BANKING FORESIGHT: TAKING BANKING TO THE RURAL PEOPLE THROUGH MOBILE PHONES

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Introduction

In futures studies, especially in Europe, the term "**foresight**" has become widely used to describe activities such as critical thinking concerning long-term developments.

Our banks, like other companies, have been having business models and designing innovations to reduce costs and expand banking services to capture bigger market shares. But foresight requires more than a business plan for the future. It requires visualizing the technical changes that are likely to take place in the world in the future and planning to use such changes in their business development for the future.

In the last decade, scenario methods, for example, have become widely used in some European countries in policy-making. At the same time, the use of foresight for companies ("corporate foresight") is becoming more professional and widespread. Corporate foresight is used to support strategic management, identify new business fields and increase the innovation capacity of a firm. So the new approach to futures planning by bankers is a novel approach which will stimulate innovative thinking.

Challenges in the future

The Banking & Financial Services industry faces significant challenges in an increasingly changing global environment. Market dynamics are changing in the banking and financial services industry. Policy makers are promoting consolidation of banks. Regulation of banking by the authorities is also changing with the Central Bank determining interest rates, directing the credit to be given by the banks to special sectors like agriculture. Consolidation is encouraged since small banks will find it increasingly difficult to afford the costs of modern technology driven services like on-line banking. Competitive forces are pressuring banking and financial services companies to create new products and services. The collection, analysis, and application of customer and supplier information throughout the enterprise have become a core business requirement. As the global financial markets continue to evolve, financial institutions are working to grow and maintain profits while adjusting to ever-changing regulations like the Basel Regulations and the inevitable global downturn's effects on profitability and performance. Successful institutions will need to reassess their operating models and address the effects of regulatory reform, competitive dynamics, evolving markets and increased expectations from stakeholders.

As Banking & Financial products increasingly become commodities, e - Business will become a necessary core capability. eBusiness knowledge and technology will be the keys to competitive marketing, distribution and customer service functions in the Banking & Financial services industry. The local banking industry will need to go for integrated systems of computer architecture where on-line banking and mobile phone banking are integrated. It will be necessary to develop and implement back-end systems to fit into these new banking services.

But computer software and equipment is costly and some co-operation among the banks will minimize costs for all. Sharing of ATMs and software packages would have benefited all. I think the Central Bank should have pressurised the banks to co-operate in the field of introducing computer technology in banking. We missed the opportunity for such co-operation in the past and each bank spent enormous amounts of money on computerizing their operations. But the Central Bank should not allow it to happen in the future. The locally owned banks at least should co-operate in introducing computerized mobile banking systems.

How our banks responded to past challenges

Banks in Sri Lanka have long been accused of ignoring the small and medium scale businesses. These businesses account for over 75% of the Gross Domestic Product and are too large a sector to be ignored without affecting adversely our economic growth prospects.

Historically the foreign banks established branches in Sri Lanka mainly to cater to the Agency Houses managing the British plantation companies and the multinationals like the Ceylon Tobacco Company, the Shell Co, Caltex etc. There were complaints from indigenous businessmen that the foreign bank branches were not catering to indigenous businesses. So the Pochkkanawala Commission which looked into these complaints recommended the setting up of the Bank of Ceylon in the 1930s. The Bank of Ceylon resolved the problem to some extent. But after 1956 another complaint arose- that the local as well as the foreign bank branches were ignoring the small and medium scale businesses as well as the Co-operative sector which depended entirely on the Co-operative Federal bank and Co-operative banks. The Peoples Bank was set up to resolve this problem. But the Peoples Bank forgot its primary objective to assist small businesses and the co-operative sector. Today it is no different from the other commercial banks and has launched into the same type of businesses as the other commercial banks. The problem of provision of agricultural credit has not been resolved.

Providing micro-finance

Meanwhile the need for micro-finance and institutions to provide such finance has become more important. Banks in some countries have entered the field of micro-finance and have made profits from lending to them. Economists in developing countries have always believed that the small and medium enterprises play a crucial role in the country's economic growth and prosperity. After all, SMEs account for more than 75% of all business enterprises and they provide a viable and forceful mechanism for achieving a balanced and sustainable economic growth through their contribution to the generation of employment and income, regional development and revitalization, and foreign exchange earnings. In addition, they contribute to the optimal utilization of indigenous resources, the creation of forward and backward linkages with existing industries and the development of entrepreneurial skills. The country cannot promote inclusive growth which refers to the participation of all people, including the rural farmers, the small scale urban businessmen and the self-employed unless the SME sector obtains finance from the organized banking sector instead of from the informal sector as at present. Credit provided by the informal sector is too costly and the small and medium sector firms are unable to retain a sufficient surplus for re-investment and expansion.

