CHAPTER V
CONCLUSIONS & RECOMMENDATIONS

There is no doubt that potential for net banking in India is immense considering the rising penetration levels of the World Wide Web in Indian homes and offices. When one takes a look at what is available worldwide, one sees that net banking is more of a norm rather than an exception in many developed countries. The services offered enables one to check credit card transactions, paying bills, transferring funds between accounts in two different banks and scheduling future payments and transfers. The gradual increase in net banking is logical as the need to minimize costs catches attention.

A North American Internet Banking Survey done by management consultancy Booz Allen & Hamilton in 1996 revealed that the cheapest way of banking is Internet banking. The survey estimated that a brick and mortar network of a bank would cost US$1.07 per transaction while it is only US$0.01 for internet banking. The same survey said that by 2000, 16 million US households would be banking through the net. In India, however, there may be problems with nationalized banks, which have in the past opposed computerization. However, the fact remains that given a choice, customers would like to bank via the net and the next decade could well see virtual banking becoming a reality. The exhibit below faithfully describes the bankers' dilemma evidencing that everything is not well with internet banking in India.

**Biggest Shortcomings in E-Banking Metrics**

- Understanding profitability: 52%
- They don't tell us what customers do: 24%
- No information on what customers want: 24%
- No industry standards: 14%
Massive costs are involved in going for latest information technology and automation of operations in banking. Although public sector banks have computerized operations in selected urban branches and providing service standards which are at par with private and foreign banks, the task before the Public Sector Banks is really difficult and challenging due to the huge network of branches, through which these banks are providing mass banking services to entire geographical areas of our country and implementing the monetary policy of the RBI.

Now, as in the recent times, Government has started giving them much needed operational freedom in various areas including interest rate determination on deposits and advances as declared in the Credit Policy announcement in April 1997. We can look forward that all these measures will put them in a better position in improving their operations, adopting the latest technology, profitability and of course in their ability to meet the fast growing expectations of their present as well as further customers.

It should be noted that customer awareness about internet banking is a recent phenomenon in India and they seem to get satisfied at the slightest of improvement in service. This is likely to change dramatically as the expectations grow. Hence the results today should not be seen insulated from the rising expectations of the customers, who when become accustomed to internet banking shall not only demand more, but also, the service expectations shall rise exponentially.

Today service realities in banks leave a good deal to be desired even after implementation of recommendations of two working groups, last of which made its recommendations in the early 1990s, constitution of customer cells, and even an ombudsman. Notwithstanding autonomous boards, the residual powers which seem to include even listed powers, rest with the Finance Ministry in respect of all public sector banks, and in a slightly lesser measure for other private banks, which may not receive oral instructions but 'suggestions' or 'guidelines'. They all know that discretion is the better part of velour. This has led to centralization of decision-making and pass-the-buck attitudes. Over the decades, efficient management and defining profit targets have given way to obscured goals and vague clichés like social justice. Loan melas and loan waivers under active political participation and guidance have edged out the banker. Snowbailing NPAs and other skeletons could no longer be hidden in the cupboards. "Multiple unions have bowed before populist
pressures and tended to account customer service or stepping up productivity a very low priority in their demands.

All this should not deter the researcher to put forward the expectations of customers from internet banking which were neither many nor unreasonable. They expected security, reasonable return, liquidity, affordable and justified service charges and good service, comparable globally as far as the internet banking was concerned. The five elements of good delivery as identified by the First Working Group on customer Service in Banks (1997) were truly mystified in the data accrued viz. 'speed', 'timeliness', 'accuracy', 'courtesy' and 'concern'.

Irrespective of the customers' demographic characteristics, it was 'convenience' that was desired the most, followed by 'guarantee against deposits', 'interest on deposits', 'accuracy of information', etc. etc. Customers were not desiring of the lavish comforts, but expected internet banking service to have utmost 'transparency in transactions', 'process requests expeditiously', 'ensure secrecy of transactions', 'charge bare minimum', and 'provide equitable treatment to all customers'.

Though the "delays" of brick and mortar banking in respect of 'updating passbooks', 'encashing cheques', 'issue of demand drafts', 'issue of cheque-books', even 'receipt of cash/deposits', 'collection of local or outstation cheques' etc. has been eradicated in the internet banking - there are a few irritants; for currency requirements one must move out to an ATM.

It is very interesting to note that 92 percent of the respondents were introduced to internet banking services by their relatives, friends etc. The remaining respondents came to know about it through advertisements. This information brings out an observation that at present the advertising has not made any significant impact in introducing internet banking services among customers.

According to an estimate made in 1996, banks were officially closed for 103 days in a year. They are 52 Sundays, 26 days in lieu of half-days on Saturdays and 23 holidays. Unscheduled closure due to strike, etc. 2 days equal 103 days. For the elite class who have access to ATMs or carry credit cards, this may not mean anything. But for the common man and pensioners it caused a hardship. They and the businessmen expected banks working throughout the year. Needless to state - it has affected the customers, especially the small traders, peasants, factory workers and pensioners, apart from lowering the productivity. Apart from his casual, privilege and medical leave, a bank employee, enjoys 57 paid holidays. Even after adjusting
for unemployment and poverty limiting our savings capabilities, one would have to recognize the long haul ahead for our banks. From this perspective, a rational approach to the question of holidays is called for. While internet banking has provided a near perfect solution to all such problems, yet internet downtime and/or technical or software problems of the banking sites were enormous which can not be overlooked.

Problems/Concerns with Internet Banking

As with any new technology new problems are faced. One of the first problems that banks have to worry about is customer support. Banks must create a whole new customer relations department to help customers. Banks have to make sure that the customers receive assistance quickly if they need help. Any major problems or disastrous can destroy the banks reputation quickly. By showing the customer that the Internet is reliable one can get the customer to trust online banking more and more.

Another major issue in internet banking is the software that is used in order to support the network. The first major concern is with laws. While Internet banking does not have national or state boundaries, the law does. Companies will have to make sure that they have software in place that can detect when an interstate law is being violated.

Another concern with software is over the company that manufactures it. Microsoft and Visa have formed an alliance while Netscape and Master Card have done the same. These alliances allow the Internet service provider to establish secure online transactions. Since Microsoft has an 80% market share on the software used by PC's it can possibly dominate the bank software market, creating a monopoly.

Security of course is a huge issue with banks. Along with security, encryption, and managerial issues, a bank also has to worry about becoming too cold a distant to the customer. Data is a witness that banks who offer Internet banking are becoming more and more cold and impersonal with respect to the customers.

Why should a customer go online with these potential problems? Well actually, the problems aren't as bad as one thinks. The breaking that happened with Citibank happened years ago and encryption and security technology has improved in leaps since then. Also even though the 56-bit was broken, banks and financial institutions are allowed to use 128-bit code which is seen as theoretically impossible to break. People don't feel uncomfortable by asking a computer to repeat information
or by cutting it off when they have heard enough. So maybe Internet banking is not that bad after all.

**Why Some Businesses Do Not Use Internet Banking**

Firstly, some people lack the basic web skills or they simply do not have access to a PC (or the Internet) at work or at home. However, learning to surf the web is not like learning a new language: computer magazines are frequently published to help the new web user. In addition, PCs can come very cheap today and Internet access is available to all those with a telephone line: there are many Internet access packages (for business and personal use) available to suit the surfing requirements.

Perhaps the biggest reason why people do not use Internet banking is the issue of 'security'. Internet security has always been an issue and will continue to be so for the unforeseeable future. However, banks are aware of the issue and have integrated a high level of security into Internet banking ranging from 128 bit encryption to unique user IDs and passwords.

As regards the adoption of Internet banking, the literature has largely focused on motivation factors. When the primary advantage of Internet banking is to save time and cost, investigating adoption of Internet banking based on advantages the Internet banking offers and the quality of customer service provided might be more appropriate. This study proves that demographic factors are definitely associated with individuals accepting the internet banking and the perceptions about the benefits that accrue and the costs determine the adoption of the internet banking amongst the Indian customers.

This study examined the customer service aspects in internet banking as distinguished from traditional customer service in brick and mortar banking (where the customer faces the bank employee(s) directly), and the examined the differences in quality of service to pinpoint to the factors that induce adoption of internet banking (or determine the barriers to internet adoption) by the customers. In most simple terms, data says that with marginal differences in frequency and length of usage of IB, more or less, the customers have become acclimatized to IB.

The accumulated results suggest that an overall of ninety percent of Internet Banking customers may age between 20 to 40 years old. Nonusers were relatively old, (77% aged fifty or more). New users were a little bit younger: near by 40 percent of the respondents was aged 35-49. Occupation seems to have an impact on Internet banking. Current users are more educated and have higher occupations.
than nonusers. This finding is in line with the past literature (see e.g. Jayawardhena and Foley 2000). Most of the respondents worked in industry (14.4%) followed by services (12.6%) and administration (10.4%). The largest proportion of nonusers worked in manufacturing industry (8.9%), whereas the most common category for new users was services (15.4%) and for old users industry (17.9%), followed by information technology (16.5%).

To develop more insights on Internet usage, ANOVA by age was conducted. The results yielded some statistically significant differences in means between the age groups. In total, the younger consumer groups seem to use Internet services more than the elderly group. However, for banking, and investments, the results were not statistically significant. That is, age seems to have no impact on Internet banking and investments among current Internet users.

Of the respondents who banked online, 39 per cent used the service for inter-account transfers, 27 per cent checked their balances or statements, 20 per cent paid accounts or beneficiaries, 14 per cent communicated with their banks, and none invested online.

Majority of banking customers in India are not aware of intricacies of Internet banking services available. All banks that provide Internet banking services, therefore, should increase promotion on Internet banking services awareness and understanding programs to local customers in India.

The results of this study confirm that in general customers are late adopters of Internet banking. They follow wait and watch policy. The performed factor analysis indicates four main reasons for this: practical problems in using e-banking, concerns about the expensive start-up, security, and lack of personal service. These hindrances may be alleviated, for example, with education of customers to use e-banking, and by integrating personal services within the Internet bank interface. One alternative for incorporating personal service with e-banking would be the development of three-dimensional Web pages with voice recognition, and the ability to call a personal bank employee via a video connection. As the customers preferred tele-text to current Internet banking delivery platforms, banks need to develop new electronic delivery channels for their products and services if they wish to reach the consumer segment. This means at least the extension of the current Internet banking from the PC and the mobile phone to digital television.
Summary of the Demographic differences in electronic banking

<table>
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<tr>
<th>Group</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Nonusers</td>
<td>Relatively old (77% older than 50 years; Not high educated (47% had only basic school education); Low household income per annum (39% less than Rs. 15000/- pm); Pensioners (52%)</td>
</tr>
<tr>
<td>New users</td>
<td>Mixture of nonusers and old users; Secondary education; Relatively wealthy (32% had a household income more than Rs. 25000/- pm); Blue-collar workers (28%)</td>
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<tr>
<td>Old users</td>
<td>40 percent belonged to age group 35-49; Men dominated (almost 60% were men); Married (58%); University degree (41%); Wealthy (52% had a household income more than Rs. 35000/- pm); White-collar workers (42%)</td>
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The results suggest that HDFC Bank is the number one Internet Banking services provider bank in India. ICICI bank and State Bank of India have been ranked number 2 and 3 respectively.

