

P E R S P E C T I V E

A Hopeful Outlook for Mobile Commerce



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Mobile Commerce Growth in Numbers

Telecom market observers predict that approximately 1 billion people will use their mobile devices to conduct financial transactions in 2015. These will span a range of services including basic banking, remittances and mobile wallets. Around that time, every other mobile user will also use the handset to make payments or purchases, 500 million from the Indian subcontinent alone.

Although shopping on the mobile web will still account for less than 10% of the e-commerce market by the middle of this decade, there's no denying that mobile commerce is the object of serious attention among industry players.

Mobile Commerce Growth Drivers

Mobile commerce has travelled a long way since 1997, when a soft drink vending machine accepted payments via text messaging. Its progress can be traced back to several factors – demographic, behavioural and technological – as follows. With the number of mobile subscribers crossing 5 billion worldwide, consumers are clearly comfortable using mobile technology for communication. Now, they are willing to extend that to other purposes including gaming, transacting and knowledge sharing, to name a few. Mobile handsets have become sleeker, friendlier and more versatile in general, topped by the smartphone's computing and web capabilities. These developments, along with the downloadable app phenomenon have conspired to elevate the handheld device from a simple phone to a multi-functional lifestyle enabler. Last but not least, security technology – still a deterrent to widespread acceptance of the mobile as a channel of financial transaction – has evolved to reduce the risk of fraud and melt down the reservations of consumers.

The Present and Future Outlook

M-commerce encompasses a gamut of activities such as third party bill payment, downloads, purchase of digital and physical content, Peer to Peer transfers, ticketing, voucher redemption, location-based services and brokerage, all of which are fulfilled with a single handheld instrument. That being said, current m-commerce offerings still have limited functionality, typically:

- A provision for cash deposit and withdrawal.
- A provision for third parties to transfer funds into a user account.
- The ability to transact with various merchants.
- A feature enabling top up of credit at retail outlets as well as recharge of mobile wallets used for transactions at merchant establishments using a mobile.
- A facility to transfer cash between users' accounts.
- Access to all the above without a bank account or credit card.

However, with the advent of new technologies and product innovation by telecom majors, mobile commerce is all set to take wing. This is what its future looks like:

- [The rise of the semi-closed and open wallet](#)

A mobile innovation in the form of a semi-closed money wallet could explode the size of the m-commerce opportunity and potentially create new avenues of revenue realisation for banks, telecom operators and retailing companies. This product enables mobile owners to transact at various merchant establishments using their phone, without requiring them to have a credit/debit card or even a bank account. Authorised telecom operators sell semi-closed wallets – in the form of an additional feature built into the SIM card – to consumers, who can then conduct various menu based transactions from paying utility bills to booking tickets. Consumers can also use their mobile to make purchases at designated merchant outlets by entering the merchant's mobile number, amount and a mobile PIN. The loop is closed by a settlement between the merchant and the telecom service provider which issued the SIM card.

The semi-closed wallet is particularly exciting because it has something in it for everyone – consumers, banks and telecom operators. It is a convenient cashless mode transaction, accessible even to those consumers who are not eligible for a credit card. Banks could save the cost and effort of credit card maintenance and administration by getting more customers to switch to the semi-closed wallet. India's Airtel Mobile Commerce Services Ltd. has already launched the semi-closed wallet successfully

within certain regions. Similarly, other big stakeholders of the smartphones market like Apple, Blackberry, Android (Google) and Symbian (Nokia) would certainly benefit by providing their customers an additional easy payment option.

A further extension of the semi-closed wallet is the open wallet which also allows customers to withdraw cash.

- Growth of P2P remittance

P2P remittance, which is the transfer of money from one individual's mobile number-linked bank account, credit card or mobile wallet to another, will gain traction. It scores over existing methods of mobile inter-bank transfer by way of procedural simplicity and speed. A research firm estimates that 170 million mobile subscribers will make domestic person to person transfers this year.

This growth of P2P remittance will extend to foreign exchange remittances as well, to enable money transfers across mobile-linked accounts held in different countries and currencies; another research firm predicts that by 2015, the mobile industry will earn revenues between US\$ 1.2 billion and US\$ 6.2 billion from international money transfers.

