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E-banking and E-insurance

For the sake of analytical convenience, this chapter has been divided into three sections. Section 1 deals with problems and policy framework for small- and medium-sized banks which are entering the field of e-banking and e-insurance for the first time. Section 2 deals with the experience of the banks, which have internet facilities available for their customers and analyses the impact of this additional channel. The last section examines possibilities of stand-alone e-banks entering the field and the penetration of mobile banking.

To begin with a definition of e-banking is important as various authorities/users have different perceptions about the definition of e-banking. E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic and interactive communication channels. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the internet. Customers access e-banking services using an intelligent electronic device such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM), kiosk or touch tone telephone. We would be using this definition in the text. However, it might be useful to quote the OECD version too. 'An electronic finance transaction is a financial transaction that depends on the internet or a similar network to which households or non-financial enterprises have access. The trade in electronic finance is the part of an electronic finance transaction that relates to the exchange of remunerated financial services' (Christiansen 2001). Importantly, this implies an element of service provisioning for it to constitute a trade in e-finance service.

About five years back there was considerable uncertainty if banks would go in for e-banking. The *Asian Banking Journal* (2000), on financial institutions' preparedness to meet new challenges, showed a marked apathy on the part of bankers and others about the new channel.

> We asked analysts and harassed half a dozen bankers …. Whom they would consider a veritable 24-carat E-Banking savvy CEO? We were referring to a CEO who could articulate an integrated electronic banking strategy, has taken decisions in that direction, and demonstrated an ability to lead his or her bank into E-Banking. We could not even get five names …. And the responses sometimes slow and deliberate, sometimes drawing a complete blank was telling of how few CEOs are ready to lead their organizations into the E-Banking arena.

However, the picture is now totally changed. The question, which bankers pose, is not whether, but when and how. Most of the large-sized banks do have internet facilities for their customers as against two to three banks, which started having a range of limited offerings just five years back. The number of small- and medium-sized banks wanting to go in for internet-banking facilities for their customers is also on the increase. The reasons for this change in approach are not far to seek. Most banks are apprehensive that they might not be able to access the new IT savvy customers and others who have/had heightened service standard expectations, but who have shown a marked reluctance to visit bank branches for transacting routine banking business.

The fact that banks in other parts of the world are going through a difficult patch opens up vistas for Indian financial institutions as never before. Compared to Islamic banking, the Indian system of banking has an added advantage as we follow the business model which European, American and UK banks follow. However, Indian banks have not suffered the ill effects of Western banking on account of speculative trading or total neglect of risk management practices. We have a stable system and it is by any stretch of imagination a fairly sound and safe one. One would have to be good at connecting the dots and see the big picture.

It would be interesting to see the kind of customers targeted by banks or the general profile that banks have for their 'potential' customers. They are in the age group of 25–35, tech savvy, have sufficiently diverse needs for financial services and need to be handled with care, as the other bank is just a click away. It is natural that banks should be in a hurry to go in for the latest technology available and make delivery channels available to attract new customers.

Section 1

This section analyses the problems encountered by small- and medium-sized banks making their forays into internet banking. These small- and medium-sized banks need to analyse their preparedness for such changes before being lured by high-pressure technology sales people into going in for updates, which could, in the long run, not give the desired results. It is true that banks both large- and medium-sized have other problems, which could, to some extent, hinder their progress, but technology could be of some help in solving them. Perhaps, these could be mitigated by adoption of the new technology. Some of these are briefly referred to in the following section.

- Large work force: They are used to job security, are not exposed to working in a competitive environment and are somewhat reluctant to upgrade the skills required to work in an automated environment. The clamp down on recruitment has resulted in the workforce comprising middle-aged staff with 15–20 years of service behind them. This, therefore, leads to high transaction costs.
- Slow pace of 'technology change'.
- Indifference towards customer service.
- 'Thinning' margins.
- Falling share in foreign exchange business.
- Competition from hostile ambience of retail markets.
- A rather inefficient treasury function.

It is understood that banks, which lag behind in the technology upgradation process are likely to suffer over a period of time. However, it does not mean that banks need to rush in and decide on these issues. Experience suggests that the banks need to pay considerable attention to the planning phase. In this content a discussion by the Federal Deposit Insurance Corporation (FDIC) on electronic banking examination is important. The main elements that need to be kept in sight at the planning stage have been discussed here to some extent and would be mentioned again in Chapter 13.

Planning and Development

- Inadequate decision processes while considering, planning and implementing electronic capabilities.

- Impact of technology costs and pricing decisions.
- Strategic implications of activities.
- System design and capability and its compatibility with customer demands.
- Uncertain applicability of insurance coverage of electronic activities.

Equally significant are technical competencies, the bank's control procedures, confidentiality of information, and so on.

The Planning Phase

The banks would need a clear view of both their brand positioning and what type of organization they want to be. They must, if they have not done so, undertake step-by-step planning to:

- Identify their priorities and determine critical success factors.
- Create an e-business road map. The bank must be able to deliver solutions quickly without sacrificing long-term flexibility.
- Every phase of the planning process should focus on delivering solutions that meet and exceed customer expectations.
- Decide on the resources required, both in terms of costs and in terms of people to successfully deliver e-programmes. Technology and business strategy (as is being repeatedly stressed by us) must go hand in hand. 'E-channel' must be consistent with the overall direction of e-business.

Before taking up specific issues, it might be useful to remember that for established banks the problem is wringing optimal performance from traditional business lines while simultaneously transforming their banks as competitors in e-commerce. A major financial upheaval would and does put a restraint on resources available for reinvestment in commerce and reignite concerns about stability of earnings. However, the fact is that the geography-centred banking model is being supplanted by an electronic system.