In conclusion, age, education, income, and profession are the most influential demographic variables affecting Internet banking usage. Interestingly, the Internet was the most popular mode of payment among the respondents. The Internet was mainly used for banking, communication, and information seeking; it was not much used for investments or purchasing. It was found that the importance of the different factors varied between the three target groups.

Social contacts, ease-of-use, price, speed, and security seemed to be important for nonusers. Both new and old users valued security, speed, ease-of-use, price, and free from time and place. Most of the differences between the groups were found in the importance rating of the categories social contacts, free from time and place, and bank’s name. While nonusers seem to value social contacts, users tend to appreciate free from time and place and speed. In other words, users do not hunger for traditional branch banking. Usually, visiting bank branches is considered time-consuming due to long queues. Therefore, electronic banking users are not eager to queue at branches.

The question of loyalty still remains. On the basis of the results, we might claim that nonusers are more loyal to their bank than users, because nonusers placed more weight on the bank’s name and contacts with the banking personnel than users did. However, more evidence on this issue is needed.
The results also suggest that electronic banking users are not as price sensitive as nonusers are. Cost of the mode of payment was most important for nonusers. To bank online requires one to have knowledge of transacting online, what buttons to click and what to do when a transaction is in progress. Although most of the Indian online bank sites have tutorials on how to use Internet banking, users wanted this knowledge in advance. Slow dial-up connections in sampled area slowed down the online banking, especially when downloading secureWeb pages. The cost of paying an Internet service provider BSNL or other operators add to the cost of the online transaction. A positive note for online bankers is that the respondents who did not bank online were all willing to bank online if the customers are assured of safety, free training, loyalty rewards and lower costs.

Though the first reason for not using Internet Banking is the concern about security of the Internet Banking services in India, the reasons for not using Internet Banking is the benefits of Internet banking services. Customers do not see benefits of using Internet banking services. Thus, the banks need to promote or educate customers about tangible and intangible benefits they may receive from using Internet Banking services. Another important reason for not using the internet banking was the little trust reposed in the internet banking. This finding suggest that both banks and Internet Service Providers (ISP) need to create trust or have certificate authority (CA) seal on their web to ensure security and create trust for Internet Banking customers.

Findings suggest that both banks and Internet Services Providers (ISPs) should put more effort in educating, training, promoting and supporting the security, trust, benefits and ease of use of Internet Banking on the Internet in order to attract more customers to Internet Banking.

For a variety of reasons, banks are developing new electronic banking products for their retail customers. The probability that these efforts will succeed can be enhanced if managers at the banks focus the promotion of the new services toward those customers who are most likely to find them attractive. The analysis confirms that many of its retail customers are already using electronic banking services. This is especially true for customers that are comfortable with technology, proxied by whether the customer has an Internet connection and patterns of non-banking online transactions.

Of special concern to bankers is the risk that they will lose customers to competitive Internet banks. The potential loss of customers to institutions with
aggressive Internet offerings (perhaps even "virtual" banks) is substantial.

In many of the cases, the customers have actually tried using Internet banking, but have discontinued after disappointments. The majority of the usage disappointments were due to insufficient amount of training in the use of the Internet interface, which is given to the customers by internet service providing bank personnel. Even the expert Internet banking users complained that in the very beginning, nobody trained them or even showed them how to use Internet banking in practice. Also, the feeling of confusing Web pages might be solved with more careful initial training of customers. A large sub-segment of customers thought that the Internet banking Web pages are confusing, and difficult to use. They felt that the pages are lacking sufficient guidance and that advice during use was almost impossible to get. Therefore the importance of pre-education in the use of Internet banking Web pages is even more emphasized.

Thus the pertinent factors which seem to affect the adoption of Internet bank can be summarized as Internet accessibility, reluctance to change, cost of computers and Internet access, trust in one's bank, security concerns, convenience and ease of use. It is however, interesting to note that awareness of Internet banking products and services did not seem to affect the adoption of Internet banking services. This may be due to the fact these respondents being Internet users are probably already quite aware of Internet banking services.

Inspiration Sources

Friends have been the most instrumental source in getting the customers to use the IB service. Recommendations of the friends carry a lot of weightage and builds up confidence among the customers and the perceptions regarding the physical attributes of the banks are put behind (as is usually the consideration while selecting the brick and mortar bank), and variety of services provided becomes immaterial. Compulsions for banking with IB service were bare minimal and only for a few customers. Relations with the bank/branch staff mattered somewhat along with the recommendations of the relatives, colleagues and fellow beings.

The most prominent factors weighing in favor of IB service as perceived were "the single window system" besides such internet banking providing "error free service", having "no queues of customers" and "using attractive promotional tools" which had special alienation for the customers. Surprisingly, despite being "Remote Banking" IB service customers reported selecting the bank based on the staff of the brick and mortar bank that existed or their personal relationships with the
Customers were scared of filling ambiguous and complex forms and vouchers, and regretted to latest steep hike in the service charges by the banks and were apprehensive of whether the banks will ever be in a position to provide error free, prompt, at home banking and/or 24 hour banking services in the area.

Efforts thus concentrated on examining the factors that distinguish customers that use electronic banking services from those who prefer traditional services and delivery channels. In addition to measures of demographic, financial, and technology characteristics, we find that measures of banking relationships are useful in predicting the likelihood that a customer views the availability of electronic banking services as a principal factor when selecting a primary financial institution. Additionally, measures of banking relationships are useful in predicting whether a customer views funds transfer, balance inquiry, bill payment, and loan application services as useful. The implication of this finding is that managers of Indian banks may find this type of information valuable when choosing which customers to target for new electronic banking services.

Overall, the results demonstrate that banks are highly vulnerable to loss of customer relationships and deposits to banks with extensive online services, virtual banks and non-banks. As online banking becomes more widely accepted by consumers, smaller or less innovative banks may be most at risk. The likelihood of current customers being tempted to do business online with another institution was shown to increase with the level of customer transaction use on the Internet. This can be estimated by banks through the use of customer study research as a means of monitoring Internet use by customer segments. Although most prior studies have focused on the role of demographics in explaining online banking use, this study shows that current customer account and service relationships are predictive of electronic use in general. Moreover, interest in use of specific online services is related to differing customer relationships. This finding can be useful in helping to identify potential users from a CRM perspective in addition to the use of ordinary demographic and balance information.

Security

Security refers to the reliability of IB and an overall belief on the part of the user that banking transactions can be completed confidentially and safely. According to Polatoglu and Ekin (2001), security comprises of three dimensions – reliability, safety, and privacy. Consumers' concerns about security, which arise from the use of
an open public network, have been emphasized as being the most important factor inhibiting the adoption and use of IB (Sathye, 1999; Daniel, 1999; Cox and Dale, 2001; Howcroft et al., 2002). Security issues have been identified as significant determinants of IB quality (Liao and Cheung, 2002; Jun and Cai, 2001)

It is clear that Internet users are hesitant to bank online unless they can rely on their bank’s site. Banks have to constantly improve their online security. According to Singh (2001), improving online security is not enough: banks have to publicize their improvements through the media in order to increase consumer confidence. Some of the measures that are available to banks include secure socket layer encryption methods to protect data being transmitted from the bank to the customer and vice versa, regular upgrades of firewall hardware and software, and digital signatures. Banks use digital certificates to assure customers that the site they are visiting is a bona fide site, and that transactions are secure. Similarly, banks need to be assured that the person on the other side is their customer. Therefore, customers should be able to append a digital signature as a measure over and above the use of a password. State Bank of India have taken great steps to ensure that they are transacting with a bona fide customer by introducing a “double lock” system that asks for a PIN, followed by a password.

Site design

A major challenge for all Web site designers is creating a balance between aesthetics and functionality. All designers want their sites to be vibrant and exciting, and tend to load the site with color, pictures, flash animations, sound, and links to other sites. These features, although very exciting, hamper the functionality of the site. Rather than doing what was intended, i.e. conducting business, the aesthetics slow down the transaction and annoy the user, with the result that they will click away. A well-designed site will have simple pages that load quickly and contain only relevant information that is easily read. When using links, customers wait for the page to be loaded. When no action is detected, customers think that the site is not functioning and click away. Either links should be minimal or the customer should be informed of the progress of the loading of new pages. An alternative to balancing aesthetics with functionality is designing a site where the user can turn off all artistic features such as graphics, pictures, sounds, and flash animations, making downloads faster and cheaper.
Training

If one were to conduct a study to determine how many users of the Internet were trained to do so, it would probably yield a very small positive response. For those with an aptitude for computing, Internet usage is simple. However, for many users, the fear of the unknown and the exposure of their private data to the world would be most threatening. Therefore, banks wanting to grow their Internet service usage should train their customers to use their online facilities. Training could be conducted through the banks’ regional training centers. Institutions such as universities have the infrastructure available, and sessions could be held for bank customers using either the banks’ trainers or lecturers who have been trained as trainers. Fictitious accounts and “play” money could be used to simulate online banking. Training should not be restricted to current customers. Banks need to educate the potential market. Once again, universities play a major role in supplying new customers to banks. Therefore, banks could try and capture final-year students by providing them with free Internet banking training.

Loyalty rewards

The effectiveness of loyalty awards is debatable. However, 27 per cent of the respondents in this study wanted to be rewarded for using Internet banking. Banks could allocate a portion of the savings they enjoy from customers using Internet banking and award them as incentives. The rewards that could be given to Internet bankers are limited only by the imagination of the banks. Some ideas that could be used include double airline miles, points that could be redeemed for products/prizes, entry into a competition that carries a large financial prize, incentives for introducing new online bankers, customers who pay water and electricity bills online could get a month’s free electricity, and ISP’s could be given incentives for getting their customers banking online.

