Before delving into the products and services that are offered by various service providers it is necessary to review the thrust that propelled the forays into internet services. The initial impetus came primarily from the competition within the fraternity and from those which were outside the pale of normal service providers. To an extent the stock market categorized banks as tech-savvy or otherwise forced banks into such decisions. However, subsequent developments have not quite been in consonance with the initial response. These developments could well be regarded as somewhat sluggish.

The large (very large) organizations are very often reluctant to make radical departures from the road traversed successfully. Parts of such a large organization (and in all likelihood they are the most powerful parts) are not prepared even to contemplate developments, which appear to be risky. The fear is that the new technology could end up cannibalizing their markets and destroying their divisions. One sometimes wonders if large organizations are good at fully developing and commercializing technologies. The issues have moved from the narrowly technical domain to fundamental questions of how to organize one’s markets and bring about the other required changes. The policy risks are high.

There are, however, other reasons which have to some extent retarded the developments. These could be summarized as under.

- Concerns for security have held back many customers who would otherwise have opted to avail of these services. The media coverage in such cases tends to paint a somewhat exaggerated version.
The terrible delays and hassles involved in getting redress often deter the clients from pursuing these matters. One naturally tends to use the services only when it is absolutely necessary.

The corporate customers and other ‘bulk’ users find that all that the institutions are promising is not translated into action. Delay in getting the promised result (for example, clearing of high value cheques) is a very common complaint voiced by the customers.

Add to it the infrastructure problems like power outages and one can well appreciate the reluctance of clients to be solely dependant on this channel.

The competition has led to a continuous downward pressure on margins as banks and financial institutions are vying with each other for good advances. The era of asset-led growth, forces banks/financial institutions into cut-throat competition for the small cake available. The need to shore up profits by reducing transaction costs was keenly felt. Internet services did offer a way out. The financial institutions also stood to gain because transaction costs could and did come down substantially. A cash payment at the branch would cost somewhere around Rs 18–20 while the same payment through the internet would cost a few paise. Last but not the least, banks and financial institutions must learnt that successful strategies have to be built around the customer. The World Bank rightly suggests that with data mining techniques, it would be possible for banks and others to tailor schemes for individuals and charge them accordingly.

At this stage it would be worthwhile looking at some peculiar problems associated with the internet. Initially, it was felt that stand-alone e-banking institutions would overtake brick and mortar banks and that the latter would wither away. This was more a conceptual fantasy and the ‘brick/click’ model has come to stay. The emergence of such a model has led to certain patterns of development. However, it is a huge challenge to get behind virtual customers, their wants and help them understand emerging desires, and to move from delivering things to aiding in the understanding of self. The institutions have three options. They can develop internet-banking capabilities that support the current product, service and channel mix. This is normally referred to as the ‘traditional migrator’ approach. It has the advantage of reinforcing the banks’ long established brand and allowing the banks to proceed with single market personality while actually using multiple delivery channels.

The second approach described as ‘Continual Evolver’, would be for the banks to reinvent themselves and focus primarily on extending reach on the internet channel and deepening relationships by meeting customer
needs. This would help them in clarifying confusing offerings, streamlining disparate marketing messages and committing to an ongoing culture of change. The final approach—Clean Slate Approach—is to create a new brand disconnected from its established identity. The benefits include the ability to use a low-cost base and virtual distribution to achieve new customer acquisition and deliver broad customer choice.

It is important for companies to find ways to make their history work for them. For instance, I distinctly remember the function at our zonal office when customers having their accounts with the bank for over 75 years were felicitated. For quite some time the environment was such that the services rendered by a company helped in distinguishing it from the rest. The same strategy (customer service, reliability and trust) must be used to retain the fickle customers. In India, it is not advisable to close the branches merely because they are high-cost centres. During the time when staff is trained to take over more responsible tasks as advisors/marketers, the costs incurred will have to be subsidized by low-cost internet operations.

Handling of customers is always problematic. One of the difficulties is to hunt through old records and get at the bottom of things. It is worth noting that traditional financial institutions are extremely adept at retrieving information from old records and deal with customer complaints very easily. With the help of technology it might be possible for these institutions to deal with these matters in minutes. This strength needs to be built on, particularly, for customer relationship building.