The experience of stand-alone banks and in some cases their failure has led to an integrated banking structure known as 'Brick & Click' and is becoming an industry 'norm'. An equally important reason for the emergence of such an integrated structure is due to the response of the existing banks to the emergence of these new entities. According to *The Economist* (2001) 'Their physical rivals have become wiser, launching their own

integrated strategies (clicks and bricks) that offer customers electronic access as well as dark satanic branches' (*The Economist* 2001). They allow their customers to do their banking online. Further, the customers also were not too keen to throw away the 'yoke' of branches. Customers, on the other hand, seem to fret about the security of e-banking. Traditional banks are thought to be more secure. It was also shown earlier that while marginal costs may be negligible, fixed costs are substantial for stand-alone banks.

How should the banks then approach the problem(s)? The banks intending to solve the problem must realize that they cannot look on internet banking as part apart. It is not difficult to list out the dos and don'ts. However, a more convincing evidence can be provided by citing three specific country experiences. Following are some of the priorities IT departments should keep in mind.

- The architectural vision to avoid costly short-term investment decisions.
- Evolution of systems as opposed to 'revolution' as one Assistant General manager in charge of IT called it.
- Careful selection of language to have an easy interface (say XML).
- Choosing the right middleware system.

All of us have been witness to the early efforts towards computerization. The deadlines, the number of branches to be computerized, and so on, had to be taken into account to achieve certain ends. The fact that few IT departments would have the breathing time to look at the future could be a worrying fact. They would be under intense pressure to bolt it to the existing system. A word of caution is in place. The latest may not be the best route to operational efficiency. The important question is how these fit into the mid-to-long-term view of the IT infrastructure of the bank.

The banks that have decided to explore the e-banking route are, in the first instance, likely to use the Application Service Providers (ASPs). The reason for this is that the policies pursued by HDFC bank, in India, which is looked on not only as 'technically savvy', but also highly profitable and, therefore, a model worth emulating. Its treasury, corporate and even retail activities are mostly automated with a strong focus on online connectivity and e-commerce. They use (in partnership with I-Flex solutions) e-commerce solutions provided by I-Flex. Wipro handles their data centre management. HDFC is now able to provide Application Support Services to other banks. Realizing that there is a huge niche market awaiting developments, ASPs would be able to play a useful role.

In fact, the ASPs, worldwide, are a growing tribe. The problem is to choose one, which would meet the banks' needs properly and then give it a try. There are, no doubt, certain advantages in going the ASP route. A bank could achieve its automation objectives without huge capital investments and with least costs. The HDFC bank and I-flex have formed a business partnership to provide such services to small- and medium-sized banks. This would facilitate use of such services by small banks.

Choosing the ASP

How can a bank decide which ASP to choose? Gartner has pointed out that an ASP should have a strong focus in the industry, a good brand name and develop real know-how with specific tailored solutions. Although these characteristics would make the ASP quite acceptable, it must also provide some unique, specific software solutions, which would ensure a competitive edge for the bank. Banks' automation, so far, has been one of a standardized 'one-size fit all' solutions. In order to do this four to five software vendors were identified and banks were asked to choose from amongst those. It is almost forgotten that automation could be a major competitive tool. It is also not certain whether the outsourcing environment is adequately and truly secured by confidentiality conditions. There is a genuine concern regarding this because the ASPs would then not be able to assess specific customer requirements or problems faced by the bank(s). They would offer only general solutions.

In this context, it could be said that the transformation to e-banking does necessitate considerable preparations within the bank itself. Training of staff is a major problem. Professor Padwal has attempted an estimate of the quantitative dimensions of the training problem and they look forbidding (see Padwal 2000). Further, it is possible that not every bank customer has access to a high-speed dedicated line(s). Many people might have a slow internet connection (56k modem connection) and might have to wait for 10–15 minutes just to know the balance. This is not a worthwhile activity.

Many banks had taken the first step in this area by building their own websites. We begin with a review of these.

Bank Websites

The problems faced by banks in building and maintaining their websites have been touched upon previously. Today, online delivery is not only

about websites accessed through PCs. Banks' customers would soon look to a plethora of online devices like PDAs (Personal Digital Assistants) and mobile phones (WAP enabled). Once again, the spread of mobile phones would make it essential for those banks, which already have their websites, to rethink about the design on the lines previously indicated in chapter on web designing.

When a bank embarks on a technology solution, it is essential that it does not blindly jump on the bandwagon, but critically looks at the limitations and issues that surround such a strategy. Further, the bank must never lose customer focus, as solutions are for the benefits of the customer also. Accepting multi-channel delivery in e-world is a necessity. To a great extent, the design for services for these channels depends on human behaviour and the financial institutions that recognize this and understand how best to present the services to their customers would be the most successful.

There is one major pitfall that should be avoided. Although anywhere–anytime banking would imply that the bank is ready to offer all services across all devices, it is a totally useless concept which ignores not only the functionality of a channel but also people behaviour. Banks must have prior knowledge about the way a consumer looks at a product and the way he/she is likely to approach the bank.

Around the time when the ATMs were making inroads in the banking sector, the chairman of Barclays bank told us in a discussion that ATMs ignore the possibility of a customer wanting to talk to the bank. There is actually a thing as a human touch. His advice then was not to underestimate this aspect, and this is valid even today. Further, correctly looked at and handled, banks could ill-afford to ignore this opportunity for a feedback session!

Will relationships between a small customer and business go the way of horse and buggy? Will bank products be primarily sold in the financial market place as commodities or will personal service and contact still matter?