Lower charges

Internet transaction costs are currently lower than in-branch or ATM transactions. Lowering charges any further, where it is considered to be a substantial saving, can only become a reality if Internet banking has the effect that the number of branches and branch staff can be reduced. In India, due to the small Internet population and the large population that relies on bricks and mortar banks, it may not be possible to reduce bricks-and-mortar overheads to a level where Internet savings are substantial for customers and banks alike. However, customers seem to feel that the cost that affects them is not the transaction cost, but the connection
cost. Therefore, all banks should offer their regular Internet customers free Internet access. Free Internet access, however, should only be implemented if the resultant transactions have the potential to be profitable.

**Online help**

All banks should have online help in the form of frequently asked questions (FAQ) pages or a call centre that could respond to e-mail queries from customers. The fact that someone is listening and holding the customer's hand through transactions at night, or any other time of the day, is very reassuring. Furthermore, if there are going to be changes to a site, online and offline communication is required well in advance.

**Marketing**

According to Kotler (1991), marketing is about identifying what the customer's wants and needs are, and providing the satisfaction in the form of products and services, whilst making a profit. It is evident from this study that banks are not conducting regular or accurate marketing research, or they would have identified tertiary institution employees as a profitable niche market for online banking. This study has highlighted this niche. However, banks need to develop products and services that appeal to this niche market and communicate this to them using online and offline promotions, such as press advertising, advertising in institution brochures and magazines, pamphlet distribution, lunch-hour talks and billboard posters. Banks could also donate a small fee to institutions to allow them to install screen savers that direct users online.

Banks should also advertise and publicize their security innovations, as this will play a role in improving consumer confidence in their service. The three golden rules for banks are communication, communication and communication. If customers are aware of what is on offer, they will soon want to try it.

This study found that customer satisfaction was also a problem, citing issues such as slow download times, cluttered sites and too many links. Customer dissatisfaction was identified by 19 per cent of online bankers, although a clear breakdown of the reasons for dissatisfaction could not be checked in. If done right, online banking can increase customer satisfaction, boost retention and improve profits. It was found that upwards of 60 per cent of online banking customers used online banking to view account balances, view recent transactions, transfer funds and pay bills, but once in six times they could not complete the transaction.
Where are most Indian corporate customers banking currently? Evidently, "on the Internet" is not the immediate answer. It is evident that the Internet is here to stay. It has the ability to benefit both banks and corporate customers. However, Indian banks have a major challenge ahead of them to get more corporate to banking online.

The major factors that influence the corporate consumer uptake of Internet banking were security concerns and lack of awareness about Internet banking and its benefits stand out as the obstacles to non-adoption of Internet banking. Security, here as well, was a burning issue and even one instance of adverse media publicity can damage consumer confidence in the system. A quick response to such publicity can help ease corporate customer concerns and restore their confidence.

Some of the banks have included an undertaking that they will indemnify the losses incurred through unauthorized use except under certain circumstances. Such an undertaking can help build customer confidence. In addition, the information on security aspects needs to be presented in simple and non-technical form. Issues like lack of awareness about the service and its benefits, difficulty in use, resistance to change, are matters of customer education and thus controllable from a managerial perspective. Possible solutions could include giving wider publicity underscoring the benefits, demonstration kiosks at supermarkets or public libraries, where people can have hands-on experience of Internet banking, a third party, like, say, industry association/consumer groups/government, publishing educational literature, etc. Effective publications could help in customer education.

Similarly, banks may consider passing on some of their gain in reduced operating cost to customers and thus offer a low-cost service. This may ensure customer loyalty to the service and switching to other modes of delivery or banks could be avoided. It appears that the uptake of Internet banking will not be uniform. The young, educated and wealthy groups of customers need to be targeted first for migration to Internet banking. It is important to identify the relevant customer segments and predict the development of their growth. The products could include account maintenance, account monitoring, and credit card transactions, mortgage loans, stock market trading, margin loans and vehicle loans. Farm loans and other products for the farmers and others in remote areas and various deposit schemes could also be the possible targets.

The results show that importance of the internet to users' banking needs, compatibility, and trailability are significantly positively associated with adoption, and
complexity is significantly negatively associated with adoption. These results indicate that bank customers' adoption of internet banking depends on the perceived salience of the technology in meeting their banking needs, compatibility of the technology to users' lifestyle, style of managing finance, etc., and ability to try out the technology before making any long-term commitment.

This research argues that customer attitude and the features of the internet banking site can help in creating internet banking acceptance among Indian bank customers. Specifically, the following strategies would assist in consummating greater diffusion of internet banking in India: enhanced salience of internet banking to customers' banking needs, greater compatibility of internet banking to customers banking norms and lifestyle, less complex and easy to use system that does not require a lot of mental and physical efforts to accomplish banking task, and opportunity for adopters to experiment with the system before making any long-term commitment.

Besides the above attitudinal factors, system's design factors to be considered in developing strategies for enhancing internet banking adoption in India should be transaction related. For example, easy to read, comprehensive information or instructions on the site, prompt processing of transactions, fast downloading/uploading of materials, interactivity, customization, and website semblance with the actual bank are important. On the flip side, de-emphasizing hedonic features such as background music, animation, cartoon, advertisements, promotional jingles, and so on, that could potentially distract the user are also effective strategies for promoting internet banking adoption.

Internet banking was perceived by both adopters and non-adopters to offer a high level of convenience, but users perceived Internet banking to be significantly more convenient. Respondents seemed more positive about convenience because they perceived that Internet banking could be used at any time, subject to a PC being available and their bank's Internet site being accessible. Current Internet bank adopters must already have access to a PC. As some of households have an Internet connection, there are proportions of non-adopters who have the technology necessary to link to an Internet bank; while other non-adopters may be able to do so using a family member's PC or one at work. Hence, it is not surprising that even non-adopters view Internet banking as a convenient way of sourcing bank services.

Non-adopters perceived Internet banking as offering high levels of convenience, reflecting what was said by some of the non-adopters during the interviews conducted.
Irrespective of their very positive comments about convenience, the mean response of non-adopters was significantly less than that of adopters.

Bank managers, based on the results of the current study, would see that the respondents appeared to be more positive about Internet banking than neutral/negative, irrespective of whether they were adopters or non-adopters. They recognized the convenience this self-service delivery method offered and that it was compatible with a hi-tech way of living. They recognized that minimum levels of PC skills were needed but, as they did not perceive the service to be complex, they believed that they had the skills to access and use it. The respondents were somewhat ambivalent about economic benefits and social desirability while they had negative perceptions about accessibility and confidentiality.

How can bank managers use the findings of the current study to increase the number of consumers who register as Internet bank customers? Banks should emphasize the positives in any marketing campaign, while at the same time; they need to consider how they can shift the perceptions of customers relating to the characteristics which were viewed in a negative or neutral way, thereby enabling Internet banking to be viewed more favorably.

Accessibility and confidentiality of Internet banking is associated with consumer risk. Accessibility can be improved by explaining to customers what they should do to access their bank's services when the bank's computer system is not on-line. Inaccessibility may arise through a purposeful event, such as a closure to enable upgrading or maintenance to take place; or when the system has had to be shut down due to an unexpected event taking place (such as a power failure). For closures which are purposeful, banks should provide sufficient notice to their Internet banking customers, thereby enabling customers to work around the closure hours. Customers should also be advised that the bank could be reached in alternative ways if any service(s) is urgently needed and explain the simple procedures which are necessary.

Second, banks need to reconsider what they have said and done to date in explaining the level of security which supports the bank's computer system and that third-party intrusions into an Internet account are "impossible". Banks need to emphasize that customers, when creating their PIN/password, should use one which is easy for them to remember, and thus make it unnecessary for it to be recorded anywhere. Customers should rely on their memory and should that fail them at any time, they can always contact the bank which will cancel the old PIN/password and the customer can register a new one.
The second characteristic which was perceived in a negative way was that of confidentiality. Respondents were concerned that either the bank may pass customer profiles over to other companies in the banking group or other sections of the bank resulting in the information being used to try and sell additional products. Customers were also concerned that, even if the bank itself did not take steps to observe usage patterns, a consultant may be appointed by the bank to establish usage behavior and the acquired information may be similarly passed on. Respondents felt that third parties could build up a picture of a customer's financial profile by gaining access to the bank's computer system. Banks, in addition to having to address possible security breaches, would also have to be open about the ways in which they track customer usage and undertake not to pass on to third parties any information, so acquired, without the customer's express consent.

In regard to the more neutral adoption characteristics, customers perceived that there were no economic benefits to be gained from being an Internet bank customer. For example, many customers may not presently pay transaction fees to their bank. Hence, as a matter of fact, they would not gain any economic benefits; or if they pay nominal fees at present, they may see no major financial benefits in becoming an Internet bank customer. Alternatively, is it that customers perceive that there are no financial benefits? Banks need to establish what is behind customer responses to this characteristic before proceeding to use pricing as an inducement to get customers to register with their Internet bank. Banks, in an attempt to explain the extent of financial benefits may consider identifying the profile of an "average" customer and show how much a traditional bank customer, with such a profile, would pay in monthly fees and the fee payable by an equivalent customer who uses Internet banking. Customers could then see for themselves the extent to which they would benefit. It is probably true to say that to convince customers on the matter of economic benefits, the savings would have to be more than marginal. The bank may additionally make comparisons of how fees associated with non-regular services differ, as between traditional and Internet banking.

Internet bank users were found to be financially more innovative. Banks are advised to identify such customers and then target them prior to a new service being introduced. Having then targeted those who have historically been early adopters of other services, banks can better target the laggards, by aiming to influence their perceptions about the characteristics which inhibit adoption. This comment is not in
conflict with what is said earlier about a bank passing on customer information because it solely involves the bank itself.

The extent of Internet Banking usage in India appears to be influenced, among other things, by the quality of connection and access. For banks offering Internet Banking (and those that consider it in the future) this implies that their Websites should be reasonably simple and less graphics-intensive.

Another issue affecting level of usage is the perception of government support. In India, the value of information and communications technology in national development is well recognised. This is reflected in the sixth development plan, which among other things, set up India's information technology task force. Hence, the government need to be very vocal about its plans and intentions.

Trust has emerged as the top issues inhibiting Internet Banking adoption. Banks along with the government need to address the perception of risk and build the confidence of customers in Internet use in general and Internet Banking in particular. Preference of face-to-face personal banking is another inhibitor of Internet Banking adoption. This could be due to either lack of awareness or the contextually rich nature of Indian's culture. Hence, banks should make their Internet Banking sites as customer friendly as possible and develop relevant marketing strategy to win the trust of customers.

