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Top 6 Technology Trends in Banking

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Introduction

The period following the collapse of Lehman Brothers has been one of the toughest for banks in decades. Banks have been under constant scrutiny from Governments, regulators, activists and the public. During this time, quite a few of them collapsed, some merged together to survive but very few managed to grow, and growth like the boom days is a distant dream.

Banks while fighting a war on all fronts, are also constantly struggling on a less glamorous front i.e. technology. Banking is one business domain which has always been early mover in embracing technological change. Banks are constantly looking at upgrading their technological prowess for better customer experience, improved back office efficiencies and many a times just to comply with some regulatory changes.

This paper aims at identifying some of the technology trends that are common across banks globally. The trends listed below are identified from a short to medium term perspective. We also try to identify the key drivers for some of these trends i.e. whether they are demand driven (consumer needs) or regulatory compulsions or just proactive investments in technology for future growth.

1. Convergence of Mobile and Online platforms

As things stand, banks have separate mobile and online solutions. One reason being the way technology evolved, with the advent of internet and personal computer, banks adopted technology to provide banking solutions on the web. This reduced the big queues in the branches and revolutionized the way we do banking.

However, any new delighter service goes on to become an expected one over time. It was hence apparent that consumers would expect banking services to be available on mobile the moment they had internet on it. Big multinational banks once again took the lead and are the first to come up with mobile based banking solutions. Majority still do not have mobile banking, some have very few features available. This is one big gap which needs to be filled as soon as possible. It is still not clear whether this would help banks drive value or is just another cost, but it is something which no bank can afford to ignore. Even the multinationals which have mobile banking solutions, built them from scratch on completely different platforms than their online solutions. There is an obvious need to integrate these platforms to

provide a seamless navigation experience to the consumers. Consumers expect to start their work on laptops at home, then stop midway and leave for office and finish it from their smart phones sometime during lunch break. With tablets making their way in the lifestyle of consumers, there is a need for a rich user experience even on these half phone half computer machines.

Bank branches also need to be integrated with all these platforms, as an urgent call may just drag a consumer out of branch leaving work unfinished, expected to be completed using one of the technology based solution.

As of today, the various platforms of a bank often compete with each other resulting in a competitor taking away the consumer. A single, unified platform should be the identity of a bank. This also alleviates fears of theft from the minds of the consumer as it helps identify the authentic platform of the bank easy (unlike today, where a regular online user may find the mobile platform strikingly different).

2. Use of Web 2.0 and Social Media for customer interaction

Social networks have changed the way we communicate, in fact they represent much more than communication; they represent lifestyle. Facebook, LinkedIn, Twitter are helping people communicate and take their life public. Individuals are more expressive than ever before. This represents both an opportunity and a problem for banks. Any incident of customer dissatisfaction can go viral and harm the brand name within hours. It is said that a customer can highlight a bad interaction to six friends, but a customer online can highlight the same bad interaction to six thousand, putting a big dent in the brand reputation.

It is imperative for banks to have a social presence. Social media is a great platform to interact with the consumers directly. It not only helps banks avert the danger of an incident going viral by interacting and solving the clients' issues, but also provides a very good opportunity to then highlight publicly the client focus of the bank. Social networks also provide an opportunity to connect with potential customers, with an aggressive campaign banks can attract these to be customers to their page and offer deals on their products and services.

This is also a very good place for community initiatives and to highlight the corporate social responsibility related activities that a bank does. It helps in building the brand in a big way. And as the action here is instant, consumers are likely to share their

good experiences with online friends, starting free viral marketing campaigns for the bank.

However, it is not enough to just have a presence and communicate. Banks ought to have a proper link with their entire system out here. Recently Facebook started its own Facebook credits. Various such initiatives can come up in the future. No bank would like to hand over the first mover advantage to a social media giant like Facebook. They should hence work at integrating social media into their portfolio.

3. Use of Big Data for understanding the consumer

Big data is one of the most talked about thing in technology space in 2012. The sea of data before us is a puzzle that can unlock the ultimate secrets of consumer behavior, giving organizations an ability to customize products and services on a one to one basis.

The key to a bank's success often depends on the relationships it is able to develop with its clients, which comes down to its ability to provide each client a customized solution. With transactions becoming intelligent (capturing data through cards), banks now have enormous amount of data about their clients. The challenge is to capture information out of this data.

As of today, many consumers often complain about receiving sales calls from banks for credit cards when they already own one from the same bank. This is not just a case of wasted sales call, but also irritating one's own customer. Proper use of bank's data can help avoid such mistakes.