Attacks on Banks' Websites

At this stage, it has to be highlighted that bank websites have been under constant attacks from hackers. Web designing must be very carefully undertaken. Further, it will be shown, in the chapter on legal issues, that the case law could be quite baffling and may lead to most unexpected judgements.

The smaller banks would naturally like to know if these efforts are rewarded. Would small banks ever see their bottom-line improving through these efforts? The survey done by the Office of the Comptroller of Currency can provide some valuable insights. How effective are internet offerings by smaller banks? And what impact do the offerings have on their profitability? The news is certainly encouraging. Institutions offering internet banking outperformed non-internet banks in terms of profitability. The Return On Equity (ROE) and accounting efficiency (non-interest expenses to net operating revenue) were higher for institutions offering internet banking than those that did not.

Before dealing with these questions in general terms, we would like to quote from the experience of two case studies based on the experience of regional banks in the US and then offer suggestions of a general nature. The case refers to Gray Bank, Georgia. The total population is about 26,000. It wants to retain its identity as an independent community bank. It now faces competition from two banks, which have moved to the locality, and also from non-bank companies offering retirement and pension products.

The bank used the internet to advertise and succeeded in signing merchant establishments in establishing an internet shopping service. The internet has been a great source for advertising the e-banking services. Apart from processing new accounts, consumer loan applications, regulatory compliances, the bank offers account opening service online, 24 hours a day. In four years it could line up 3,000 e-banking customers.

A noteworthy feature is its understanding of quality in the e-banking service competition. The e-banking service has helped in freeing up personnel to attend to other duties and more emerging services that require face-to-face attention.

This somewhat old case has been deliberately quoted to amply clarify the doubts often plaguing the minds of decision makers in smaller banks.

Some additional factors have been discussed in the following paragraphs that would help in impacting the decision. Regional rural banks/medium-sized cooperative banks should consider using profitability and demographic information to prevent usage which would be uneconomic for the banks. Customers who use internet banking and more so if they are early adopters of the internet are more profitable for the bank. Further, they are more likely to stay with the bank. 'Good Customer', profitability information, good channel usage and internal bank data on costs can prove to be extremely useful for relationship management.

- Highly profitable customers should be convinced to use internet facilities.
- Heavy users of other channels can be encouraged to shift to e-banking.
- Unprofitable customers should be avoided altogether.
- Banks should target the small personal/business relationship.

The smaller banks can build business-specific solutions and develop other kinds of systems to offer more functionality to their customers. Security policies that can be adopted by smaller banks to build trust are as follows:

- Limiting/eliminating use of email.
- Never soliciting information via email.
- Building up preauthorization processes for money transfer.
- Close monitoring of customers' bill collection requests.
- Regular contacts with customers and informing them about these efforts.

These measures would go a long way in improving the bank's image as a responsible entity in maintaining privacy and security.

Section 2

While reviewing the performance of large-sized banks as providers of internet services, it would be useful to briefly touch on some theoretical issues and then undertake an impact assessment. In India, barely a couple of years have passed since these services were made available to the customers and a thorough impact assessment would be possible only after some more time has elapsed. But at the same time there are some glaring weaknesses and these need to be highlighted.

The first thing any observer notices about the internet facilities is that many banks would soon (particularly, after RBI gives the go-ahead) offer many independent communication channels (mobile banking), but there does not seem to be any attempt at integrating these channels and allowing the customers to choose the channel of their preference. It is true that by increasing the number of channels financial institutions can satisfy a widely diverse clientele, but the shift away from integration of channels

could be a risky strategy in an environment where consumers demand an easy access service with an option to choose how they communicate with their banks.

The objectives, which banks have before them when they decide to go in for adding these delivery channels, will now be reviewed.

- The banks have to meet the competitive challenges and offer services at par with those offered by the competitors.
- The perceptions in the market about a bank being technically savvy also impact its share prices and indirectly affect its access to the market for capital.
- The transaction costs are going up very steeply. The costs of operations on the internet are negligible.
- The customers demand such services and the thrust is too strong to be ignored.
- Pressure on interest earnings and margins make it necessary to seek other avenues to augment the exchange and commission income.
- Possibilities of multilateral communications between branches, head offices and customers.

Although many other reasons can be provided, few banks have articulated their objectives with any degree of precision. Perhaps, this could explain the difficulties in having statistical information about even elementary aspects like utilization of services, retention of customers, income flows and plans for future expansion in cross border financing.

More surprising is the fact that specific profit centers responsible for developing the internet activities do not exist. Further, banks do not seem to have achieved a thorough integration of IT plans with the overall banking plans. It needs to be reiterated that banks should not look on internet banking as part apart.

Products Offered

For the sake of analytical convenience, products that are offered on the internet by large-sized banks will be reviewed by looking at the services offered to different segments. The broad classification between business and retail is useful to some extent, but a more detailed segment wise analysis is perhaps more helpful. It used to be customary to divide the products/services offered into two broad types—Basic and Premium products. These could be described as follows:

Basic

- Balance inquiries.
- Funds transfer.
- Bills payment.

Premium

- Includes all the basic services.
- New account setup.
- Cash management.
- Fiduciary.
- Bills presentment.
- Insurance.

A more detailed review would, in all probability, cover most of the functions as mentioned in the following list.

- Account balances/transaction histories-batch.
- Account balances/transaction histories real time.
- Account reconciliation.
- Lending.
- Account transfer—intra bank.
- Application for loans.
- Online statements.
- Transfer from deposit account to loan account.
- Electronic payments authorization schedule viewing facility.
- Electronic bill payments.
- Home loans/car loans.
- Online applications for credit cards.
- Multiple payments from a single page.
- Multiple payments on 'us' capability.
- Recurring multiple payments.
- Bill presentment and e-alerts.