Auxiliary features are designed into the Internet bank in order to improve the overall augmented product. For example, voice effects, virtual figures, and search agents can be added to improve the usability and interactivity of IB, thus enhancing user-friendliness and reducing the perceived risk. These features often contribute to multimedia friendliness. Auxiliary features contributed to experiential value by increasing efficiency, enjoyment, visual appeal and entertainment aspects of IB.

Correlation analysis showed that retail banks perceive competitive advantage is achievable through improved customer dealings, an advantage that Internet banking must clearly demonstrate. Further to this, positive communications lead retail banks within the industry to believe that adoption represents less risk and more benefits, thereby increasing the rate of diffusion. The issue of government support is perceived to lead to an increased rate of adoption whereby governments lend credibility and stability to a potentially risky innovation.

The key inhibitors are mainly internal issues such as lack of enhanced ability to deal with customers, resistance to change, attitudes within the bank to this innovation, resources available and the existing legacy system.
Managers of internet banking must effectively identify consumer segment(s) that will be immediately responsive to internet service offers. Interestingly, the researcher found more profound differences among non-adopters (between prospective adopters and persistent non-adopters) than between current adopters and prospective adopters. Prospective adopters and persistent non-adopters are qualitatively distinct segments and should not be lumped together. The results indicate that any attempt to profile adopters (as opposed to the broad non-adopter population) using only demographic characteristics may fail to generate meaningful implications, due to the wide heterogeneity within the non-adopter category.

Banks need to identify prospective adopters and then focus marketing efforts on the prospect group who will potentially become full adopters. The results of this study indicate that the major differences between adopters and prospective adopters are perceptual; whereas differences between prospective adopters and persistent non-adopters reflect varying levels of technological sophistication. Thus banks should focus their marketing communications on changing potential adopters' perceptions about internet banking, emphasizing the convenience factor in particular. In order to lure prospective adopters into using internet banking, banks must create a safe and secure online environment and provide monetary incentives.

On the other hand, before consumers can fully adopt internet banking, they should be proficient in the use of computers and web browsers. Lack of experience with technology-based services, the internet, and computer technologies significantly decreases a consumer's likelihood of adopting technology-based services. Persistent non-adopters generally lack experiences that are compatible with the skills needed to use internet banking. Therefore, it may require more than attitudinal changes to bring these persistent non-adopters closer to adopting a high-tech service. Such technological barriers may be the main factors that prevent persistent non-adopters from adopting a technology-based service. General adoption, and widespread diffusion, of internet banking will occur only after such technological barriers are lowered.

Prior computer experience, prior technology experience, personal banking experience, reference group, and computer attitudes strongly affect attitude and behavior towards online banking. Specifically, the relationship between personal banking experience and attitude was found to be critical.

This study showed that prior experience of computers and technology, as well as attitude towards computers, influences both attitude towards online banking and
actual behavior. Specifically, prior computer experience had a significant impact on online banking usage. Thus, it is vital for banks to provide education targeted not only to guide using the Internet but also to provide more extensive education in the whole field regarding computers. Hence, a consumer with a good knowledge of computers in general is more likely to engage in a more active online banking usage compared with having only valid knowledge of one single online service (banking). In providing online banking services, banks rely much on customer education in bank branches. Nowadays it is hard to find a branch in Finland not offering free online banking access supplied with personal education. From our perspective this kind of education system is not widely used abroad. To sum it up, the better knowledge of computers customers have, the more online banking users this creates.

The results of the study also propose that demographic factors impact heavily online banking behavior. Specifically, occupation and household income were significant variables. The results suggest that a typical online banking user is relatively young, well educated with high level of income, a family man with a good job. These findings are in line with the previous studies concerning Internet shopping and Internet banking (Jarvenpaa and Todd, 1997; Daniel, 1999; Jayawardhena and Foley, 2000). By knowing the demographics that influence consumer intentions, managers can then use them in segmentation. Thus, the marketing implications of demographics in Internet banking might include, for example, the need to focus on consumers who are not in the middle class, and who are less educated and relatively poor in terms of income level. Banks largely target their marketing at middle-aged, wealthy segments who are seen as more profitable, easier to serve, and maybe more loyal. Further, banks have developed their online banking services for this particular segment. The neglected consumer segment referred to above also consists of young as well as senior citizens. Elderly consumers, especially, tend to have a negative attitude towards online services. According to various studies, the mature consumer segment is expanding rapidly, and it needs to be served in a better way (Kennett et al, 1995; Henderson, 1998; Kesner, 1998; Swartz, 1999).

In addition, positive personal banking experience seemed to have an effect on both attitude and usage. This is to say that satisfied customers tend to keep up with their current delivery channel. Furthermore, the results indicate that referents would have a negative impact on online banking usage. This derives from the fact that strong social contacts with banks' staff impact negatively on attitude towards online banking and behavior as well. The more familiar consumers are with online banking, the less
weight they put on social contacts. While current online banking users seem to have no social contacts with the staff, it becomes of primary importance to provide social contacts with them. Without social interaction and personal service online customers will not become loyal to a bank.

Only by developing interactive real time online services equipped with voice and picture, will customers become more loyal and satisfied with their bank. The increasing competition and change in the financial industry in general and the technological improvements in particular mean that interactive real-time service is the buzzword for creating competitive advantage in the future.

**Relative advantage.** The IB services offer relative advantages when compared to branch banking and other alternative methods in terms of price, convenience and performance. Banks in India offer almost all retail banking transactions via the Internet at no cost to consumers. From the satisfaction survey, Savings dimension of the IB services (cost, time, and self-service) was ranked the highest. Consumers clearly see the relative advantage of IB in terms of price and convenience comparing to branch banking. Although, 86 percent of the sample still uses branch services, the majority reported that the number of visits had decreased. By contrast, the overall use of banking services in general has increased.

**Observability.** The more easily consumers can observe the positive effects of adoption, the greater its chances of success. IB consumers were able to observe the positive effect of the service immediately. For example, consumers can check account activities (information inquiry), pay bills, and make investment anytime and anywhere. Over 80 percent of the respondents reported using information inquiry service often and/or very often, followed by EFT (43 percent) and bill payments (34.5 percent).

**Trialability.** A more rapid diffusion occurs when consumers can have low-cost or low-risk trial of the service. As mentioned earlier, IB services are free. Further, the cost of hardware (PC and modem) in India has been declining, fostering the penetration of PCs into homes. However, the Internet service is still a costly media for users. In the near future, however, Internet infrastructure developments are expected to boost the Internet development. Only 10 percent of the sample reported using the Internet from home only; majority uses the Internet from work or both home and work. Overall, the cost and risk to trial are relatively low especially when Internet access is available from work.

**Complexity.** The more complex the product or service is to understand and use, the
slower is its adoption rate. It is argued that IB customers have sufficient understanding of the computer and computer-related technology because of their high educational level. Therefore, they do not see IB services as being difficult to use. The majority reported that IB services are easy to use. In addition, most are already using the Internet for other reasons such as information and news gathering (65.8 percent of the respondents) and e-mail (64.9 percent); therefore, the Internet is not a new or complex innovation for them.

**Compatibility.** The innovation should be compatible with the individual's and group's values or beliefs. Given that larger numbers of customers are shopping/trading online, IB services are therefore quite compatible for them once they overcome the security and privacy concerns. However, the activities of e-commerce among consumers are quite low because third party mail is not an accustomed way of conducting business. Also, consumers like the interaction and personal relationship when they conduct businesses. So lack of compatibility may be a factor working against the adoption of IB, although it is not something that was directly measured in the current study.

**Perceived risk.** Risk includes financial, physical, or social risks associated with trying an innovation. It has been known that security risk is one of the major barriers to the adoption of online banking. With the introduction of IB services by a few large, well-known, and trusted banks, customers' perceived security risk is assumed to decrease considerably. For our sample, satisfaction on the security of IB services was rated quite highly with a mean of 4.15 out of 5 (5 = very satisfied).

**Type of group.** Young, affluent and highly educated groups generally accept changes more readily and this is favorable for IB services. From the sample, 83 percent are young and between 20 to 39 years of age, 82 percent are university graduates, and 73 percent reported being in the medium-high or high income group.

**Type of decision.** Over 70 percent of the sample use IB for personal purposes. Therefore, the decision to adopt this new service can be made more rapidly in a household environment where banking needs are not as sophisticated as that in business environment.

**Marketing effort.** Radio and TV advertisements by the banking sector have been known to be very effective and one of the best among other promotional tools. The majority of the sample mentioned that they learned about IB services from TV advertisements (32 percent). They also mentioned Web site (27 percent) and branches (27 percent) suggesting that marketing communications will have a positive effect on acceptance.
The exploratory analysis suggests that IB has the potential to be successful with a high level of acceptance by consumers who have access to the Internet. As more banks offer the services and the product is more mature, it is expected that a larger number of individuals will sign up for IB services and the services will be improved at no cost to consumers. However, there are some negative influences that the banks need to overcome.

Quality of Customer Service

The whole problem of customer service is related to customers' expectations. The customer today is much more aware of his rights and expects something more in return than the customary services provided by banks. Hence, what a customer expects and what he receives is a vital factor and it plays a vital role in building the image of an organization and consequent selection for personal or corporate needs.

Overall, customers' evaluation find praise for the customer service for the internet banking, confirmed high loyalty and decisively agreed to recommend the service to their friends. The banks must take cognizance of changes required in certain attitudes. This will lead to the paramount need to provide high quality service to customers. The customers of these banking services belonged to upper echelon of the society and hence were more bothered about the comfort and convenience rather than the multiplication of interest.

Most of the banks operated traditionally. 'Change' was not in their preview and were relenting with "God's grace" on the feel free attitude. Many of the branches had not planned for anywhere banking, tele banking or internet banking. Banks were not bothered about building their reputation. It was considered to be the job of top management. Employees were in fact myopic enough to limit the job to personal ends without having an inkling of the organization. No communication attempts were made with the customers, nor the employees ever tried to socialize with the public they were dealing with. They considered themselves a 'class' a special class - having acquired a status of 'notary' and hence were reasonably busy among themselves.

As regards the objective with which the customers bank with, the basic instinct differed from customer to customer. The service class's objective for getting into bank's computerized services can be stated as:

*Going along and associating oneself with the modern, educated, elite and affluent class of the society that thinks ahead of other technologically and thus wades its way through highly efficient, time saving, reliable & open way of savings with banks providing personalized services.*
On the other hand the objective of the business class apparently goes along the words "compulsorily banking with the bank branch that is the utmost need of the business for exchange of money speedily, reliably and confidentially.