At this juncture, a very broad based review of products and services offered is important. A detailed review would be available in chapters dealing with broking, banking and insurance. At this stage we would detail the broad trends in the three segments referred to earlier and deal in some depth with topics not covered in subsequent chapters. Certain peculiar aspects of the internet economy are covered in Chapter 14. Normally one would expect an increase in price with improvements in quality. This does not necessarily happen with goods traded on the internet. Similarly there are other aspects regarding costs and their behaviour which would have a bearing on the whole range of services offered. This background has to be borne in mind to appreciate the development of products and services offered.

The term e-finance refers to the provisioning of banking online, electronic trading, delivery of financial products such as insurance, mortgages and electronic money and communication of financial information and analysis over the internet or via other public networks. Financial markets now have electronic clearing and settlement—transfer of title.
E-MONEY

Broadly speaking ‘e-money’ represents monetary value which is stored on electronic devices and which is acceptable as a means of payment by undertakings other than the issuers.

Various types of e-money are currently in vogue. The more frequently used are card-based. E-purse schemes seem to have, unlike the card-based schemes, reached a critical mass in some countries. It is seen that card-based schemes are used more at unmanned stations (vending machines, public telephones, and so on). The contact-less cards version has significant potential, particularly at retail outlets, stadium, and so on. In the realm of server-based ‘e-money’ certain types like prefunded personalized online payment schemes (Pay Pal) provide these services to customers of its parent company ebay. Prepaid debit cards, electronic travellers’ cheques along with other hybrid products are also available. The hybrid products are available in both prepaid and postpaid categories.

It is difficult to ascertain the amount of such money in circulation. Estimates for Europe suggest that currently it could be of the order of 450 million euros.

The convenience and security of cash payments could be available in such forms also, provided the legal certainty of acceptance is assured and the stability of issuers is ensured. The guarantee could come through capital adequacy and regulatory constraints. Of course, technological innovations must not be hampered in the process.

Mobile devices are now being widely used in countries like Japan and Korea, for internet access and use in e-money. It is the merger of internet access and traditional finance that has made such inroads possible. It is expected that in India also this transition could be made and that it would soon replace cards. The mobile recharging charges are now reduced and soon mobile companies may start offering these services and enter the payments market.

It is necessary to point out that what at one time seemed outlandish is now very much a reality. Conversion of virtual world gaming currency is now going to be made in real world currencies. Online game Entropia Universe has been granted a licence to be a bank. Issued by the Swedish Financial Supervisory Authority, the licence means the game can be more closely tied to the real-world finances of players. Mindark, the developers of the game, said that they aimed to launch a fully-functioning in-game bank within the next 12 months. At current exchange rates, 10 PED (Project Entropia Dollars) are worth one US dollar. Unlike many other
online games, which charge a monthly subscription fee, the software for Project Entropia is free to download and install. However, players pay real money to get at in-game items, such as guns, armour and other gear, and the micro-payment system pays for Entropia’s running costs. The license will make it easier for players to convert real world cash into PEDs and sustain their characters in the game, said Mindark in a statement. ‘We will be in a position to offer real bank services to the inhabitants of our virtual universe,’ said Jan Welter Timkrans, boss of Mindark. It plans to offer players interest-bearing accounts, let them deposit their salaries and pay bills or lend cash via the in-game bank. The license also means that each account is backed by deposit insurance to the value of US$60,000 (£42,000). Regulators will get oversight of financial transactions carried out in the game world, so they can spot if criminals are using it to launder money. Mindark claims that more than 800,000 people have registered to play the game and 80–100,000 are regular players. About US$420m of player-to-player transactions were carried out during 2008, according to Mindark figures.

Could the mobile phones replace the PC in such transactions? It is doubtful because most of us are used to wide screens and many financial decisions need a lot more information than what a small screen can hold/display. However, we envisage a possibility of it being put to use in different ways. One could book a table at a restaurant, place an order and walk in after sometime. Basically, if delivery is innovative, getting a large number of clients on the mobile bandwagon may not be difficult. One must emphasize that wireless devices are now a part, an essential part would be the right way of saying it, of our lives. Third generation phones would make internet access easy and SMS could well become the foundation carrier. Financial institutions could ignore these aspects at their own peril.