The extent and use of these products and services cannot be exactly gauged as most banks do not keep a record of such usage. Some banks, perhaps, have attempted an exercise to determine if the workload at the branches has been reduced. The broad conclusion seems to be that the bank has succeeded in converting 80 per cent of their customers to using the internet for their transactions.

B2B Applications

Many banks are widening their online offerings by providing content and services, in addition to banking transactions. The first foray comprises of developing a port network primarily for the use of employees and corporate partners. These allow the banks' customers to communicate via a port-secure net connection. The greatest advantage of this is the security. The competitive pressures and thinning margins on banks' traditional business, are forcing banks to concentrate on developing 'relationships'. Over the past decade, banks have focused on 'efficiency' to make up for the losses suffered. In the earlier phases, banks relied on consolidation, automation, downsizing and outsourcing. However, the need to develop customer equations was ever present. The automated processes have freed the dealers, managers, and so on, to build up a relationship with corporate clients and high net worth individuals.

Apart from rendering all their existing services, banks began offering a host of other services. These have been discussed in some detail.

The corporate intranet is increasingly being used as a marketing opportunity, a way to win a position as a company's 'in-house bank' and attract customers for their online services.

Some large corporations have tens of thousands of employees, who can provide a number of opportunities. These could be described as business to employee portals offering a cluster of bundled services. Wells Fargo is offering online services (in addition to an on-site branch) to employees.

However, employee accounts are not particularly 'profitable' for banks. A number of banks undertake salary payments for the clients. The experience suggests that most employees leave only the bare minimum balance and corporate customers are reluctant to pay for the services rendered. The reason banks do this is, obviously, to build a relationship. It would be cheaper than staffing a branch at a client's site. The customer base increase does not follow merely because an intranet facility is available. Employees are not likely to switch their allegiance unless there is strong evidence. Some staff unions have expressed fear over 'big brother' watching the entire gamut of operations, while others feel it would lead to the employees being tied down to the office, reducing the necessity to visit a branch!

Banks have two choices in these matters. They can build a package, make it attractive and sell it, or they can customize products to suit employee needs. Thus, a bank may even have a 'travel agency'/vacation planning service available on its portals.

Small- and Medium-enterprise Customers

Banks today are driven to widen their services net to cover small- and medium-sized enterprises. Additionally, they also have to take care of micro financing. An inhabiting factor all along has been the transaction costs. A very crude calculation would put the average service of bank employees at around 15 years. Obviously, the costs for routine services like cash payments turns out to be very high. The internet would reduce the transaction costs significantly. Equally important would be considerable reduction in time spent in scrutinizing and sanctioning loan requirements and ensuring proper usage thereafter. A major source of annoyance for these customers is submission of routine statements to the banks. Perhaps, these can be derived by the banks and workload on the customers can be considerably reduced. However, for reasons not quite clear, our surveys undertaken with the departments in the banks have not been fruitful in persuading the customers to switch over. Banks can use a certain degree of pressure to bring about the desired result.

The micro finance agencies (NGOs, Self-help Groups [SHGs]) are, however, very keen on availing these facilities. They want to cut down on their own information system costs, and also have their field staffs get access to the accounts. They, however, expect the banks to provide a conditional access depending on the hierarchical position of the particular staff member. The prime need in offering credit and savings products to these segments is innovation in managing risks and transaction costs. They have no physical assets and banks have to overcome outreach and sustainability. Overreach in this context means 'hard to reach clients'.

The most fundamental application from the bank's point of view is back office management. A suitable computerized management information system (MIS) is a prerequisite for monitoring the quality of assets and undertaking general administration tasks. The banks have to see how they can use the internet to highlight differentiating features:

- Products offered.
- Clients served.
- Environment in which it operates.
- Non-financial information needs to be recorded and tracked. Data delay can be a problem and can easily be overcome by mobile computing applications directly into MIS. This would negate the need for back office intermediary data entry at back-office. The roll out of wireless broadband infrastructure will always enable this system to be online.

- The major difficulty faced is in the area of marketing. The SM & E customers' difficulty is in marketing. It is here the banks can help them by allowing the use of its portals for marketing their wares. The banks can go a step further by facilitating payments to the suppliers. The banks can generate a fee income for the services rendered. We had published a directory of products and their suppliers, and the scheme met with resounding success even though we did not have access to the internet.
- The banks' own purchase of stationery can be done over the internet and payments can be made directly; the kind of process reengineering undertaken by automobile companies a few years back would go a long way in helping the banks in these areas.

Assessing the Impact

Some of the difficulties in assessing the impact have been indicated, although it has only been a few years since the banks have started offering the services and it is too early to assess the impact. However, there are areas like costs to income ratios, which could throw some light on these aspects. Unfortunately, the period under review also saw considerable downsizing through voluntary retirement schemes. The impact of shifts in work technology on the bottom line cannot be isolated and whether banks are able to correctly assess their returns on technology investments is also not certain. Merely having a given channel for distribution of services is unlikely to afford any additional advantages.

A rough model to look at internet developments was used by us during seminar discussions on these aspects of the problem. It is certain that there is a distinct power shift to the customers and, therefore, it is necessary to see that the organizations make every effort to lead the pack. Currently, there are three distinct phases of development.

- Phase 1: The consumers at this stage are persuaded to use the internet and access it for their information needs at least. This phase could be used to persuade customers to migrate to the internet and also to reduce costs. It would also help in extending market reach.
- Phase 2: One notices changes in the way retail financial services are made available. There is a disaggregation. One finds that advisory services are separated from execution of services.
- Phase 3: There is a virtual integration. Separate value element like market information and analytics are merged to form value added

products. There would be competition from third party advisors like price comparison advisors. These firms are not deterred by legacy systems or overheads and costs on organizational structures. The established units would have to rely on advantages like customer base and a very well established information system. Additionally, they would also have a brand name. Further, there would be multi provider platforms, convenience and customized advice.