Understandably, the gap between the expectations of a customer and the corresponding response received from staff is the root cause of all customer grievances and complaints. Such expectations ultimately get translated in terms of convenience, response time, access, accuracy and uniformity in interface.

The intensification of competition in the banking industry (as a result of growing private sector participation) coupled with growing customer needs has spurred Product Innovation resulting in a deluge of new products and services and improvement in the product delivery process with the private banks spearheading the "innovation revolution". Banks are spending mega-bucks and other resources in their effort to launch numerous specialized, innovative products - retail and corporate - catering to customer's requirements under improved service standards. Specifically, one can see the promotion of a number of skill-based services, viz., corporate advisory service, loan syndication - domestic and international, mergers, acquisitions, securitization, factoring, forfeiting, etc. on the banking scene all because of competitive human resources at their end. Apart from a whole range of new products, the customer also benefits from attractive rate of returns generated using cost effective intermediation (which in turn results in reduced margins).

Customers were finding the computerized banking officials up to the mark as far as the promotion of the computerized "personal services" were concerned. They found them inserting attractive advertisements to this effect in the locally circulated newspapers and made requests thorough and for friends for using the internet banking service. Though the personal approach to the customers of the banking officials was not found to be heart throbbing, and no audio-visual advertisements were being put up and none of the postal communications were ever made with the prospective and concurrent customers.

The data in the survey points out to several advantages of internet banking over traditional bank branches as:

- **Low overhead expenses:** Compared with traditional banks, internet banking overhead expenses is low because there are no branch offices to support. These low overhead expenses translate into added benefits such as higher interest rates and no fees for computerized bank customers.
Interest Income: Banks with networks generate interest income by originating and purchasing loans. The banks focus on high credit quality to minimize losses.

Non-interest Income: Banks with networks create non-interest income by cross-marketing loan originations, credit cards, brokerage services, and other income-generating products. The banks market these products and service via their website, bank e-mail, and online advertising. The online/internet banking are solidifying its foothold in the highly competitive financial services industry by significantly broadening its line of products and services. With these new additions, internet banking have proved that virtually any banking service, a customer might desire, can be successfully delivered by an Internet only bank.

Online lending: Banks with networks collaborate with several top Internet lenders to finance loans they originate. These collaborations allow internet banking to offer consumer loan products on line. Through such type of partnerships, internet banking is fast becoming the lender of choice online. It offers web-based mortgage services with unprecedented convenience, low origination costs, and a range of financing options.

Online Trading: Internet banking has introduced an innovative asset management account. The banks permit customers to make securities trades without having to wire money or write cheques to their brokers. Instead, trading fees are automatically debited from their bank deposit accounts. Similarly, when customers sell stock, their accounts are automatically credited with the investment proceeds.

Improved Checking Account: Usually, internet banking doesn’t charge any fees for checking current fees. Also, high interest account includes free, unlimited online bill payment, free checks, and unlimited ATM use. This improvement in the checking account has resulted in dramatic increase in the revenues for the banks.

Credit Cards: Internet banking added credit cards from VISA and Mastercard in 1998.

Equipment Lease Financing: To serve the growing small business market, an important customer base, internet banking linked up with Leasing Companies to offer equipment lease financing on an array of goods, with same-day service, no down payment, and approval with little or no financial information required.

No Monthly Fee: Internet bank charges a monthly fee for its checking accounts customers. Traditional banks usually charge a monthly fee or require a certain minimum balance in order to exempt from this monthly fee. Usually, this minimum balance is anywhere from several hundreds to several thousands of rupees besides offering high interests.

Free Unlimited online Bill payment: Internet banks offer all of its checking account customers free, unlimited online bill payment. Through online bill payment, money is electronically transferred from the customer’s checking account to the payee. If, for whatever reason, an electronic transfer cannot be made or is undesirable, a cheque is sent through mail by banks with networks.

Unlimited online Bill Payment provides the customer with convenience. First of all, online bill payment cuts the bill payment time, because electronic transfers can take place immediately. Usually when a check is written out to pay a bill, it must be sent several days in advance in order to account for the number of days it
takes to mail a check. In addition, because online bill payment is free, the customer does not have to pay for the price of the stamp to mail a check.

Free online 24 hours Account Access: Internet banks provide its customers with 24 hour account access with real time up to date balances.

Free Choices: Whereas traditional banks charge their customers a fee for printing a certain number of cheques, Internet banks offer its customers free cheques.

Unlimited ATM use: Internet banks offer its checking account customers unlimited ATM use, traditional brick-and-mortar banks often charge a higher monthly fee if the number of transactions in a certain month are higher than a standard amount.

Mail-in Deposits: Because internet banks do not have any branches, it inconveniences its customers by making them mail in their deposits. This is inconvenient mainly because of the time delay that results from having to mail in a deposit. However, in order to accommodate for this inconvenience, internet banks, like other-traditional banks, offers a direct deposit system in which a company or government check can automatically be transferred to the customer's account.

ATM Fee: Although internet banks offer its customers unlimited ATM use, this does not mean that the ATM itself will not charge a fee to the bank customer for withdrawing money. Usually, this fee is anywhere from Rs. 750.00 to Rs. 1500.00 per year. However, in order to accommodate for this inconvenience, banks are trying to form partnership with firms that operate ATMs so that internet bank customers will not be charged this additional fee by the ATM. Banks have already formed several such partnerships, and currently have a list of free ATMs its customers can use on its web site.

Expended Product Line: In the future, Internet based banks will continue to add new products, and services typically offered by traditional banks as well as other new services more ideally suited to web-based delivery. This year, Internet based banks' customers can look forward to expanded consumer loan products including second mortgages, equity line and auto loans. Other new products and services in development or under consideration include electronic bill presentment, insurance products, proprietary credit cards, consolidated account statements, and financial planning and asset allocation services. Internet based banks have already announced earlier this year that it will provide its planning and asset allocation services. Internet based banks have already announced earlier this year that it will provide its banking customers with a new web-based safe-deposit box service for the secure online storage of valuable and confidential electronic documents. Internet based bank's goal is to continue to be inventive in providing customers a single convenient channel from which to manage all their banking and financial needs.

Time has come to make the costing and pricing of the products and service in banks more transparent. The present system of loose link between costing and pricing will no longer hold relevance. Pricing should be based on scientific costing would be acceptable to customer satisfaction which would justify higher pricing. Since each bank has the capacity to enjoy different levels of customer satisfaction, pricing of customer service will also be different in the emerging banking scenario.
In a competitive environment, low cost producers have obvious advantages over competitors. Price elasticity of bank services is a moot point. Even in other service industries it has been established that customers do not mind higher price for a service offered by a firm if the perceived quality associated with it is superior to that offered by the competitors. In banking, however, low cost operator is also usually an efficient operator who uses latest technology as a device for cost reduction. Bank customers are prepared to pay higher price for technologically superior products, but the use of technology leads to reduction in average cost in the long run. The bank making use of that technology can pass on the benefit of lower cost to the customers, thereby enhancing customer value. Higher customer value will attract new customers to bank's fold leading to higher volumes which in turn would increase its profits further, thus completing the virtuous circle.

Use of IT will make things easier for bank customers and will eventually lead to 'home banking'. In the process, every bank branch will be reduced to and identical shop front. This is a danger banks need to avert if they are to enjoy the fruits of technology-driven banking. Customers do desire efficient and prompt service, but the person delivering the service is equally important. How can banks get over the increasing depersonalization of their services? One way to bring in personal element in internet banking is to introduce tele-banking which provides faster service to those who desire personal attention. A relationship officer at the branch, newsletters for important customers and an institutionalized customer call system can be some of the strategies a bank may try to make its service distinguishable from that provided by competitors.

In the ultimate analysis, it needs to be stressed that excellence in customer service and high level of customer satisfaction will remain elusive goals even with the induction of the state-of-the art technology and competitive pricing of products if the employees at the grass-roots level are not committed by branch and divisional managers, in developing a shared vision and consensus for customer oriented culture and in providing the necessary tools and support as branch and divisional managers implement and lead the changes. This strategy will succeed if there is a change in the mind set of the top management of banks and a viable alternative of the top-down hierarchy as the primary method of organizational management can be found.

In days gone by, customers knew their bankers and tellers by name, and that personal connection often formed the basis for a lifetime relationship with one bank. But today, many customers do their day-to-day banking at internet. As banking
transactions have become less personal and the competition more fierce, customer loyalty has faded. One way for banks to establish better 1:1 relationships with their customers is to make documents more personalized and targeted to each recipient.

These days, document personalization means satisfying the customer's demand for useful information distributed quickly and accurately through multiple electronic and print media. While banks have taken a lead in using the Internet as a customer communication medium (i.e., creating Web sites where customers can see current loan rates, shop for CDs, find out about special promotions, check their account balances and bank online), there is opportunity for them to make stronger use of database management and electronic printing and distribution technologies to personalize transaction-based, mission-critical documents.

Here are a few ways banks can personalize documents and make them more powerful customer service and marketing tools:

Variable Messaging: The latest hardware and software enable banks to build strong communication links with customers through the use of variable information integrated into the body of documents or attachments.

Messaging can be used for:

**Customer care:** Given the expense associated with customer service today, banks can keep costs in check by giving customers all the information they need to act upon their documents and continue contentedly in the relationship. Statements, for example, might include local branch information (including the name and phone number of the local branch contact, who can answer any account questions customers may have) or reinvestment stubs, to encourage further investment.

**Cross-marketing:** Every document a bank distributes is a cross-selling opportunity. By tapping database information, banks can target selected groups of customers for special promotions, e.g. mortgage customers might receive a mailing about a home equity loan promotion; basic checking customers might receive information about a checking account with more features; other customers might be targeted to receive messages about interest rates on mortgage, auto or home loans.

**Education/information:** Variable messaging on documents can educate and inform customers of new and existing products and services, changes in bank hours or policies, etc.

**Simplified formats:** Providing both form and function, personalized documents can present all of a customer's account information in one, easy-to-read format. For
example, customers can see their total financial picture in colorful bar graphs or pie charts created with their own personal financial data.

Effective personalized documents begin with a good design. To ensure that documents work, banks should view them critically from the customer's point of view. If they're hard to read, or if the design or quality of printing doesn't accurately convey the desired message or corporate image, a redesign is in order.

An intelligent organization of information assures that customers will understand their documents and respond appropriately. For example, vital information, such as account balance or interest earned, should be placed where customers would look for it naturally; color can be added to the document for added emphasis and interest. Remember: attractive, well planned and well laid-out documents create favorable impressions in the minds of customers. They are user-friendly and exemplify a bank's good service, professionalism and reputation. They also create the kind of 1:1 connection today's customers demand.

