



cutting through complexity

Mobile Payments and E-Commerce Considerations

**Presentation to the Standing Committee on Industry, Science and
Technology, Government of Canada**

October 24, 2011

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Good afternoon, Mr. Chairman and Committee Members. Thank you for inviting KPMG to present the findings from our Global survey titled *"2011 Mobile Payments Outlook"*. Firstly, I will highlight the findings of our survey. Secondly, I will address three key considerations that KPMG believes this Committee should keep in mind as it forms its recommendations.

Nearly 1,000 executives from financial services, technology, telecommunications and retail industries around the world participated in KPMG's mobile payments survey. Our survey was designed to explore barriers and opportunities to the adoption of mobile payments and to provide insights into the forces shaping this market.

I will now briefly describe the types of mobile payments in use around the world and here in Canada.

- **M-banking** – this provides direct access to a subscriber's bank services via a mobile device;
- **M-ticketing** – this is the purchase and receipt of tickets through mobile devices (for example, obtaining a boarding pass with Air Canada and then using your device to swipe the barcode as you check-in);
- **M-commerce** – this provides the ability to pay over the internet (such as PayPal and Google Checkout); and
- **M-wallet** – the newest payment option which uses a chip embedded in the mobile device together with Near-Field Communications (NFC) to enable purchases and more. M-wallet is designed to replace your wallet and all that you carry in it, from credit and debit cards, to identity cards such as your driver's licence.

Key among the findings was that business executives believe mainstream adoption is two to four years away. It is our opinion that this is more likely to be two years away. To support our prediction, the Canadian publication includes a timeline of related market activities that have occurred over the past two years and those anticipated in

the next 12 to 24 months revealing the intensification that is occurring. We believe we are approaching a tipping point.

Our study found that Asia is leading adoption, followed by Europe. Canada, while not leading, is mirroring the adoption flow of other countries (going from NFC cards to mobile device add-ons to NFC-enabled handsets). In Malaysia we see Maxis FastTap, a contactless payment system where physical credit cards are stored electronically on mobile phones and purchases are made by tapping the phone on a point-of-sale terminal.

In Kenya, carrier billing is taking off where M-PESA, a telecommunications company with 13 million subscribers, allows customers to make purchases and charge them to their mobile accounts. M-PESA has essentially become the country's dominant bank.

Our survey also looked at what executives had to say about the drivers and barriers to adoption. They believe convenience will be the primary driver of adoption. More than four in five respondents cited convenience and accessibility as the most compelling attributes of a mobile payments strategy. Security was ranked third.

This finding is particularly interesting when contrasted with KPMG's *Consumers and Convergence IV*¹ study in which consumers indicated that security and privacy were critical barriers to their use and adoption of advanced mobile technologies. For our Mobile Payments study, the finding is likely indicative of the comfort and trust executives have with mobile devices, a sentiment we believe will be corroborated in the next iteration of *Consumers and Convergence* as technology increasingly becomes embedded into the fabric of our daily lives.

¹ Consumers and Convergence IV. KPMG International. July, 2010. (This is an annual study; Consumers and Convergence V is currently in the field and will be published shortly).

Mr. Chairman, this concludes my overview of the study's findings. I would now like to move on to the significance of these findings for Canada.

Mobile payments are redefining the payments value chain. In the traditional payment world there are two groups of businesses: those that support payment transactions and those that provide credential issuance. Entities in the transactional side are involved in enabling consumers to take their wallets in to a retailer, pay at the point-of-sale, and transmit the relevant information back to a bank. The credential side of the payment value chain is about obtaining "credit", which involves completing an application and, upon approval, mailing a physical card to the customer with instructions for completing an activation process.

The emerging mobile payments world, however, also consists of mobile network operators such as telecommunications and technology companies. Rather than a wallet, we have a mobile device, such as a smart phone. Instead of a credit card, we have a digital credential. Mobile payments open the space for many new players to participate in the payment process.

The infrastructure to support mobile payments exists in Canada. For example, MasterCard-PayPass, VISA-PayWave, and Interac-Flash all offer contactless card systems for use at many points-of-sale. However, "m-wallet" is not yet mainstream due to the absence in the marketplace of NFC-enabled mobile devices. This is changing. The Bank of Montreal recently introduced a MasterCard RFID sticker which can be placed on the back of a mobile phone. In September, Research In Motion released a new BlackBerry that is fully NFC-enabled, and we expect the next iPhone released by Apple will also be NFC-enabled. Consumers will now have the capability for mobile payments in their hands and this, in turn, will drive more activity.

The examples I have provided thus far illustrate the different approaches being implemented by financial services, telecommunication and technology companies to

encourage adoption of mobile commerce by retailers and consumers. Essentially, there are three:

- collaboration, an example of which is Malaysia's "Maxis FastTap" involving Maybank, Visa, Nokia and Touch'n'Go, a point-of-sale supplier working together to deliver mobile payments,
- the service provider model, as exemplified by M-PESA in Kenya, and
- joint ventures, such as the recent example in Canada with Visa and Rogers.