The major users of the internet are the corporate customers. Companies increasingly use the internet based systems to cover the entire range of financial needs from managing bank accounts and bill payments to asset management and even to insurance products.

In the Business-to-Consumer (B2C) segment, the services offered include balance confirmation, transfer of balances from one account to another. Bill payment services are becoming increasingly common. ICICI bank now allows customers to pay municipal taxes on the internet. It is pertinent to note that in other countries, the competition from non-financial institutions such as Yahoo or Microsoft is quite aggressive and it is possible to witness similar developments here.

The area of ‘credit’ has seen some rapid developments. In many cases, application processing is available online, but complete fulfillment is not.
Small- and medium-sized industries can draw trade credits and other sources of verifiable finance. Housing finance is one area where functions ranging from loan application appraising, valuation of houses to completion of loan documents are all done over the internet. The internet also provides information on financing and other options to a wide spectrum of potential house owners. It is necessary to refer to two mortgage finance providers. Advantage mortgage began as a mortgage broker. Over a period, it has become an overall aggregator like the lending tree. Fifteen leading lenders are the major source from whom it derives revenue. Advantage solicits borrowers, evaluates mortgage loan packages for presentation to borrowers, prepares all the documentation required for the loan and sends the complete loan package to the lenders. The borrowers do not pay any fee because lenders pay them.

**Factoring and Leasing**

E-finance helps in lowering the costs and increases the availability and ease of transferring the information. The ease of delivery and substantial reduction of costs are factors responsible for the widespread use in this paper intense activity. This development has increased the lender and client opportunities for factoring, which is the sale of accounts receivables and leasing which are loans collateralized by assets. Electronic transmission allows real-time information exchange between parties, increased security, immediate credit decisions and lower transaction costs.

A development (in India itself) which has not attracted much attention is the development of internet platforms to trade and pledge electronic warehouse receipts. This may reduce the need for government to purchase commodities for stock piling. Letters of credit, bills of lading and other documents associated with trade funds are also gradually being taken over under the e-finance umbrella. Bolero.net is a joint society for Worldwide Interbank Financial Telecommunications amongst commercial banks, freight forwarders and shippers. It could certainly help in automating trade finance process.

**Credit Disbursement for the Weaker Segment**

It is often asked if the internet would be useful in the area of micro finance. Two cases merit a discussion. South Africa’s Standard Bank has bundled
services required by the poor and it is a viable activity for the bank. The second case is that of Grameen Bank in Bangladesh. The bank sells pay phones to borrowers of Grameen Bank and these are made available to all the villagers. A number of women have turned cow-rearing or grocery activities into profitable ventures. Action International is using handheld computers to cut costs and time to sanction loans. Entering the data takes about 25 minutes and processing takes about one hour. The new micro loan-processing software designed for palm-pilots, allows loan officers to record client data, take applications and make loans on the spot. Pla Net Finance is the first international organization to refinance micro-finance institutions. In fact, Pla Net hopes to help micro finance institutions through all stages of their development.

E-TRADING IN SECURITIES, EQUITIES AND FOREIGN EXCHANGE

Electronic Trading Systems provide some or all of the following services: electronic order routing, automated trade execution and post-trade information. Online trading systems can be divided into various categories according to:

- Trade model used.
- The ownership structure of the system.
- Sources of prices for securities.
- Customers.
- Coverage.

E-TRADING IN EQUITY MARKETS

The trading models in equity markets can be divided into two categories. Order-driven systems combine all bids, ask orders into one central order book and automatically match the orders without intermediaries. The other is the direct access trading. The investor makes an order online, the brokerage firm routes the order directly to a market maker and gets a commission from the market maker for what is known as ‘payment for order flows’. 
E-Procurement

It is an offshoot of falling margins. The financial institutions focused on e-procurement for corporate supplies. They could leverage their role as payment facilitators. The entire process of purchases was streamlined and savings affected. ABN Amro, Bank of America, Citi and Chase Manhattan are some of the leading participants in the process.