Good working knowledge of document distribution technologies facilitates the production process and keeps costs in check. It's best to work with document designers and production engineers who are familiar with document distribution techniques throughout a wide range of delivery media, including print-mail, CD-ROM, fax, and the Internet. Many unsuspecting companies have wasted money and time on document designs that were unworkable in certain media.

The challenge before the public sector banks is one of transforming their work culture so as to make banking service a delightful experience. This call for collective will. What has been achieved so far is more by way of initiatives by the Banking Division, Reserve Bank of India, bank managements and pressures from external agencies. What needs to be achieved depends largely on the desire and conviction on the part of bank staff at all levels. If the staff employed by the foreign and new private sector banks can set high standards of service and customer orientation, there is no reason why those in the public sector banks cannot do it, especially when the infrastructural facilities are adequately provided and work environment made congenial. In fact, there have been numerous success stories, even in these banks, of branches and officials ensuring top class personalized service to their customers. This should develop into a conscious movement, triggered by enlightened self-interest. The writing on the wall is quite clear - those banks which do not measure up to customer expectations will lose their high value customers to their competitors and will be forced out of business in course of time. As the competition intensifies
further, levels of customer service determine the survival and growth of banks. Younger generation of bank staff in particular have to show a new sense of commitment to customer service for they have their, long career and future at stake. Together, bank staff at all levels should focus on team efforts and own up responsibility for the levels of customer satisfaction. It is hoped that the new initiatives relating, to functional autonomy, better incentive and reward systems, skill up gradation measures, debureaucratisation and removal of rigidities specific to the public sector and creation of work environment that compares favorably with that of the new players will together bring about a new orientation in dealing with customers.

Often, gaps arise and get widened due to mismatched levels of perception between banks and customers. It is to be appreciated that customer service is not about dealing with people of logic but with people of emotions. This makes the issue much more complex. Therefore, there is a need to educate the customer on, the various aspects of banking. With the reforms introduced, a number of changes with regard to rates, discretionary powers, pricing policy, import-export procedures, funding arrangements, etc. have taken place. This makes it all the more necessary for the banks to educate the customer on wide ranging issues. The customer, whose business is essentially concerned with his own activity, may find it rather difficult to keep a track of these changes. It would, therefore, be worthwhile for banks to constantly update their own systems and provide the customers with the latest information. This could be achieved by organizing workshops, seminars, training programmes, etc. to targeted groups of customers - both corporate and individuals. Sending of news-letters, clippings and write-ups intended to specific groups such as exporters, corporate borrowers, non-resident account holders and so on would also be fruitful.

In the normal course, the customer feels distanced from the banks and this could prove to be a potential risk in losing him over time. It would, therefore, be necessary for the banks to undertake customer contact programmes on a continuous basis without of course turning them ritualistic. It will also help them in introspecting into the level of service and bringing about improvement wherever warranted. This would give a message that instead of the customer coming out with problems or suggestions, the banks are pro-active in inviting candid feedback. Further, in informal settings, the customer is likely to be objective and constructive in offering suggestions for improvements wherever needed.
Customer education has been one of the most vital requirements in respect of customer service which has not been properly attended to so far. As rural customers belong to various categories having specific characteristics, it is most essential that customers should be educated in respect of the products which banks provide, their characteristic features which have direct or indirect impact on their savings, credit availment, repayment of loans, transfer or remittance of funds, etc. Endeavor should be made to encourage large number of rural households to avail of services provided by banks for which in depth knowledge is required in respect of logic/reasoning for devising the products, likely benefits that can accrue to users, formalities to be performed by availing facilities, arrangements that could be made by banks for providing facilities through organizing drives/campaigns from time to time so as to avoid cumbersome procedures, make them cost-effective and result oriented. This approach is a must in view of exploring and exploiting untapped potential of savings, dispensation of credit mobilizing repayments of loans and transfer/remittance of funds, etc. which has been existing in India’s 550000 villages and 5000 block headquarters.

Experience confirms that while a reasonable good number of moderate regular and high income group customers are aware of savings instruments, others belonging to various categories including IRDP beneficiaries are neither approached nor educated for bringing savings into banking fold. Similarly, a very large number of rural customers even do not know that banks can meet their various kinds of loan facilities, viz., loan against jewels, their own deposits, overdraft, personal loan, loan for vehicles etc. They know that loans for limited purposes under agriculture allied activities; industry, service and business (ISB) sector covering priority sector are available. However, actual position is different indicating that loans are available for all purposes and market for that is vast. What is called for is customer-education. On these lines market for mobilizing repayment of loans, even from willful defaulters is too vast. However, this calls for market approach, business acumen, dedication and personal commitment for the cause.

**Customer Meet**

This is one more area, through being very crucial and being insisted upon by the RBI, which is either neglected or not attended to as expected. Wherever meeting is convened may be to meet RBI requirement but not to appreciate the reasoning and achieving the expected results. Market philosophy desires individual and personal contact which of course, is costly. However, customer-meet if
convened regularly through well-done home-work would result in: i) Securing first-hand information for verifying the utility and effectiveness of products need for modifying substituting, adding, deleting some of the products and identifying those products which are popular and need to be marketed aggressively.

ii) Removing customers' misconceptions/misgivings on some of the services/products offered by the banks and clarifying their doubts or providing them additional information in respect of some services which have yet not been accepted by them.

iii) Cross-checking the findings of the customer-survey and soliciting their considered views for evolving new products with required characteristic features which suit to them the best. As customer meets are very significant the bankers should regularly convene them and they should be separate for various categories of customers as also according to the users of the products.

**Staff involvement**

It should not be that customer service is restricted to the managers and officers and clerical as also sub-staff have no role in this important business requirement. It is most essential that all the staff should necessarily be involved in this task for which there is need for proper training and briefing them from time to time and it should be monitored by the regional authorities. Endeavor should also be made to find out from the internet banking customers' grievances as to who have been irresponsible to customers. All such staff members need to be motivated through human resource development process and encouraged to provide the customer service as expected.

**Internet Banking and Retail Product marketing**

With Internet and Web technologies, online customers can have unlimited access to the information they require and may enjoy a wider range of choices in selecting products and services with highly competitive prices. Therefore, it is generally not easy for online retailers to gain and sustain competitive advantages based solely on a cost leadership strategy in rival-driven online retailing. Rather, the subtle “differentiating” service quality levels of the online retailers have increasingly become a key driving force in enhancing customers' satisfaction and in turn in expanding their customer bases. The finding of this research confirmed that there is a strong and positive relationship between online retailers' service quality and their customer satisfaction.
Service quality improvement initiatives should begin with defining the customers' needs and preferences, and their related quality dimensions. If online retailers understand what dimensions customers use to judge quality, they can take appropriate actions to monitor and enhance performance on those dimensions and remedy service failures. This study identified a total of six key online service quality dimensions. Obviously, in order to maintain a high level of overall service quality, the online retailers should pay attention to all six dimensions identified in this study. However, to strengthen competitiveness in the extremely competitive market, given limited organizational resources, it is recommended that the online retailers focus particularly on four dimensions, reliable/prompt responses, attentiveness, ease of use, and access, in order to achieve high levels of consumers' perceived overall service quality and their satisfaction simultaneously.

As regards the managerial implications, it may be stated that the prompt/reliable service dimension indicates that online retailers should provide customers with accurate and prompt service deliveries. The failures of online retailers in delivering accurate services in a timely manner often result from the lack of synchronizing online (e.g. marketing and sales functions) with offline (e.g. inventory and logistics management functions) business processes. Therefore, it is recommended that online retailers implement information systems that integrate all their online and offline operations to improve their delivery performance. It is also imperative that online retailers have a smooth physical distribution channel. If an online retailer lacks sufficient resources for building such a channel, it may outsource its logistics function to a third party specializing in logistics management to ensure timely and accurate service deliveries:

Second, the attentiveness dimension suggests that online retailers should do their best to provide personalized or individualized services to their customers, even though they use an impersonal medium, a Web site, as their primary marketing and distribution channel. It is well advised that online retailers need to have enough staff members to answer customers' diverse questions via telephones and e-mails or utilize the electronic CRM applications as discussed earlier. In addition, while maintaining message areas on their Web sites in order to listen to individual customers' voices, online retailers should have their customer representative monitoring the behaviors of online shoppers, and proactively offering help when the shoppers appear in need of a helping hand. Particularly, online retailers' Web sites can customize the interfaces with their visitors by using so-called "personalization.
software". This software utilizes a self-learning engine to evaluate visitors' real-time behaviors, such as "what a visitor is looking at" and allows online retailers to offer relevant suggestions to customers (Koller, 2001).

Third, the ease of use dimension indicates that in maintaining their Web sites, virtual store managers should focus on easy navigation for their online systems, well-organized online catalogs, and concise contents. Particularly, well-designed navigational structure can facilitate customers' perceptions of online control and enjoyment. Furthermore, a good Web site should always clarify the meaning of interactive messages in order to facilitate the "flow". Finally, the access dimension refers to the ease of contact and information gathering from the online retailer. Thus, it is suggested that online retailers should enable customers to make inquiries and obtain useful information through online and offline media. Besides the widely used communication channels such as e-mail and telephone, online retailers also need to offer live text chat, co-browsing, and page pushing (Waltner, 2000). In addition, virtual store managers may encourage customers to share their views on certain products. For example, they may create online communities for their customers, which would allow customers to access experts and other customers with similar interests and experiences.

Looking at the results using the Importance-Performance Grid (exhibit 4.74), it is evident that banking institutions need to improve their customer-perceived service quality. Only two of the five categories (convenience/accuracy and efficiency) fall in the "keep up the good work" quadrant. There is also evidence that indicates that banking administrators need to revise their resource allocation as two categories (customize and feedback/complaints) fall in the "low priority" quadrant and one (queue management) in the "possible overkill" quadrant.

The analysis from the gap scores and the Importance-Performance grid displays a perceptual problem when the sample indicates poor performance of electronic banking facilities compared with an ideal banking service. The Importance-Performance grid suggests that banks providing electronic banking need to concentrate their efforts in several areas:

Banks should provide statements of all transactions that have been conducted electronically. This will allow consumers to verify accuracy of all transactions including transaction confirmation.

Banks should find ways of making their electronic services more accessible. Installing more ATMs and EFTPOS outlets is an issue, which customers consider very important and which is
not being addressed to the customers’ satisfaction.

