Hello, I am Dr. Deepankar Roy, I am a Faculty in National Institute of Bank Management, Pune, India. I have planned my talk by giving an overview of mobile financial services followed by technology options available before a bank to enable mobile banking. Further I will be presenting experiences of Indian banks on mobile banking.

Introduction

Technology has, for better or worse, undeniably brought about a change, hitherto unimaginable, in our lifestyle. The transformation brought about by technology in the area of delivery of financial services has, thankfully, only been for the better. Internet Banking complemented by core banking solutions implemented by banks, mobile banking, card based electronic transactions at any bank ATM and merchants locations (both physical and through e-commerce sites) have offered a variety of channels to bank customers to conduct their payment transactions. Besides the technology capability to transmit financial information in an efficient, secure and cost-effective manner enabled by development of mobile based applications for banking, the most significant fact about this idea is the ubiquity of the mobile phones. The number of mobile phones in the world are said to be over 5 billion. Hence, banking and financial services, which have already come a long way from the branch level services to the customer’s home desktop and laptop, can now be reached to a much larger section of the society, including the financially excluded, through the medium of the mobile phones. Besides the reach of mobile, there is another reason why mobiles are the most appropriate medium. A cheque or a withdrawal slip is a personalized direction to your banker to put through banking transactions on your behalf. The authentication is achieved through your signature. But this traditional method is expensive. A mobile phone achieves the same purpose and enables you to send personalized secure instructions to your banker to undertake transactions on your behalf. If your bank has achieved seamless integration with the CBS, then the transaction gets automatically registered. But these transactions using mobile are far less expensive than its traditional alternatives. More importantly, you hold the key since mobile is in your pocket and you need not depend on bank timings or the rush there to undertake banking transactions. This is perhaps the most important advantage of the mobile over other alternate payment methods. The mobile phone can, therefore,
empower the common man to conduct his payment transactions any time and from anywhere. Mobile phones as a delivery channel have a great potential if the security and cost aspects are addressed for it has to serve a large number of transactions that are small in size. The use of mobile for banking in financial inclusion cannot become a viable proposition on a standalone basis if the purpose is to achieve meaningful financial inclusion. To make it viable and attract volumes, it has to be provided as a package along with other products and services. This can be achieved only by entities that can provide add-on services like emergency and entrepreneurial credit, saving facilities, other products and services such as insurance, besides remittances. This is where a mainstream regulated entity like a bank fits in. Mobile payments are a top investment priority for banks. In fact, the world’s biggest banks continue to focus most of their announced IT initiatives on mobile financial services (including payments) and online banking. This is not surprising given the evergrowing ubiquity of the mobile phone. Out of a world population of 7 billion, over 5 billion or 70% have a mobile phone, whereas only 2 billion or 30% have a bank account. Take India: on a population of 1.2 billion over 800 million have a mobile phone and only 250 million have a bank account. Consumers are increasingly using their mobile phones to make payments. A global inventory lists over 130 live mobile money deployments and nearly 100 more are planned. Several new initiatives are announced every week. This is a growing market. Mobile is the payment technology that will have the greatest growth over the next five years. Growth predictions for mobile payments vary from 350 to 900 million users generating USD 430 billion to 1 trillion in transaction value by 2015. Many non-banks have entered the mobile payments market, often with innovative solutions. Mobile network operators like Vodafone, MTN, Orange and airtel have deployed mobile payments services in several countries or have set up joint ventures between them, like Isis in the US or project Oscar in the UK. Money transfer operators like Western Union and MoneyGram, as well as card companies like Visa, MasterCard and Amex all have multiple mobile payments initiatives. Payment service providers like PayPal are throwing their full weight into mobile. E-commerce companies like Google are deploying wallets for contactless payments using NFC (Near Field Communications). There are three strategic areas of opportunity and actions for banks to use the mobile phone to forge closer relationships with their customers in a new “experience banking model”: — Mobile banking: using a mobile phone to access a bank account and make payments; — Mobile commerce: using a mobile phone to buy products; — Mobile money transfers: using a mobile
phone to send money to someone. Technology has the potential to address the issues of outreach and credit delivery in rural and remote areas. Therefore, one of the basic assumptions for viability of Banking Correspondent (BC) model is intensive and extensive use of information and communications technology (ICT). By such use of ICT, it is possible to provide doorstep banking services where the accounts can be operated by even illiterate customers by using biometrics or mobile telephones, thus ensuring the security of transactions and enhancing confidence in the banking system. Information technology in the BC eco-system is thus becoming a key business enabler and is being positioned as a key differentiator.

