

Innovations in Retail Payments

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Speedier Payment Transfers

Two months ago, Singapore launched FAST¹ (Fast and Secure Transfers), a new electronic funds transfer service that enables customers to transfer funds in Singapore Dollars to accounts of one of the 14 participating banks almost instantly via the internet or mobile banking. Industry sources indicated that the 14 participating banks account for over 80% of all deposit customers in Singapore so this service would benefit the majority of the banks' customers in the island. This week, riding on the FAST infrastructure, one of the 3 major local banks offers its customers the option to transfer funds to another person via notification through a mobile phone number, email address or Facebook account without the need for a bank account number for the funds transfer.

Trends in retail payments have indicated that beyond the proliferation of mobile and internet connected devices, speed of payment transfers will increase until we approach real-time or near real-time. Coincidentally, Australia had invited tender on 17 Mar 2014 to build the banking equivalent of the National Broadband Network (NBN): the New Payments Platform². Similar to FAST in Singapore, the new payment infrastructure is backed by the respective country's central bank but funded by the industry. In Australia's case, the contract is expected to be awarded by Aug this year to build the payments infrastructure by end-2016.

Real-time or near real-time payment transfer is not a new innovation in retail payment. In the UK, Faster Payments³ was launched in Aug 2008 and two years later in Aug 2010, China's Internet Banking Cross-Bank Payment & Clearing System (IBPS) offered near real-time transactions involving 30 participating banks. Much earlier, in Korea, a proprietary funds transfer service that complete within minutes was offered via the Financial Information Network (FIN).

In fact, real-time interbank funds transfer service was already available at Shared ATM Network since the 1980s. In Singapore, such a real-time funds transfer service was already available via the now defunct 7-bank shared ATM network since 1989. The key differences over a span of 25 years are the access devices being owned by the customers instead of the banks (ATM) and that customers can now access the service from anywhere at any time as long as an internet or mobile connection is available.

Retail Payment Innovations: Evolutionary or Revolutionary?

In Jun 2010, the Committee on Payment and Settlement Systems (CPSS) set up a working group to investigate developments in retail payments, focusing especially on innovations. The report released on 29 May 2012⁴ covered 122 innovations reported by 30 central banks. Key observations from the report supplemented by this author's comments are summarised below:

- Increased focus on speeding up payment processing through faster settlement or faster payment initiation; e.g. besides Singapore and Australia in the region, a survey⁵ conducted by ACI World last month noted that 70% of respondents believed that real-time ACH in the US will become a reality in the next 1 to 2 years.
- While there have been numerous developments, only few innovations have significant effect on the market. Moreover, most innovations are developed for the domestic market with limited or no international reach; e.g. FAST in Singapore is localised while there is no indications that the new Australian

payments system will inter-operate within the region. In Oct 2002, ASEAN (Association of Southeast Asian Nations) PAY was conceptualised as the payment system to support regional financial integration under the ASEAN Economic Community (AEC) 2015 blueprint. Nearly twelve years later, this initiative remains elusive and amongst the various challenges, payment standards remain one of the key challenges to inter-operability.

- Financial inclusion continued to be an important driving force for innovations in many countries, either under a government mandate or arising from opportunities presented by “un-banked” markets. According to McKinsey⁶, Asia Pacific would account for more than 50% of the global payments growth over the next 5 years but access to financial instruments⁷; e.g. bank accounts, credit, debit cards, etc is limited in some countries in Asia-Pacific especially in India, Indonesia, the Philippines and Vietnam. In these countries, the “un-banked” segments present enormous opportunities for payment innovations to reach these groups of customers that have shown increased penetration of mobile phone usage.
- Role of Non-Financial Institution (Non-FI) payment service providers (PSP) in retail payments has increased significantly, owing in part to the availability of innovative technology and increased penetration in mobile and internet usage that allows Non-FI PSPs to compete in areas not yet dominated by banks or regulated by central banks. PayPal for instance, offers proprietary virtual accounts and in Europe, a majority of their transactions are funded from their users’ bank account via a direct debit mandate – indeed PayPal has advanced on its reach without paying anything to banks for using their established payment infrastructure. Other examples include telcos allowing their customers to make online purchases as part of their statement billing while mobile game developers are creating tradable “virtual” currencies.

Many studies have shown that developments in retail payments have largely been evolutionary rather than revolutionary. Most of the recent innovations evolved around improving the scope, efficiency and scale of the existing payment systems and infrastructures. For examples, many developments were providing additional channels (payments via mobile or tablet devices) to access or use an existing set of payment services, automating or digitising existing processes in cheque processing; i.e. cheque imaging, e-cheques, etc. Of the 122 innovations reported by the 30 central banks in the CPSS study, the top three purposes of innovations were improving convenience (~33%) via additional access channels, reduction of cash usage (~14%) and speeding up processing (~12%). Promoting competition accounted for less than 2%.