Deposit banking through Branches

The banks have also been unable to extend deposit banking to the rural areas. The banks have sought to do so by setting up branches. But branch banking is very costly. In fact customers are increasingly moving away from their bank branch which is situated in their neighborhood and turning to on-line banking. Bank branches may cease to be economically viable in the not too distant future. Expanding branch network or establishing stand alone ATM's is very costly. Giving a POS machine to every merchant is not practical. However POS machine, ATM and Bank branch could be replaced with the use of an inexpensive mobile phone /land phone and it will easily give poor people a chance of using formal savings mechanisms.

But it is possible for the banks to appoint agents who can provide many of the services presently provided by the branches. During the colonial period when the British banks set up offices in Colombo they did not launch into the outstations except for a solitary branch in the tea planting areas in Hatton. The British banks were primarily interested in providing banking services to the tea plantations and the Agency Houses which managed them. They were called Exchange Banks since their emphasis was on financing the export of tea and the import of the necessary inputs for the plantations like fertilizers. They concentrated on financing the foreign trade of the country which was then largely in the hands of British companies. But they did lend to locals through the Shroff. The foreign banks appointed a Shroff who was from a wealthy local business family. When I worked for a short time in the Chartered Bank in the 1950s local businessmen used to contact the Shroff to obtain overdraft facilities. The loan applications had to be recommended by the Shroff. I believe the Shroff took responsibility for the recovery of the loan. The late N.U Jayewardene sought to appoint Agents in rural areas to extend banking through a local intermediary but his scheme was not implemented after he gave up his role in management of the Sampath Bank. But the way to extend deposit banking and lending to the rural areas is perhaps through the appointment of such agents rather than through branches. These agents could collect deposits from the farmers and the self employed and the banks should waive charges for looking after their accounts. If they have to subsidize deposit banking to them the Government should provide the subsidy for it will promote development of the banking habit and mobilize savings.

Mobile Phone banking

The advent of the Internet has enabled new ways to conduct banking business, resulting in the creation of new institutions, such as online banks, online brokers and wealth managers. Such institutions still account for only a tiny percentage of the industry. A young banker Mr.Thilaksha Kodituwakku wrote to the Island newspaper about the potential for mobile phone banking.

First thought up by Matt Wilson, Mobile commerce was born in 1997 when the first two mobile-phone enabled Coca Cola vending machines, were installed in the Helsinki area in Finland. The machines accepted payment via SMS text messages. The first mobile phone-based banking service was launched in 1997 by Merita Bank of Finland, also using SMS. In 1998, the first sales of digital content as downloads to mobile phones were made possible in Finland. Next came the Smart Money (http://smart.com.ph/money). Mobile-commerce-related services spread rapidly in early 2000. Norway launched mobile parking payments. Austria offered train ticketing via mobile device. Japan offered mobile purchases of airline tickets.

The first conference dedicated to mobile commerce was held in London in July 2001.The first book to cover mobile commerce was Tomi Ahonen's *M-profits* in 2002.

The first university short course to discuss mobile commerce was held at the University of Oxford in 2003, with Tomi Ahonen and Steve Jones lecturing. Personal Digital Assistants (PDAs) and cellular phones have become so popular that many businesses are beginning to use mobile commerce as a more efficient way to communicate with their customers.

In order to exploit the potential mobile commerce market, mobile phone manufacturers such as Nokia, Ericsson, Motorola, and Qualcomm are working with carriers such as AT&T Wireless and Sprint to develop WAP-enabled smart phones. Smartphones offer fax, e-mail, and phone capabilities.

Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. Mobile banking is used in many parts of the world with little or no infrastructure, especially in remote rural areas. This aspect of mobile commerce is also popular in countries where most of their population is unbanked. In most of these places, banks can only be found in big cities, and customers have to travel hundreds of miles to the nearest bank.