While each approach has merit, the complexities that might ensue from different implementations could be significant. Imagine the need to have separate smart phones for separate credit cards. As our study shows, ease of use and convenience is integral to adoption by consumers.

This brings me to KPMG's **first recommendation** which suggests a collaborative approach be undertaken by all stakeholders to establish a **standards framework** that will promote cross-industry, domestic and **global compatibility**.

A key challenge related to mobile payments is the significant increase in the number of new participants in the payment value chain and the diversity of their backgrounds. The creation of cross-industry partnerships is crucial to the development of a mobile payments network in Canada. Telecom providers, technology vendors, service providers, banks, and retailers will need to work together to develop standards which are open, transparent and effective.

Canadian banks are actively investigating mobile payment services. They will need to ensure their credentials are available on any device on any network so that they are widely accepted.

Moreover, payments are not just a national issue. As Canada develops its position on standards, it must ensure that these are aligned with emerging global standards. International trade, foreign direct investment and tourism are just a few examples of international flows of money and payments which any evolution of the payment standards in Canada must take into account.

Our **second recommendation** is for **open policies** that allow for all participants to use **innovation** to drive progress. It is clear that digital networks are an essential infrastructure that enables our economy. A governance framework that balances the desire for innovation with the need for appropriate oversight and controls is required to support this.

If collaboration is key to creating a mobile payment eco-system that works, then policy is required to help ensure that parallel systems do not form. With so many potential participants in a payment transaction in the mobile world, our policy and governance frameworks must be robust enough to clearly identify where accountability lies or we will not generate confidence among the users of the system and, ultimately, will stifle development and innovation.

The Government of Canada has proactively engaged industry through the Task Force for the Payments System Review. In its preliminary report, the Task Force maintains an inclusive approach, calling for, among other things, a unified regulatory system that encompasses all players and equal access to payment facilities. The next few months will be critical as smart devices supporting mobile payments make their way into the Canadian market.

Mr. Chairman, it is important to also recognize the impact on the Canadian retail industry and the need for governance around the capture and flow of data.

The introduction of mobile payments bears a number of unknowns for retailers such as upfront capital costs of the POS network; potential systems integration costs; and

potential two-way tie ups between telecommunication companies and card brands. Canadian retailers need to see how the Voluntary Code of Conduct created to govern payment card networks might apply to the new mobile payments market. Once payments transfer to phones, there is the potential for merchants to lose the instantaneous record that they currently get through Interac and the card brands.

Additionally, Mr. Chairman, with mobile payments comes increased ability for all stakeholders to capture new data and with this, potential implications to privacy and security, further underscoring the need for education and awareness.

KPMG's **third recommendation** relates to **education**, and we suggest informing both businesses and consumers of the benefits of mobile and digital payments, how they work, and the steps that have been taken to ensure a fair, secure and efficient system.

In recent years there have been a number of payment innovations, however, in Canada adoption does not appear to have reached the pace and level we would have expected. Paper cheques remain a significant payment mechanism and few businesses take full advantage of electronic payments. In addition, EMV (chip and pin) technology is still being rolled out to merchants.

Mobile payments are a very tactile, very real thing for consumers, but they also represent a major behavioural change when compared to previous payment innovations. A concerted effort is required to educate the broad populous. Our survey findings suggest that consumers will drive adoption, but we should not ignore the significant benefits to all stakeholders.

Digital payments are far less costly than other forms of payment, such as cash and cheques, and offer the opportunity for a much greater exchange of information at the point of transaction. Without an educated consumer, we may find that we do not reach the levels of adoption that can generate benefits to the economy as a whole.

In conclusion, KPMG believes that mobile payments will be mainstream within two years. It is critical to take steps now that will provide for a collaborative approach, a consistent standards framework, policies which are fair and equitable to all and which will encourage innovation. We also need to ensure that the Canadian population is aware and understands what this means and perhaps most of all, we need to encourage adoption to support increased productivity and the flow of commerce.

Mr. Chairman, Committee members, thank you for your attention.

Appendix 1

Related URLs

www.kpmg.ca/mobilepayments

2011 Mobile Payments Outlook

Monetizing Mobile

Mobile Payments: Is Canada Ready?

Consumers and Convergence IV

www.kpmg.com/global/en/issuesandinsights/articlespublications/consumers-and-convergence/Pages/default.aspx

Clouds in the Forecast

www.kpmg.com/Ca/en/IssuesAndInsights/ArticlesPublications/Oi/Pages/CloudForecast.aspx

Executive Considerations When Building and Managing Successful Cloud Services

www.kpmg.com/Ca/en/IssuesAndInsights/ArticlesPublications/Pages/ExecutiveConsiderationsWhenBuildingandManagingaSuccessfulCloudServices.aspx

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