remote mobile payment users paying for digital goods and services are also likely to be prevalent amongst users making mobile payments for physical goods, resulting in double counting if we were to add the two sets of user numbers to derive a figure for the total number of remote payments users. Clearly therefore this approach is not valid.

We are forecasting that digital goods remote payments users will reach 2.5 billion by 2015, up from 1.8bn forecast in 2011. This represents a growth of 40% and can be seen in the figure below. There are, however, significant differences in user numbers on a regional basis, with digital goods payments much more established in all world regions than payments for physical goods.

**Figure 1: Digital Remote mPayments Users (%) Split by 8 Key Regions 2015**



Source: Juniper Research

## Order the Full Report

### Mobile Payments for Digital & Physical Goods: Analysis, Markets & Vendor Strategies 2011-2015

This executive briefing is taken from Juniper Research's **"Mobile Payment for Digital & Physical Goods"** report. In the full report, Juniper Research delivers the definitive valuation of the digital and physical goods sectors, providing intelligent analysis of developments within the ecosystem and sizing of the market for the next five years across three extensive forecast chapters.

Key forecasts include mobile payment transaction values, transaction frequencies (payment traffic) and ARPU. The number of mobile payment users is calculated, as well as the number of mobile payment transactions, projecting the market opportunity for both remote mobile payments (such as ticketing and entertainment) and physical goods payments on the mobile, by eight key regions. This fully updated addition to Juniper's highly regarded mobile payment series, provides a detailed examination of the latest advances in the market over the past 12 months, gaining first hand insight live from players in the marketplace. This third edition features expanded vendor coverage – with an innovative vendor positioning matrix analysing 17 vendors within the mobile payments landscape as well as 18 vendor briefs with over 15 interviews from key executives within the market.

Key questions this report answers:

- What will be the size of remote mobile payment transaction values?
- Which will be the leading regions in the market in 2015?
- What will be the trends in digital goods transactions over the next five years?
- How are leading sellers of physical goods developing their mobile payment capabilities?
- How many mobile subscribers will make remote mobile payments over the next five years?
- What are the trends, drivers and constraints affecting the development of the market?

For more details on this report visit the website [www.juniperresearch.com](http://www.juniperresearch.com) or phone +44 (0)1256 830001

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