On the infrastructure front, other than adaptation to use updated technologies little has changed since the days of automated clearing houses (ACHs) and SWIFT. However, the Australia’s New Payments Platform is slated to take on new governance and operating framework that is modelled after a typical NBN governance structure; i.e. a multi-layered infrastructure that is designed to promote competition and drive innovation. While the Australian’s approach is commendable, it is still unclear whether its desired objectives could be realised given the number of governance and operational related challenges faced by operators of NBN in a number of countries including Singapore’s 3-layer model comprising Network Company (NetCo), Operating Company (OpCo) and Retail Service Providers (RSP).

Looking Ahead

Other common findings that emerged from different studies on retail payments have also confirmed that most developments in retail payments systems have limited inter-operability; i.e. these are closed loop systems as in the case of Faster Payments in UK, similar near-real-time systems in China, Korea and even Australia’s New Payments

Platform. In an internal note prepared by the Payment Systems Development Group (PSDG) of the World Bank in preparation for the Web Payments Workshop in Mar 2014, PSDG highlighted that less than 20% of the retail payment products were reported to be partially or fully inter-operable.

The adoption of international standards such as ISO 20022 for FAST in Singapore is a step in the right direction to build the foundation to promote inter-operability for the region. However, the journey ahead to achieve regional data inter-operability is likely to be plagued with numerous challenges as agreement on data fields, definitions and usage at national level in itself was already a feat on its own going by anecdotal sharing by some industry players in Singapore. Nonetheless, the experience gained and lessons learnt in Singapore are valuable inputs to help guide the development of the regional payment standard.

Besides standardisation for inter-operability, standards like ISO 20022 allows the capture and transmission of additional data that facilitates not only banks but organisations in developing straight-through payment processing and reconciliation that improves productivity while reducing errors. The other concern of real-time payments other than settlement and counter-party risks is how to prevent frauds on a real-time basis while handling the increased transaction volume and massive data generated. In this regard, FIs could consider using big data and predictive analytics technologies to distil massive of data that are generated from the various payment systems to combat payment fraud⁸.

In late February this year, the CEO of a major local telco received a fury of net citizens' negative reaction (an understatement) when it was reported that she had called on regulators to allow telcos the right to charge for Over-the-Top (OTT) services that rivals such as WhatsApp and Skype offered their services while leveraging on top of telco infrastructure for free. While it was later clarified that the telco was planning to charge these companies instead of consumers, this incident reflect the reality that innovative technology companies are indeed exploiting the costly infrastructures that have been invested by incumbents over the years.

Only last month, it was reported in the local press that a number of cab companies are up in arms when they realised their fleets of taxis have been "hijacked" by companies that offer mobile applications for booking cabs; e.g. GrabTaxi. Unlike the large cab companies, innovative companies like GrabTaxi and Easy Taxi don't have to invest heavily to buy, service and support a huge fleet of taxis, cohort of drivers, build, staffed and managed a call centre for cab bookings. Some cab drivers who have switched to the cab-operator independent service providers commented that the dominant cab companies have been slow to response to market needs and are reluctant to change their existing business models that worked in the past.

The payment industry is likewise facing similar challenges and over the years, non-FI PSPs are making inroads into the payment turf previously well-guarded by financial institutions due to existing regulatory regimes and other barriers – advances in technology and rapid adoption of mobile services are changing the status-quo. The likes of PayPal, Amazon, Alibaba, etc have already established significant market shares in payment related services in various countries and regions. Beyond just providing payment services competing with FIs, these non-FI PSPs are also proposing and advocating changes to existing regulatory framework. In Oct 2013, PayPal and eBay that have identified Asia Pacific as a growth region have released a paper⁹ that proposes new models and governance framework for Asia-Pacific that will improve regulations of the e-Payment sector. In addition, PayPal is also listed as one of the three non-FIs programme participants in the Australian's New Payments Platform; an investment that would allow PayPal to influence the design and governance of the basic payment infrastructure in the country.

FIs that viewed FAST and other similar payment services as yet another payment alternative or payment instrument that could be differentiated via speed, access channels or pricing in a “protected” environment will soon find themselves in similar dilemmas such as telcos and cab companies.

References:

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³ UK Faster Payments: <http://www.fasterpayments.org.uk/>

⁴ Banks for International Settlements, Innovations in Retail Payments: <http://www.bis.org/press/p120529.htm>

⁵ ACI Worldwide Survey: Real-Time, ACH Payments will become reality within the next two years: <http://www.businesswire.com/news/home/20140430005049/en/Real-Time-ACH-Payments-Reality-Years#.U3LIhigiyaw>

⁶ McKinsey on Payments, Sep 2012, Insights from McKinsey’s Asia-Pacific Payments Map: http://www.sibos.mckinsey.com/download/MoP15_Asia-Pacific%20Payments%20map.pdf

⁷ World Bank Global Financial Inclusion Database: <http://data.worldbank.org/topic/financial-sector>

⁸ BAI, Mar 2014, Combating Payments Fraud in a Big Data World: <http://www.bai.org/bankingstrategies/Risk-Management-and-Fraud/Security/Fraud/Combating-Payments-Fraud-in-a-Big-Data-World>

⁹ PayPal & eBay, Oct 2013, Payments Regulation for Asia Pacific: A Model for Innovation & Growth: <http://www.ebaymainstreet.com/sites/default/files/PayPal-Payment-Regulations-Booklet-APAC.pdf>

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