Today, barring a few banks in Sweden, Finland, Singapore and Japan, most banks are providers of hybrid services. It would be wrong to judge these firms with the criteria of new value propositions created, new business models developed or configuration of internal operations.

A development path can be envisaged for most banks along the lines of the three phases describe broadly as:

- Inflection.
- Evolution.
- Revolution.

The first two phases could see a strong upward thrust and growth due to the following reasons:

- Strong technical infrastructure.
- Aggressive migration initiatives.
- Scope improvements and price changes.

Section 3

At this stage, there is a threat to the universal banks as the customers would prefer institutions with a limited range of specialized products. There could be a period of sustained price competition and one might even see continuous price cutting. There is a distinct possibility of re-structuring of internal offline operations. It is certain that there would be a rapid expansion in brokerage and fund management institutions/sectors.

It can be safely concluded that the internet has made banking simpler and more convenient for those who have grown up with computers and who are 'time poor'. They can do their banking when and where it suits them. Limit set by geography and time has been overcome. Banks can look at the way their operations are conducted to see if the migration is really effective. Further, banks can also see if the large volume business migrates

to the internet. An equally important facet can be the development of products, which can exclusively be delivered through the internet only. The internet has opened a new frontier for businesses and invested banking with a new meaning.

So far, the broad criteria that banks can use to evaluate the efficacy of their technological upgradation efforts, have been discussed. However, far more important is the need to remove the most obvious weaknesses plaguing the system. It must be said that our conclusions are impressionistic and that they are based on experience narrated to us by staff members/users at meets, and so on. The major drawback is the lack of information about the facilities at the branch level. Somehow, the staff members are not aware of the facilities available or the rationale behind the installation. Emails received are not responded to even within reasonable time. Cheques are not cleared even for three days or so. High value instruments which should be cleared on the same day are rarely put through. The customers have to be alert and chase the concerned staff members to see that the amounts are received. Equally serious is the lack of any worthwhile effort at marketing of services. There is no attempt at differentiating the banks' services. The investments and the returns on them are left to themselves with the pious hope that they would pay for themselves.

The first question that needs to be answered is regarding the differentiation aspect. It is important for the banks to have a vision. There is no reason why banks should not think of having a pan-Asian customer base. To achieve such results banks need to have a single window service for bill payments, increase in credit card limits, transfer of funds, and so on, and all of these need to be handled through a single window. These things need to work intuitively by using standard navigation channels. Banks have to compete with the established leaders in the field and they must never forget that their customers have very high expectations.

Broadly speaking, some of the steps that need to be taken to achieve these results have been discussed below. There has to be a breadth of functionality and intuitive way in which the application behaves. It is easy to remember that differentiation comes through the following:

- Brand development.
- Wealth of information availability.
- Depth of transactional quality, underlying the products and services.

Businesses today need and expect a certain degree of tailoring of services. One such example is given here to bring home the point. Corporate

customers need different levels of services with varying authorization levels. They would like to nominate users with potentially different levels and with a built-in check for auditing what each level has done viz. 'check and release' transactions only if within user authority. One can never forget that corporate customers have different requirements than the average and less tech-savvy customer.

The proof of the pudding lies in eating. A case from Sweden or Korea needs to be used here to confirm that what has been said is not merely a castle-building exercise, but that such results can be achieved by banks. The case of Nordea bank has been discussed here to highlight the possibility of achieving such results. For the sake of brevity, a brief outline of the steps taken by these banks has been mentioned.

- It is necessary to start with the presumption that internet banking is a profit center activity. The result can be achieved through support from the branch staff. Otherwise, the goal can never be reached.
- Solutions attempted have to be simple, user friendly, secure and expandable.
- There has to be the same secure identification with each contact over each medium and terminal.
- Gradual introduction should be made to new product offers.
- E-banking has to be a part of the branch business.
- Corporate and other customers should get the same services.
- The branch staff must have a friendly attitude, and ensure prompt and timely response. Eventually, the staff would notice that customer satisfaction improves considerably.
- Be aware all the time that your competitor is just a click away.
- Profitability and payback on investment have to be in the forefront. Added value 'for free' is just not given.
- One thing is abundantly clear. Without staff support, e-banking cannot be launched and carried on as a profit center activity.

Risk Factors

The risk management policies for various activities like broking, banking and insurance shall be dealt with in a separate chapter. Some of the threats/risks, which impinge on the analysis made earlier have been indicated further:

- Speed of technological change.
- Changing customer expectations.
- Increased visibility of public networks.
- Integration with legacy computer systems.
- Dependence on third parties for necessary technical expertise.
- Proliferation of threats and vulnerabilities in publicly accessible networks.

Management should review each of these perceived threats and adapt the risk management practices to meet the risks posed by e-banking activities.

The next section refers to the cases of stand-alone e-banks. We are of the view that sooner or later some of the mobile service providers are bound to enter this field. Non-bank finance companies would find this activity quite profitable when viewed as a supplement to their mobile telephone services.