Mobile Banking refers to the provision and availing of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information. I have reproduced what follows from various websites on mobile banking and from the Wikipedia article on Mobile Banking.

Mobile Banking can be said to consist of both transactions based services as well as non-transactions based information providing services. The non-transaction-based services of an informational nature are however essential for conducting transactions - for instance, balance inquiries might be needed before committing a money remittance. So the informational services may be offered in combination with transactions based services. Information services, may also be offered as an independent module.

Trends in Mobile Banking

According to a study by financial consultancy Celent, 35% of online banking households would be using mobile banking by 2010, up from less than 1% today. Upwards of 70% of bank call center volume is projected to come from mobile phones. Mobile banking will eventually allow users to make payments at the physical point of sale. “Mobile contactless payments” will make up 10% of the contactless market by 2010. Another study from 2010 by Berg Insight forecasts that the number of mobile banking users in the US would grow from 12 million in 2009 to 86 million in 2015. The same study also predicts that the European market will grow from 7 million mobile banking users in 2009 to 115 million users in 2015.

Many believe that mobile users have just started to fully utilize the data capabilities in their mobile phones. In Asian countries like India, China, Bangladesh, Indonesia and Philippines, where mobile infrastructure is comparatively better than the fixed-line infrastructure, and in European countries, where mobile phone penetration is very high (at least 80% of consumers use a mobile phone), mobile banking is likely to appeal even more.

Mobile Banking business models

A wide spectrum of Mobile/branchless banking models is evolving. However, no matter what business model, if mobile banking is being used to attract low-income populations in often rural locations, the business model will depend on banking agents, i.e., retail or postal outlets that process financial transactions on behalf of telecoms or banks. The banking agent is an important part of the mobile banking business model since customer care, service quality, and cash management will depend on them. Many telcoms will work through their local airtime resellers. However, banks in Colombia, Brazil, Peru and other markets use pharmacies, bakeries, etc.

These models differ primarily on the question: who will establish the relationship (account opening, deposit taking, lending etc.) to the end customer, the Bank or the Non-Bank/ Telecommunication Company (Telco). Another difference lies in the nature of agency agreement between bank and the Non-Bank. Models of branchless banking can be classified into three broad categories - Bank Focused, Bank-Led and Nonbank-Led.

Bank-focused model

The bank-focused model emerges when a traditional bank uses non-traditional low-cost delivery channels to provide banking services to its existing customers. Examples range from use of automatic teller machines (ATMs) to internet banking or mobile phone banking to provide certain limited banking services to banks' customers. This model is additive in nature and may be seen as a modest extension of conventional branch-based banking.

Bank-led model

The bank-led model offers a distinct alternative to conventional branch-based banking in that customer conducts financial transactions at a whole range of retail agents (or through mobile phone) instead of at bank branches or through bank employees. This model promises the potential to substantially increase the financial services outreach by using a different delivery channel (retailers/ mobile phones), a different trade partner (telco / chain store) having experience and target market distinct from traditional banks, and may be significantly cheaper than the bank-based alternatives. The bank-led model may be implemented by either using correspondent arrangements or by creating a Joint Venture between Bank and Telco/non-bank. In this model customer account relationship rests with the bank.

Non-bank-led model

The non-bank-led model is where a bank has a limited role in the day-to-day account management. Typically its role in this model is limited to safe-keeping of funds. Account management functions are conducted by a non-bank (e.g. telco) who has direct contact with individual customers.

Mobile Banking Services

Mobile Banking can offer services such as the following:

Account Information

1. Mini-statements and checking of account history
2. Alerts on account activity or passing of set thresholds
3. Monitoring of term deposits

4. Access to loan statements
5. Access to card statements
6. Mutual funds / equity statements
7. Insurance policy management
8. Pension plan management
9. Status on cheque, stop payment on cheque
10. Ordering cheque books
11. Balance checking in the account
12. Recent transactions
13. Due date of payment (functionality for stop, change and deleting of payments)
14. PIN provision, Change of PIN and reminder over the Internet
15. Blocking of (lost, stolen) cards

Payments, Deposits, Withdrawals, and Transfers

1. Domestic and international fund transfers
2. Micro-payment handling
3. Mobile recharging
4. Commercial payment processing
5. Bill payment processing
6. Peer to peer payments
7. Withdrawal at banking agent
8. Deposit at banking agent

A specific sequence of SMS messages will enable the system to verify if the client has sufficient funds in his or her wallet and authorize a deposit or withdrawal transaction at the agent. When depositing money, the merchant receives cash and the system credits the client's bank account or mobile wallet. In the same way the client can also withdraw money at the merchant: through exchanging short messages (sms) to provide authorization, the merchant hands the client cash and debits the merchant's account.