Banks should also provide customers with a toll free number. This number could handle customer complaints and general feedback about the electronic banking services. This would not only provide a service to consumers that are free, but also provide the banks with valuable trends for future development on electronic services.

Banks should improve the security of ATMs by making them well lit at night.

Banks should develop their electronic facilities to cater for the elderly and disabled. ATMs that read out the keys pressed would aid the sight impaired as well as lowering the height of the ATM screens making the service available to people in wheel chairs.

Banking administrators should revise their resource allocation in light of the importance/performance findings. Queue management is in the “possible overkill” quadrant, which means that management thinks it is more important than customers do. Banks would be better served by using some of their resources on addressing the issue of “accessibility”.

To reduce difficulties stemming from inadequate or limited staffing or training, information security experts have suggested that banks should equip their staffs to respond to problems affecting on-line systems by establishing guidelines or providing associated training. Nearly all of the banks reported providing training to staff. One bank that attributed its staffing problems to the newness of its on-line banking system believed that such problems would decrease over time. Twenty two percent banks reported operational difficulties relating to the need to upgrade and replace outdated software.

Overall, both core and relational performance were important drivers. Features such as convenience also contributed to customer satisfaction, as did competitive interest rates and skilled employees. The importance of these findings is that positive attitudes towards a retail bank are driven by service quality components, such as the employee-customer relationship, as well as other features/benefits of the service.

These results confirm the importance of problem recovery in maintaining customer satisfaction (Hart et al., 1990). However, the results do not support the contention that satisfactory problem recovery leads to heightened customer satisfaction or closer “bonding” of the customer to the provider. At best, satisfactory problem recovery leads to the same level of customer satisfaction as if a problem had not occurred. Further research is required to determine if, and when, satisfactory problem recovery leads to “delighted” customers. A situational characteristic, holding both a mortgage and a loan, leads to lower levels of satisfaction. It would appear that “borrowers” versus “non-borrowers” (who are likely to be lenders) experience situations that create some level of dissatisfaction. While many of them may not complain, the borrowers hold less positive attitudes towards
the service provider than do non-borrowers. Based on personal observation, it is possible that borrowers resent, to some degree, the demands and conditions retail banks place on them. For example, borrowers may be more critical than non-borrowers because it is costing them more. Propensity to switch was driven by core performance and problems encountered within the past six months. In particular, it is important to note that, even if the problem was resolved to the customer’s satisfaction, the propensity to switch was significantly higher. It appears that if customers experienced a problem which was serious enough to complain about, regardless of the service provider’s response, the customers’ switching intentions increased. Again, these results did not support the proposition that satisfactory problem recovery maintains or improves customer loyalty.

As regards the managerial implications, the results point to one general recommendation for managing service offerings and several specific conclusions for managing customer satisfaction in retail banks. Overall, the organizing framework for managing customer evaluations of a service offering should focus first on the core and relational dimensions. These two dimensions yield clean and convincing directions for designing service offerings, staff development programmes and customer complaint management systems.

The items that comprise the core dimensions concern accuracy, expectancy, meeting promises and informing customers about when services will be performed. They are clear signposts concerning quality standards for employees for every transaction. Also, the items outline the range of issues that are the primary causes of customer complaint behavior.

The items which comprise the relational dimension set the tone of the relationship between the customer and the service representative. They are straightforward features and traits of employees; in a sense, the results confirm common understanding and practice.

Managers also need to be aware that customer satisfaction is based on service quality and other aspects of the service offering such as convenience and service specific factors (e.g. competitive interest rates). Managers should probably consider the value or contribution to customer satisfaction of each dimension of the total service offering and allocate resources accordingly. Regarding customer complaints, managers should attempt to “get things right the first time”. When customers complain, satisfactory problem recovery maintains satisfaction, but switching intentions increase. Unsatisfactory problem recovery leads to dramatic
declines in customer satisfaction and increases in switching intentions.

Concerning specific implications for retail banking, the results suggest that service quality judgments form the basis of customer satisfaction. The relative sensitivity of customer satisfaction to the core and relational aspects of service quality points to the role of the various service features in the overall design of the offering, staff training and complaint management. In retail banking, it appears that core and relational features ought to be equally weighted when managers are interested in improving customer satisfaction. In contrast, when the focus is on reducing switching intentions (i.e. increase customer retention) considerable emphasis should fall on core items (i.e. getting it right the first time) and ensuring successful problem recovery. In this case, the influence of relational features is far less important.

Concerning future investigations, researchers should consider taking a broader view towards identifying the components of service quality and the overall service offering. The components should encompass not only the recently identified constructs (e.g. core, relational) but also constructs/items that reflect the service offering (e.g. competitive rates). Future investigations in this area might focus on the complete service package and seek to develop a framework which is based on the major customer benefits derived from the service. This approach might yield useful insights into the composition of the service from the customer's viewpoint. Also, including more measures of customer satisfaction and future intentions might offer further insights into the drivers of these customer outcomes. In particular, the inclusion of measures of perceived value may be a fruitful direction to pursue.

**Service Quality Satisfaction**

The law of customer satisfaction is expressed by the formula: satisfaction equals perception minus expectation. If a customer expects a certain level of service and perceives the service received is higher, he will be satisfied customer. On the contrary, if he perceives the same level of service as before but expects a higher level, he will be disappointed and, therefore, a dissatisfied customer. Hence, there are two main directions in which customer satisfaction is affected are:

A. What customer expects and
B. What customer perceives
The banking environment in the private sector banks was found more conducive and so was the employee satisfaction level and perceived customer service satisfaction level. Data points to glaring disparities between the expectations and the actual state of affairs meaning total customer dissatisfaction.

The implementation of quality initiatives should begin with defining customers' needs and preferences, and their related quality dimensions. Identification and measurement of customers' expectations of the Internet banking services provide a frame of reference for banks' assessment of their service quality. Management's first step in planning quality enhancement programs, then, is to listen to the customers. Unfortunately, the service quality dimensions and their related quality improvement approaches, developed in the traditional banking environment, cannot be an appropriate set of guidelines for effectively managing Internet banking service quality. The reason is that the Internet banks, unlike the traditional banks, seldom have interpersonal interaction with their customers in their banking service delivery process.

This study attempted to extensively identify key quality attributes of the Internet banking products and services by analyzing Internet banking customers' comments on their banking experiences. A total of 17 dimensions were identified under the three categories of Internet banking service quality:

1. Customer service quality;
2. Online systems quality; and
3. Banking service product quality.

Those 17 dimensions include:

1. **Customer service quality:**
   - reliability;
   - responsiveness;
   - competence;
   - courtesy;
   - credibility;
   - access;
   - communication;
   - understanding the customer;
   - collaboration; and
   - continuous improvement.

2. **Online systems quality:**
   - content;
   - accuracy;
   - ease of use;
   - timeliness;
• aesthetics; and
• security,

3. **Banking service product quality**: one dimension of product variety/diverse features.

Obviously, in order to maintain a high level of the overall banking service quality, the Internet banks should pay attention to all 17 dimensions identified in this study. However, to strengthen competitiveness in the extremely competitive market given limited organizational resources, it is recommended that Internet banks, both Internet-only banks and traditional banks offering Internet banking service, focus more on the following key dimensions:

1. **Customer service quality**:
   - responsiveness;
   - reliability; and
   - access;

2. **Online systems quality**:
   - ease of use;
   - accuracy; and

3. **Banking service product quality**:
   - product variety/diverse features.

All of the six dimensions tend to have strong impacts on either customers' satisfaction or dissatisfaction, depending on the quality performance of those dimensions.

More specifically, first, the Internet banks should perform the promised service dependably and accurately. The Internet banks' customers frequently complained about the unreliable banking services. For example, some customers commented that their banks did not provide banking services in the same way as advertised on their banks' Web sites. This type of service failure might be caused by either unreliable banking services or miscommunication between the customers and the service providers regarding terms and conditions. The chance of miscommunication occurrence tends to be even higher in the Internet-only banks than in the traditional banks offering Internet banking service, because the customers of Internet-only banks seldom have a chance to interact directly, face-to-face with their service providers.
Second, since e-mail is becoming an important communication means between the Internet banks and their customers, a prompt and attentive e-mail response to a customer's e-mail inquiry is becoming more critical than ever before to improve the quality levels of, particularly, the access and responsiveness dimensions.

Third, the banks are required to keep increasing the speed of online systems' responses to customers' input, upgrading the Web sites' navigational functions, and improving the compatibility of their online systems with customers' application software as well as hardware.

Fourth, in establishing long-term relationships with their customers, the Internet banks, face their own unique set of challenges to overcome in competition with the traditional banks, since the Internet banks use the Internet as both a primary communication channel and a service delivery medium, and, thus, they have very limited capacity for direct personal interaction, through which the traditional banks understand and meet their individual customers' unique needs and, in turn, establish long-term customer relationships. However, as argued by Kolesar and Galbraith (2000), the Internet banks can also create a "bond" with their customers over time if they consistently provide high quality services to them with a particular attention to such dimensions as responsiveness, reliability, credibility, and understanding the customers. Furthermore, as noted by Ghosh (1998) and Mols (2000), the Internet banks can offer personalized services to their customers in order to build customer loyalty, since they can automatically track, through the Internet, individual customers' financial service usage and gather the information in their integrated database.

Fifth, as argued by Stricter et al. (1999) and Latimore et al. (2000), since many customers want to make a variety of financial transactions at one site, the Internet banks need to provide a wide array of service products and features to them. In doing so, as suggested by Stricter et al. (1999), the banks may need to appoint a single person (or a group of people) as a product manager (or a product management team) to lead their wide organizational efforts to meet the financial needs of various target customer groups by continuously improving existing products and developing new products. Finally, although the security dimension received only few mentions, it is worthwhile to note that the breach of security may pose tremendous threats to the success of the Internet banks, particularly Internet-only banks. Since the Internet is an open network, the Internet banking
customers appear to be much more concerned with the security of their banking transactions and the privacy of their personal information than do the traditional banking customers. Therefore, the Internet banks should do their best to ensure the security of their customers' personal information and banking transactions.

In addition, it should be noted that even though the price of banking service products, such as interest rates on interest-bearing accounts or loans, and service fees, cannot be considered as one of the banking service quality dimensions, many customers emphasized the importance of the price of bank products by making comments similar to the following:

The best thing about the bank X ... good interest rates, no fees, free checks, and refunding ATM fees ....