Stand-alone E-banking

There are a number of banks today which regard the internet as a way to deliver the products; others see it as a separate line of business for the bank. Here, we would like to review the performance of the stand-alone e-banks. Let us first explore the possibility of a stand-alone internet bank. In course of time, the emergence of new entities in this field is a distinct possibility with newer approaches, work culture, and so on. For instance, a major telecom company like Reliance or a technology company like Infotech may decide to foray into this field and set up a stand-alone e-bank. Recently, *The Economist* published a review of the working of internet banking and concentrated on the reasons for their failure. Amongst the causes listed were: *(a)* customer resistance *(b)* expenses incurred on advertisement. The study no doubt highlighted the problems faced by the stand-alone banks. However, subsequent studies, particularly Robert De Young's (2001) work, does throw considerable new light on the working of stand-alone banks in which websites are the only delivery channel. Theoretically, low overhead expenses and access to larger geographical markets should allow better prices (higher deposit rates and lower interest rates on loans). It is true that in practice, they are struggling for profitability and they are not dominating traditional banks with branch networks.

It must not be forgotten that as e-banks age, they accumulate more experience. Experience effects have not been extensively measured in banking, though some recent studies do point to the fact that the performance

of banks improves over a period of nine years. De Young (2001) rightly points out that the maturity experience is important. As a new bank ages and its employees accumulate general banking experience, the maturity effect would transfer this experience into improved financial performance. This transformation occurs through improvements in numerous aspects of financial performance such as cost control, risk management, marketing or pricing policies.

There are two distinct possibilities. In the first instance, e-banks can draw on a talented pool of manpower available and make use of technology more effectively. There are areas where, even in large banks, technology is not being harnessed to the extent required. Stand-alone e-banks can handle areas like asset liability management, risk management or even investment management, more effectively because there would be less inter-departmental conflict. At the same time, these entities can experiment with the Drucker model. For instance, hospitals are being run by part-time consultants. In the same way, the core staff can be augmented by such consultants and the learning curve can be shortened. E-banks need to conduct their operations like start-up banks. They can also begin with broking, which is definitely a profitable activity, and then enter other business activities.

The second instance pertains to technology. The customers and some managers may take time to get used to the new technologies, they would eventually have an edge over others in translating this into an improved financial performance. With the scale of operations changing, the technology effect transforms into improved financial performance through a reduction of unit costs.

De Young has in his study, compared the performance of newly established banks with newly established banks with branches. The analysis shows that on a purely static basis, newly chartered internet banks perform poorly compared to newly chartered traditional banks. The dynamic analysis suggests that the performance improves more quickly over time at the internet-only start-ups and the evidence is consistent with both technology-based effect and technology-scale effects (see Tables 5.1 and 5.2).

Most banks that use the internet-only business model are struggling for profitability and it may lead one to conclude that this model does not seem to be a particularly successful one. But the study also shows that profitability ratios and non-interest expenses ratios improve more quickly over time at the internet-only start-ups than at the traditional start-ups. If these trends continue, the internet-only business model could prove to be a viable business proposition.

Table 5.1 Internet and Non-internet Banks—A Dynamic Analysis

Dependent Variable	*Static Analysis*	*Dynamic Analysis*	
Return on Assets	0.0310	0.0094	0.0078
Return on Equity	0.1096	0.0123	0.0006
Interest Margin/Assets	0.0002	0.0004	0.0005
Equity/Assets	0.1034	0.0334	0.0126
Non-interest Expenses	0.0214	0.0158	0.0148
Premises Expenses/Assets	0.0015	0.0008	0.0013
Labour Expenses/Assets	0.0045	0.0047	0.0084
Wages (full time employees)	0.0083	0.0022	0.0014
Non-interest Expenses/Assets	0.0154	0.0104	0.0053
Depreciation/Assets	0.0700	0.0417	0.0381
Loans/Assets	0.0636	0.0208	0.0331
Non Paying Assets (NPA)	0.0000	0.0000	0.0006
Asset Gross Rate (annual)	0.7524	0.0086	

Source: De Young (2001).

Table 5.2 Internet and Non-internet Banks—Selected Balance Sheet Ratios (a) Loan Comp. (b) Funding

	Deposits/Assets		*Purchased Funds/Dep.*		*C & I Loans/ Credit Cards Loans*	
Asset Size Category	*Internet*	*Non-internet*	*Internet*	*Non-internet*	*Internet*	*Non-internet*
Less than $100 mn	20.4	16.9	0.5	0.4	82.1	85.1
$100 mn to $1 bn	17.9	18.1	1.7	0.9	78.9	82.3
$1 bn to $10 bn	24.5	17.8	4.2	0.9	68.6	71.8
$10 bn and over	34.1		2.8		66.1	11.7

Source: De Young (2001).

There is one question, which remains to be resolved. It is now clear that the earlier fear of brick and mortar banks vanishing like the dinosaurs is not a possibility in the near future. Thus, why should the management not increase its geographical spread? The option is not only open to them but also a viable one. An analysis of key ratios of their respective balance sheets shows that the brick and mortar branches do perform better than branches of internet banks.

It cannot be ruled out that there is a fairly high degree of scepticism about the viability of e-banks. The reasons for this stem from the fact that these banks have not been performing as well as they should have. For example, the entry of the most successful 'pure play' internet bank 'EGG', was dramatic. It developed a customer base of 150,000 customers and 1.3 billion pounds sterling in deposits. In the first three months, it had over a

quarter of a million customers and deposits of 5 billion pounds. The customers were not only affluent, but also technology literate. It had a very substantial share of mortgage loans. It was hailed as a great success story. EGG was widely hailed as a strategic triumph that revolutionized British banking and the most extraordinary success story in new customer acquisition retail banking has seen. However, underneath it lay the faulty banking policies. It offered a savings rate that was higher than the prevailing market rates which meant negative deposit margins and in effect giving money away.