One reason behind the failure of big data projects is the quality of data itself. Banks have lots of data; however they lack clean data, data which can be worked upon directly. To go along with the problem of impure data, the fascination with the term big data has also been a source of the problem. Very often projects are started just for the sake of doing something with big data. There is nothing like a 'big data problem' which technologists can solve for banks. It is for the bank to decide its problem statement first. This problem statement, which identifies some business issue, then needs to be solved using the data available with the bank. This requires the coordination of the domain expert (banker) with the technologist at a level never seen before. Data scientist is believed to be the hottest job profile over the coming years just because of this reason.

Banks have to start narrowing down rather than generalizing their big data projects. They need to break it down in modules on the basis of business needs and execute each one independently. Verdict is still not out on whether big data actually transforms the way banks operate or is just a technology fad.

Banks can also utilize big data for more focused customer segmentation. It is no more sufficient to segment consumers based on age and income, the segmentation of future would come from behavioral patterns more than anything else. Two colleagues earning same and living in the same neighborhood may exhibit completely different usage pattern when it comes to credit cards.

4. Branch less Banking

The growth in technology is striving to make banking ubiquitous. But ubiquitous banking does not mean branches everywhere, it means banking without branches. Branch less banking is unique in itself; it provides cost benefits and also caters to top notch service. On the one hand, the high end customers would prefer avoiding the travel and waste of time by going to the branch, so it makes sense to have banking available for them at their fingertips on their smart phones, tablets and computers. The rural population in emerging markets on the other hand can't afford the costly banking services offered in a branch, so it is imperative that banks reach out to them. Technology helps enable this. Banks are reaching out to rural consumers to mobile based payments, solar powered ATMs and even middlemen like shopkeepers.

Branch less banking is about to give banks the next level of scale. Banks can not only reach out to a large portion of population which currently has no access to formal banking services, but can also increase the frequency of usage of current customers who maintain a savings account but prefer to use it sparingly because of the difficulties associated with branch based transactions like time and travel expenses.

Another advantage which branch less banking can provide is improved customer satisfaction. Transactions can be process dependent unlike branch based banking where the executive's handling of clients may differ from time to time and from client to client. This can help banks identify key issues related to customer satisfaction and implement solutions a lot more quickly.

Union Bank of India has come out with the pioneering idea of branch less banking under Biometric Smart Card technology by appointing BC-BF (Business Correspondents / Business facilitators) to reach the unreached and taking banking services at the doorstep of the unreached.

Central banks around the emerging world view branch less banking as a tool which can help implement financial inclusion. In Indonesia for example, Bank Indonesia (BI) has been pushing programs that promote financial inclusion to solve a perennial problem of providing formal financial services to people living in remote and underserved areas of the archipelago.

5. Branch as a Service Station

As more and more banking services can be availed without going to a branch, the existing branch may not survive in the current form. The branch can do away with the transactional purpose and serve as a service station or a solution provider, where more complex and individually tailored products can be sold.

A branch may have more managers than clerical officers and customers visiting may come there on an appointment basis. One reason for a branch to exist is to attract new customers, say someone in his early twenties looking for banking services on landing a new job.

A branch can also function as a one stop full financial services shop, providing banking, insurance, mutual funds all under the same roof. Banks and other financial service providers can actually collaborate and coexist under the same roof. This can help a lot of financial service providers cut costs and increase their reach.

6. Security

Consumers' demand for banking services to be available anytime, anywhere and on any device isn't just an opportunity for banks, it also comes with a big threat, the threat of a breach in security, and a whole new breed of bank robbers can emerge. Multiple devices and multiple apps on those devices means any single loophole anywhere in the entire information chain can be disastrous for the bank and its consumers.

The rate of change or say innovation in the mobile world leaves banks vulnerable to theft. Every new device can present hackers the opportunity to attack from a different front. New mobile phones and new operating systems are being released almost every month in the market. Banks have to keep pace in releasing their supporting apps for these new devices and operating systems as soon as possible in order to not lose out to competition. This puts security on the backseat and time lines drive the project.

Banks will have to integrate all their information sources and destinations and treat them as one unified information chain. That way the focus of security would stay consistent on securing this information chain. Individually looking at different channels and devices can leave out some loophole somewhere which can be exploited by the modern day thieves.

The increasing innovations also present opportunities to make every transaction more secure. Like using the global positioning system to identify where the transaction started, pattern based transaction passwords and even the use of biometrics in identifying the consumers. One such idea is to link accounts to programs such as UIDAI (project headed by Nandan Nilekani in India) which is supposed to carry biometric information of individuals. The Government of India is close to implementing direct cash transfers using it.

Conclusion

Four decades since the bold prediction, Moore's law still holds true. With the rapid advancement in technology, businesses world over are getting disrupted. Banks seem to have realized this need to continuously invest in technology to stay relevant, because one never knows; a school kid in a garage might just come up with a technology based model that can make them redundant. There are many more technological innovations taking place in the banking space at this point of time, the above mentioned trends are some of the most common ones and the ones we believe will have the maximum role in defining the new look of banking services in the coming decade.

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