Investments

1. Portfolio management services
2. Real-time stock quotes
3. Personalized alerts and notifications on security prices

Support

1. Status of requests for credit, including mortgage approval, and insurance coverage
2. Check (cheque) book and card requests
3. Exchange of data messages and email, including complaint submission and tracking
4. ATM Location

Content Services

1. General information such as weather updates, news
2. Loyalty-related offers
3. Location-based services

Based on a survey conducted by Forrester, mobile banking will be attractive mainly to the younger, more "tech-savvy" customer segment. A third of mobile phone users say that they may consider performing some kind of financial transaction through their mobile phone. But most of the users are interested in performing basic transactions such as querying for account balance and making bill payment.

Future functionalities in Mobile Banking

Based on the ***'International Review of Business Research Papers'*** from World Business Institute, Australia, following are the key functional trends possible in the world of Mobile Banking.

With the advent of technology and increasing use of Smartphone and tablet based devices, the use of Mobile Banking functionality would enable customer connect across entire customer life cycle more comprehensively than before. With this scenario, current mobile banking objectives of say building relationships, reducing cost, achieving new revenue stream will transform to enable new objectives targeting higher level goals such as building a brand of the banking organization. Emerging technology and functionalities would help to create new ways of developing deep customer relationships and the mobile banking world would achieve superior customer experience with two-way communications.

In countries as diverse as China, Brazil and Kenya the number of new users of mobile phone banking has soared over 100% in just 12 months as banks in those countries leapfrogged from traditional service models and moved directly to mobile phone banking. In China the increase was from 10% in 2010 to 25% in 2011.In Brazil the increase was from 10% to 21%; in Kenya from 6% to 18%; in USA from 11% to 22% and in UK from 9.7% to 22.4%.

Mobile money extends the concept by turning mobile telephones into mobile wallets, capable of being loaded up with and storing money in addition to delivering new services. Mobile wallets can bring people without bank accounts (the unbanked population which is large in developing countries) into the wider financial world and help drive economic and social development of the developing world which includes the large majority of the world's poor. The Mobile Life Research shows that the Mobile wallet adoption has more than doubled across emerging countries as they take advantage of the new opportunities it offers.

The increase has occurred not only in the emerging countries but also in developed countries. Banks in UK, USA, Singapore, South Korea and Sweden have expanded new services to their clients via the mobile telephones. As James Fergusson, the Global Technology Sector Head at

TNS said “Mobile finance technologies have the tremendous capacity to be transformational in rapid growth markets, empowering consumers by giving them greater access to financial services.” The research has been released as part of TNS Mobile Life, an annual report on mobile consumer usage and reveals a wealth of opportunities for banks and mobile service providers to develop for existing and potential customers. The percentage of users of mobile phone banking is increasing rapidly.

Government Support and Assistance

I quote below from an article in the Island newspaper by Mr. Thilaksha Kodituwakku. “The government support along with assistance of Banks is much needed to implement this new branchless banking model in Sri Lanka and it could be implemented through “PROMIS” (Promotion Of The Microfinance Sector) program which is conducted by the Ministry of Finance and Planning or “Gamidiriya” project conducted by the Ministry of Nation Building & Estate Infrastructure Development in order to uplift the living standards of poor people in the rural sector”.

The banks should upgrade their computer and telecom technology and utilize the services of global technology experts to introduce mobile phone banking and thereby provide deposit banking to the rural areas. This is a vast new area to mobilize savings and channel them into the banking system. The banks may need the assistance and financial support of the government to move into the new technology which is likely to be costly but which open up vast vistas for the development of the country- an inclusive development rather than the narrower development presently taking place where those more capable of taking advantage of the opportunities of the market economy move ahead while the others who lack exposure to modern facilities find themselves left behind.