So although it initially did succeed in scaling dizzying heights, did it make money? Would it make money over a period of time? Not in the near future given the accumulated losses. What banks lose in higher deposit rates can be made good by maximizing the price or rates at which they lend. However, it is doubtful if one can lend at rates higher than the market rates. The competitive dynamics of the market place will force prices down to gain sales at the cost of margins. For standardized, low risk products such as mortgages, competition is severe; no bank can afford to charge more. For high risk, unsecured lending, risk should be the main consideration. The primary determinant should be risk not merely competitive margins. Traditional banks have one more bow to their string, that is, the fee income. Unfortunately, many internet banks waived such fees.

In the aforementioned business 'model', it would be difficult to make profits. This is exactly similar to other low margin businesses. Scale is the only way out. To build scale, requires a relentless focus on attracting customers whatever the cost (which leads to lower margins). The bank gets into a vicious circle of destruction of profits.

Questions regarding the high costs incurred by banks are often asked. Since traditional banks have high cost structures (translating as poor cost discipline), it is suggested that the protected environment of domestic banking has given rise to inefficient dynamics of domestic banking.

On the other hand, the internet banks have low costs. It should be possible for them to offset the 'losses' elsewhere. These banks would make their money on super low operating costs. It is, however, clear that lower margins and lost fee income cannot be made good by a low operating cost. Nor is the influx of high net worth individuals with an idle balance in the account able to offset the fundamentally flawed 'economics' of business. In an article in the *Asian Banking Journal*, (2000) Scott Roman estimates 'that these Banks would have to triple the average balances of their customers or further reduce costs by 47%.' Clearly both these options would be difficult to exercise.

The only option, and it is not an option, but a fundamental necessity, is to start pricing sensibly. The logic of banking business demands that breaking the fundamentals of business is not a feasible proposition. Rather, adherence to the basics alone can protect 'shareholder' value.

The problem gets compounded when we note that the size of the market is considerably small and growth can be at the expense of another institution. Marketing then amounts to 'poaching'. Obviously, a price is extracted for such a transfer.

The lesson is that pure play internet banks must decide whether they are looking at themselves as 'business entities' or as delivery channels. This would affect their marketing strategies as it could lead to a situation where banks become desperate to be available on the internet, but neglect to persuade their customers to choose their facilities. Many banks do not offer an incentive to bank on the web. Customer emails were not responded to even after a lapse of 8–10 hours.

Mobile Banking

Reserve Bank of India has issued certain guidelines on banking services being availed of through mobile access devices. Apparently doubts have been raised about the security aspects and the RBI has advised banks not to proceed any further in the matter of mobile banking services. Currently, the RBI is reviewing the regulatory aspects and banks have been advised to proceed further once the review process is duly completed. However, it would be worthwhile looking at the experience of Korea or Japan, where the preponderance of mobile banking users could be a guide for Indian financial institutions.

Equally important are other allied developments in Japan. There is a proposal to form an entity exclusively for providing mobile banking services. Some banks are getting together to form such an entity. In India, there is a distinct possibility of mobile operators forming an alliance with an Indian bank to set up such a venture. It is equally likely that technology modifications would permit an access through the mobile devices. After all, one has to reckon with the small size of the screen. Surely, one would not be looking for a loan application through this medium. Perhaps, the use could be restricted to getting quotes, status reports on accounts or getting alerts.

The technology breakthrough which people are waiting for is to have a chip which could be used to access accounts with different banks. It is expected that sometime during 2009–10 should see this facility being

made available. Banks are not particularly happy over such a development because of security concerns.

A broad spectrum of developments have been outlined and India's low costs for technology development should give it a great advantage to steal a march over some of the struggling banks overseas and get to their clients and to attract them.

E-INSURANCE

E-insurance can be broadly defined as the application of internet and related information technologies (IT) to the production and distribution of insurance services. In a narrower sense, it can be defined as the provision of an insurance cover whereby an insurance policy is solicited, offered, negotiated and contracted online. While payment policy delivery and claims processing may all be done online, technical and regulatory constraints may not allow these elements to be subject to full e-commerce application in certain countries. However, insurance legislation is being continuously modified to accommodate online payment and policy delivery, and outside the discussion of e-insurance metrics, these elements should be included in the narrow definition. In India, for instance, Insurance Regulatory and Development Authority (IRDA) has not yet permitted insurance companies to use the internet as a distribution channel. But premium calculations can be got done on the internet and in some cases where risk has been assessed, renewal premium can be paid.

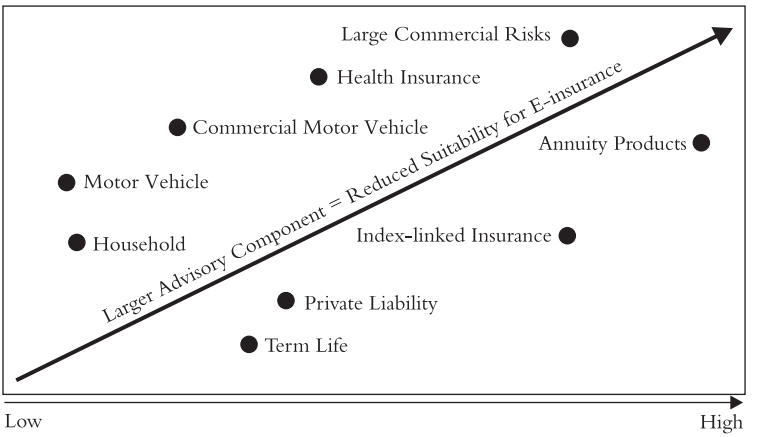
To ensure legality the client needs to have an insurable interest and the asset to be insured has to be the property of the client and some information confirming this is usually submitted. The condition of offer and acceptance is satisfied by having the insurer offer coverage terms and conditions for an insurable interest, against a loss caused by general or named perils under particular conditions of hazard. The client reciprocates the offer by expressing an acceptance of the proposed contract. Consideration for an insurance contract assuring payment or compensation for the loss event is the receipt of insurance premium. The promise is a non-physical information service. Similarly, the transfer of funds is often electronic and even cash itself has a nominal value unrelated to its physicality. When a loss occurs, the damage is assessed and a claim is submitted. Large amounts of data are again transmitted between policyholders, intermediaries and insurers—insurance requires modern e-commerce legislation that permits insurers and the insured to safely and unambiguously exchange information, make electronic payments and validate their responsibilities through digital signatures.