It is important to present a road map which Indian banks/financial institutions may like to follow. Increasingly the corporate clients (particularly those rated highly by rating agencies) are no longer dependent on banks for their credit requirements. The issuance of commercial paper, suppliers’ credit and recourse to global capital markets have led to banks and financial institutions pursuing (chasing) the corporate clients for a slice of assets. It is, therefore, not surprising that most banks are focusing their attention on small- and medium-sized enterprises. State Bank of India and ICICI bank have all set aside hefty sums for this sector.

The whole procedure right from origination of application to sanction and loan disbursement is extremely dilatory. This is where internet could be harnessed to speed up the process. Credit rating and or scoring tools are available with many banks and these are used at the time of considering consumer loan applications. The same could be extended to small- and medium-sized sector and delays avoided. Further, many of such units use computer-based accounting packages and banks could offer advice to the customers in areas like receivable management, cash management, and so on. This is however a novel proposal. It envisages building a ‘virtual’ market for their products. All the banks together can provide a market place for their small and medium clients by acting as a clearinghouse for products manufactured by their clients. A similar exercise was undertaken for a bank at the state level and the bank brought out a directory of products manufactured by the bank’s clients and it turned out to be extremely useful.

Currently, a survey is being undertaken by us with the help of a bank to ascertain the requirements of small and medium clients and it is likely to lead to the introduction of internet facilities by the bank concerned. Purely from a lender’s point of view, it would afford a degree of control never before thought possible or feasible. It would assist the industry and the banks in building a unique partnership and in a creating a healthy appreciation of each other’s problems.

Another segment which is somewhat neglected is that of senior citizens. Banks and particularly cooperative banks, could conduct classes for senior
citizens and induce them to use the internet facilities. For them it is a prime necessity. Mobile telephones could meet their requirements. Cash withdrawals and deposits may not be possible. But a courier service, run by the bank and other income-generating services, could be provided while meeting a great social need.

In countries as diverse as the Republic of Korea, Mexico and Philippines, insurance products are being increasingly offered to clients both electronically and through intermediaries. In India, Insurance Regulatory and Development Authority (IRDA) has not yet accorded its approval to issuance of policies on the internet as the digital signature certification mechanism is not fully in place and not easily accessible. There is also a certain degree of reluctance on the part of customers to buy insurance on the internet.

However, it is increasingly clear that financial services firms have now to hasten the pace of change. They must realize that they do not have much waiting time and would encounter a number of threats to existing competitive positions. The need of the hour is ‘information freedom’. It is about transforming island processes into extended ones. It is about integrating the complete chain of events that information available anywhere must be made available across the entire network. Organizations must learn to take advantage of information available with them. With a bit of slogan mongering one could assert ‘integrate or die’.

Discussion with some overseas bankers, who had been offering such services for some time, brought out the following general observations in respect of product development.

- The old axiom ‘build it and they will come’ is a model that does not work online.
- A full range of products, including brokerage and financial planning tools, a trusted brand name, a multifunctional but easy to navigate website and responsive customer service, is a must.
- There is a constant need for adding functionality and new products. Customers should be able to do more things online than they do at a branch.
- There is an acute need to unbundle financial products so that a person who does not want face-to-face relationship can get whatever help/advice he requires.
- Bad service really ticks off online customers. Customer service is an offensive weapon in the marketing artillery of any web-based company.
In conclusion, it could be said that to gauge the future we would have to think ‘both/and’. The future is digital. It is also analog. Those who talk of paperless office should remember that paper is an amazingly efficient and a cost-effective display medium. The wrong question is how to get rid of paper. The right question is what should be on paper versus a digital document.

Organizations have also to make other changes and these relate to job enrichment of staff and reassessing the role of branches in the new setup. Many of the routine functions are taken over by machines and there is an acute need to reorient the work systems at the branch level. The branch would necessarily have to be a profit centre for such diverse channels and must be responsible for marketing and advisory services. Clients do need guidance in managing their wealth and do look up to the bank staff to assist them. In these uncertain times the staff could play a crucial role in building the required confidence levels. Closing down the branches could be easily done. But making them an integral part of the new environmental responses would require foresight and planned efforts.