- The crossing of borders

Similarly, mobile commerce will turn ubiquitous to allow cross border purchase and other transactions. Some examples: in July 2010, Korea's SK Telecom and Japanese wireless operators KDDI and Softbank Mobile announced a partnership to introduce cross-border NFC payments between their two countries. Later in the year, MTN and Western Union entered into an agreement to allow MTN subscribers to transfer and receive money from 21 countries in Africa and the Middle East over the Western Union network.

- Opportunities for all

The outlook is bright for both B2B and B2C mobile commerce applications, a fact that is not lost on PayPal which has introduced a mobile innovation enabling consumers to use PayPal while making payments on third party mobile sites and apps. For example, it has a partnership with Starbucks which allows customers to reload their Starbucks Cards through an iPhone app using PayPal's mobile payment product called "Mobile Express Checkout". Online commerce firms have

been equally active; both eBay and Amazon have reported impressive growth in m-commerce sales. Last year, eBay alone saw 13 million downloads of iPhone apps from its site and registered nearly US\$ 2 billion worth of transactions via mobile. In future, the websites of online resellers will become prime marketplaces for mobile commerce products.

Globally, more companies and individuals will use the mobile channel not only to do their shopping, but to fulfil other needs as well. The handheld device will become the prime medium of entertainment when not just wallpapers and ringtones but even video is downloaded over high speed networks. In countries where networks permit the streaming of audio-visual data, the distance education classroom will move from the online to the mobile platform. And businesses will be able to improve the effectiveness of their advertising campaigns by tailoring them to the location and context of their customers.

Biggest Challenges

Although there is no denying the opportunity of mobile commerce, a few hurdles must be crossed before it can realise its full potential.

There's still some way to go before completing a transaction on the mobile phone becomes as simple as using a credit card or the PC. The small screen size of mobile devices restricts the type and volume of data that may be transmitted as well as the richness of applications. These factors make the mobile shopping experience quite inconvenient. In a study of 2,000 consumers in the U.K., the need to zoom in and out to view all the information on the screen and slow page loading were cited as the top peeves. An overwhelming majority said they would leave the m-commerce site when faced with such a problem.

A huge number of basic mobile handsets which are still in use are not compatible with sophisticated apps. Even today, the mobile interface is not quite user friendly, especially on low-end phones. Not surprisingly, in the U.K. consumer survey mentioned earlier, smartphone users were way ahead of the others in m-commerce adoption, with approximately 1 in 2 making purchases and 1 in 3 comparing prices using their mobile devices.

Interestingly, the form-factor constraints of mobile phones has given tablet devices an advantage and many online retailers report that over half their m-commerce sales already come from tablets.

Technology constraints continue to limit the processing and storage power of handheld devices. On the other hand, while security technology has evolved to provide a safer mobile transacting experience, concerns still abound amidst users.

Conclusion

Analysts declare that the world is on its way to 100% mobile penetration. With the mobile becoming an important part of their daily lives, consumers are seeking to do more and more using their handheld devices, setting a solid foundation for the growth of mobile commerce. Players from the telecom, financial services, retailing and technology domains are responding to this consumer need with m-commerce innovations such as open and semi-closed wallet, P2P remittance, money transfer and mobile shopping services.

However, consumers' willingness to embrace m-commerce is also accompanied by high expectations of convenience, usability and security. In addition, research studies reveal that they want the mobile to be part of a seamless multi-channel shopping experience in which they can switch between various modes to track, change and fulfil a transaction. These are some of the challenges that the m-commerce industry must address.

Finally, a few caveats. Mobile commerce still suffers from structural problems, such as the lack of coherence and stability in standards and protocols in the mobile world, network bottlenecks and a cascade of hardware and software options. As data transfer to and from the handset increases, ensuring total security of mobile transactions against data leakage, theft and redundancy will become an even bigger priority. Finally, issues related to training of internal users on the new features of m-commerce, asset allocations, virus scanning, and application updates may be a potential threat to this burgeoning industry.

If these challenges are surmounted, even the sky is no limit for mobile commerce.

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