At this stage it needs to be pointed out that there is a marked reluctance amongst insurance clients to complete insurance transactions through the internet. Most of the insurance companies have either centralized data storage or are in the process of building it up and soon many of the transactions including claims settlement could be centralized. Even the Life Insurance Corporation of India would be able to settle claims arising centrally. Once that happens we see that the move towards e-insurance would gather momentum. Further use of handheld devices would facilitate offering services to the clients electronically as the agents could perform the role of 'Aggregators'.

Prior to concluding the insurance contracts, a good deal of information is required to be submitted to the insurer. To do so via the internet might pose difficulties and it would be cumbersome to verify the same (see Figure 5.1).

Before we examine the possibility of internet being a viable distributive channel it is necessary to understand the current environment of the insurance sector. For the last few years, fears about the soundness of the insurance sector were expressed by various regulatory authorities. The latest AIG debacle has raised questions about the sector's basic viability. The life and non-life segments have been affected by placing too much emphasis on the small print of the contract, dubious policies of surveyors, hospital authorities, third party claims settlers and service providers. The

Figure 5.1 Product Complexity



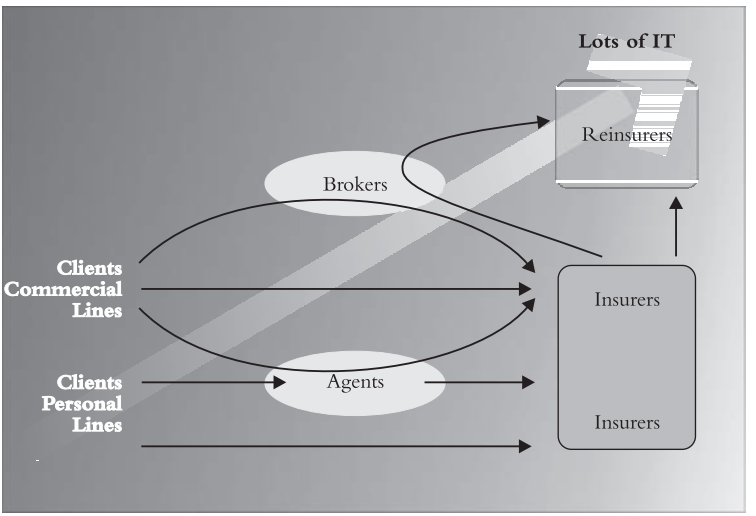
Source: *E-Commerce and Development Report* 2002.

insurance industry will have to lift itself by its own boot straps before it could claim to attract genuine clients and to meet their requirements. They have to clean up their sullied image. Last but not the least, is the investment aspect. The investments made are risky, highly speculative in nature and activities undertaken with an eye on bonus payments to the staff. The result is the fate of AIG.

In view of the current legal requirements, use of e-insurance would essentially be a PC-based activity. Cross-border activities, if any, are likely to be perhaps restricted to regional groupings that may emerge. It is, likely that in the rural and micro finance segments the vacuum currently felt may be filled by postal insurance, which has a distinct place in mobilizing savings. The use of electronic devices by the postal staff and provision of internet services through the post offices would enable them to get a hold in this market as never before. Perhaps, the regulatory changes that are likely to be ushered in after the present debacle would lead to modifications to legal aspects and facilitate the transition to a more healthy sector. Then the newer distribution channels could bring the customers in direct contact with the companies. The present broker dominated agency system would have a sway for some time to come.

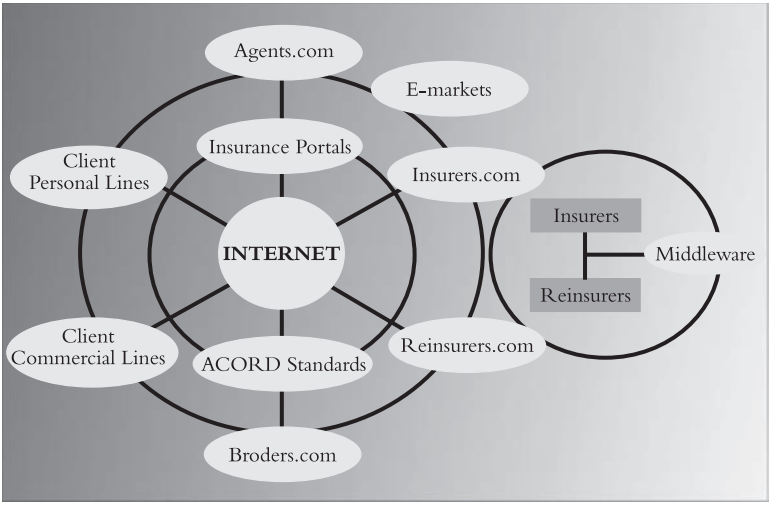
The possible changes that can come up if IRDA allows companies to use the e-distribution channel have been represented in Figures 5.2 and 5.3.

Figure 5.2 Pre-internet: Insurance



Source: *E-Commerce and Development Report* 2002.

Figure 5.3 Internet-enabled Insurance



Source: *E-Commerce and Development Report* 2002.