**Mobile Banking**

Mobile banking is using your mobile phone to access your bank account; receive debit/credit alerts and statements via SMS (short message service); check balances and recent transactions by browsing a simple mobile-enabled website; conduct basic operations via a menu; or transfer funds and pay bills using an application on a smart phone.

Technology options available before a bank to enable mobile banking are:
— SMS: communicate with payments services via short messages; can work with short codes.
— USSD (Unstructured Supplementary Services Data): conversation-like telecom protocol to access menu on server by sending short code (e.g. dial *525#).
— WAP (Wireless Application Protocol): to access simple text-only web page (online).
— IVR (Interactive Voice Response): menu accessed by calling toll-free number (“to transfer money, press 1”).
— Application on smartphone typically downloaded.

Many banks offer one or more of these options. Mobile can fundamentally change the retail banking experience and strengthen customer-bank relationships. Some banks also have mobile banking services for corporate treasurers, but these are often basic services to initiate and approve payments, receive transaction alerts and view account balances. The good thing here is that the bank is in total control: the mobile phone purely acts as a channel to access the financial application that is owned by and runs at the bank. Banks should actively expand their mobile banking offering, which today is often still underdeveloped particularly toward corporates. A
unique value proposition can turn mobile banking into a cost saving (instead of contacting a call centre) and revenue generating channel (increase loyalty, target marketing to cross-sell core banking services). Many smaller and medium-sized banks will be looking to deploy a mobile banking channel to connect their customers. Rather than build one, they are more likely to buy a product. In that case, it could make sense to provide a serviced mobile platform that can be white labelled.

**Mobile Banking Experiences in India**

(a) **State Bank of India**

State Bank freedom has been launched in all branches and is available over application (on SMS / GPRS\(^1\)), wireless application protocol and USSD (Unstructured Supplementary Service Data). For mobile banking service over USSD, fund transfer, account enquiry and mobile top up are offered. As on 31\(^{st}\) March 2012, there were 3.65 million customers using the service with more than 0.12 million daily transactions, around 46% of which are financial transactions. SBI is the market leader in this space, both in the number and value of the financial transactions with 83.7% market share in number of transactions and 49% share in transaction value. A host of Mobile Banking services such as Fund Transfers, Enquiry Services, Demat Account Enquiry, Cheque book request, Bill payment, Mobile top up, DTH\(^2\) recharge, SBI Life Premium Payment, E-tag recharge to pay toll tax, Merchant payments and Inter Bank Mobile Payment Services (IMPS) are currently being offered.

(b) **Corporation Bank**

Following new features have been implemented-
- **IMPS- InterBank Mobile Payment Service**
- **Loan Alert for Loan account becoming NPA(non performing Asset), OD(overdraft), and gentle reminder for EMI(equated monthly installment) falling due**
- **SMS Alert for all the ATM, POS(Point of Sale), Internet transactions for all registered customers**
- **SMS alerts for all transactions has been introduced with effect from 30th June, 2011.**

c) **Punjab National Bank**

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\(^1\) General Packet Radio Service  
\(^2\) Direct to home signals
• SMS Alert facility is being availed by over 8 million customers through generation of SMS Alerts on identified financial transactions undertaken through branches and delivery channels.

• The Bank launched its Mobile Banking services in February 2010. The users can also make payments of utility bills/services using their mobile phones, besides effecting transfer of funds to third party accounts.

(d) Axis Bank

Axis Mobile

• Anytime anywhere access to your Axis Bank account(s)

• Information on your fingertips

• Secure transactions using your mobile phone

• Easy to use menu and navigations

• Works on both GPRS and SMS connectivity

**Services on Axis Mobile**
Getting Started...

- Register your account and Mobile number at an Axis Bank ATM
- Download and install Axis Mobile
- Add and activate the registered account on the application