The strategic importance of pricing is also supported by recent research conducted by one consulting company, which reported that 45 per cent of online customers cited rates and fees as the initial reason that they decided to bank online (Latimore et al., 2000). Therefore, since the Internet banking system has made the financial market more transparent and has helped the customers switch their banks with minimal costs, the Internet banks should make every effort to continually and in a timely way, introduce highly competitive prices of their bank products to enlarge their customer base. In fact, many US virtual banks have offered higher interest rates on interest checking, CD's, and money market accounts and lower fees than traditional banks (Rose, 2000), based on their significantly lower cost structure than those of their counterparts (Sathye, 1999).

The research revealed that, in general, failures are very common in both, interpersonal service encounters and technology-based service encounters. In interpersonal service encounters, unfriendly or impolite service and time-related aspects were the most common causes for dissatisfaction. On the other hand, dissatisfaction in technology-based encounters was most often related to failures in technology, service design or in the service process.

The overall complaint rate was somewhat lower than previously reported complaint rates. Contrary to predictions, no significant differences were found in rates of complaining between dissatisfactory IB and interpersonal service encounters. The highest rate of complaining was associated with Internet banking, while personal visits to the bank, ATM encounters and incidents involving bill-payment machines led less often to complaints. While further investigation is needed, it is argued that these differences can be due to the novelty of Internet services. Specifically, consumers
might be more inclined to complain about Internet banking encounters as many are still learning to use the services and willing to know how to avoid failures. In fact, contrary to previous findings, the respondents who attributed the failure on their own actions were the most active complainers.

When making predictions about the influence of technology on complaining behavior, one should critically evaluate the various reasons that inhibit consumers from lodging a complaint. The critical question that marketers should ask is "Can technology removes the barriers that hinder consumers from complaining?" It is argued that technology is not likely to change the complaining behavior of those consumers who suspect that the service provider will not attempt to solve the problem. In fact, most of the respondents who specified their reason for not complaining claimed that complaining would have been ineffective. Also, in some cases the situation was perceived so hopeless that complaining would not have helped.

Paradoxically, in the era of booming technology investments, the biggest barrier seems to be the attitude of service providers and the remedy has little to do with technology. Technology can, however, help the consumer to solve the problem independently during the service encounter. Technology offers the possibility for keyword search of questions and usage of "troubleshooting engines" that can automatically walk customers through problem-identification and resolution processes. A number of respondents stated that the problem was somehow solved during the incident or an alternative solution for completing the encounter was found. What technology cannot do is to provide empathy and understanding, which can be essential in successful service recovery. Furthermore, when customers use technology to solve the problems independently, customer complaints are never being filed, nor are disappointments being heard. Thus, valuable information about service failures and problems might never reach service designers and other personnel.

Some clear opportunities exist for bankers when implementing technology-based services. The second most common reason for not complaining was that complaining is time consuming. It is undeniable that technology can speed up the complaining process when the complaining channel is build into the service technology. Prior research shows that some dissatisfied customers do not complain because they simply do not know where and how to do so or feel embarrassed about attracting attention (Lovelock, 1994; Tax and Brown, 1998; Hart et al., 1990). Also
in this study many stated that they did not know where and how to complain. By integrating complaining channels to service technologies these types of barriers may be removed.

In addition, technology does not require a face-to-face contact with personnel and thus, can ease the complaining process for those who feel embarrassed about attracting attention. Moreover, no further search is needed for ways of lodging a complaint when it can be made in the immediate service encounter situation. Most interestingly, since the perceived easiness of complaining had a significant effect on complaining frequency, it was very surprising that no complaints were made through the IB even when it would have been possible. Most complaints resulting from an IB incident were delivered by telephone or in person. In fact, the high reliance on traditional methods of complaining might be one of the reasons why no differences exist between rates of complaining in IBs and traditional encounters. In other words, as customers do not utilize the feedback mechanisms provided in IBs, complaining has not become any easier. It is suggested that bankers should encourage and assist consumers in embracing the technology-based feedback mechanisms to facilitate complaining.

Customer complaints are important for service recovery but so are responses to the complaints. Thus, it was interesting to note that only 39 of the 59 respondents who complained reported receiving a response from the bank. More interestingly, there was a significant difference in the response rates when comparing complaints involving dissatisfying IB incidents and interpersonal incidents. Complaints about a IB encounter had a much higher response rate than complaints about a traditional service encounter. This could be interpreted as the banks being more concerned about how the IBs are perceived than about the quality of traditional service encounters. During the recent years, retail banks have made large investments in technology based services and simultaneously reduced the number of bank offices and service personnel. The lower response rate to complaints about traditional encounters could reflect the fact that banks are actually discouraging consumers from using traditional banking services. Paradoxically, some respondents explained that they did not complain because they perceived that the incident was caused by technology and not by the bank. While further research is needed, the study indicates that new technology alone is not enough to increase complaint frequency. In order to encourage customers to express their opinions, banks should in their marketing communication stress that customer feedback is important. Obviously,
making promises is not sufficient. The banks should also improve complaint handling procedures so that the customers are not let down. Finally, the findings indicate that even though many firms had implemented immediate feedback systems to facilitate complaining, the customers were either unaware of them or found them too complex to use. Thus, careful attention should be devoted when designing feedback systems and their existence should be emphasized and communicated more effectively.

**Website evaluation**

Banks have to go online with interactive web pages and account tracking and modifying functionalities for people to be able to transact their banking business completely on the web. Banks, on the other hand seem to be waiting for enough customers to come online before they take the big leap. But some efforts are being taken by Indian banks to maintain an online presence, and give their customers limited online functionality.

At the very minimum, the survey reveals that banks offered information about itself and details about all the services it offers, including interest rates and various service charges. Also available was the searchable list of physical branches and ATMs with full address, telephone and fax numbers along with email addresses.

Guidelines as to how to start accounts, apply for a loan or a credit card etc was also available on web sites. But this does not qualify a site to be an online bank. The bare minimum required for a bank web site to qualify as online banking is for it to provide account tracking facilities. That is, an account holder, or a credit card holder should be provided with, or should be able to create an account at the site, much like one create an account at any other portal.

By logging into this account, the customer should be able to see the balance(s), see whether credits and debits have been made etc. Customer should be able to make simple requests like issue of a passbook. Going a step further, the customer should be able to give and change standing orders, like transferring a stipulated sum every month to parent's account, or automatically paying the credit card bill and so on.

The next step is when the customer can transfer money to another account, operated by some one else, say a utility or a merchant, maybe in a different bank, from his/her account. There should also be facilities at the site to interact with the bank, to clarify doubts, etc. At the most basic, this could be email. Most banks get away by giving a mail to: link on the page that opens up your email client.
Internet usage is expanding along with consumers' computer and Internet literacy. The consumer generation is also changing and the majority of bank customers will grow up with the Internet. On the basis of this study, it is justified to suggest two different development possibilities: the first one is to concentrate on core function of IBS and design the services in question to be as simple and unhindered as possible. This is the most cost-effective way to proceed with IBS; this is where the interest of banks and current consumers as maintainers converge.

The second possibility is to adopt a more future-oriented approach and to invest in developing IBS that satisfy the needs of growing consumer cluster of youngsters, who are the prospects of tomorrow. They are used to operating in the vivid and entertaining world of Internet, and thus, it is reasonable to argue that they will require these elements along with the practical utilitarian service dimensions. It must be emphasized that while the basic services must be provided with absolute quality and efficiency, one should also have a long-term orientation and develop features in accordance with changing consumer expectations. In this paper, the behavior and perceptions of consumers using IBS has been examined. It has been found that consumers can be divided into four clusters according to their needs and behavior. Furthermore, it has been found that the clusters differ according to age and education. These findings give a challenge for further research regarding expanding ways to develop existing products and services, to design new market offerings and especially, to take into consideration emerging consumer generations.

In the case of e-banking portals, six main quality dimensions related to three generic service categories were identified: security/trustworthiness and basic services represent the basic demands of portal users and form the core service category. Attractive cross-buying services and added value constitute a second dimension representing the additional services that facilitate the use of the core products. A third dimension used for quality assessment consists of transaction support and responsiveness of the service provider, which are assured by personalized offers and content as well as interactive decision tools.

Consequently, e-banking portal quality cannot be described as a one-dimensional customer rating. Instead, it represents a multi-dimensional and multi-factor construct that is composed of partial quality judgments with regard to the portal's diverse service categories. Our study provides validated measurement scales for each factor. The empirical results strongly support the understanding of portals as integral solutions. Portals represent a bundle of various services and functions.
Based on our findings, management can establish early warning systems by continuously measuring quality in e-banking and can foster appropriate improvements as soon as one of the dimensions falls below a tolerable level. Thus, aspects as for example depth of service range and possibility of opening accounts online or call back buttons and prompt responses to questions are important drivers leveraging overall service quality in an effective manner.

Customers are less likely to register for I-banking if they are unsure about the security of transactions, like to be able to talk to staff in person, have not tried it (I-banking) before, feel it is too much hassle to register, think it is complicated to use and offers a limited range of services.

Hypotheses testing proved that
(i) the length of I-banking use is not related to future usage and the overall satisfaction,
(ii) overall satisfaction is however related to future usage. It seems that the more a customer is satisfied with the retail I-banking services provided, the more likely he/she will continue to use the services in the future.
(iii) young customers (under 20) are less likely to register whereas customers with the highest level of education are more likely to register.

The result indicates that the site evaluation is not correlated to the banks’ ranking generated from the customers’ perspective. This implies that customers do not necessarily perceive a bank provides better services even though it rates better under an objective evaluation. It means that larger banks do not necessarily provide better services from the customers’ perspective. The result indicates that the maturity of I-banking is not correlated to the banks’ offerings. Banks that launched I-banking earlier do not necessarily provide better retail I-banking services.

Summarily, it must be noted that getting customers to register for I-banking does not mean that they will use the services. Although there is a reasonable adoption (39 percent) of I-banking in India, it still has the lowest usage amongst all banking facilities in India. The adoption of ATM, EFTPOS and counter services are about two times that of the I-banking adoption. Although ATM and EFTPOS are the most popular accessing banking facilities, results show that the usage of these facilities is not related to the utility of I-banking.

The chi-square test is unable to generate a reliable result regarding whether one is less likely to use I-banking if one does not use either ATM or EFTPOS. Nevertheless, a customer is more likely to register for I-banking if he/she is a user of
phone banking. Whether a customer will register for I-banking is also related to his/her age and education level but not income. In terms of attracting more I-banking registration, banks are recommended to consider firstly target current phone banking customers and people aged more than 20 and with higher education background before aiming at lower educated and younger people.

ATM, EFTPOS and phone banking and counter services are the main banking facilities that customers prefer rather than I-banking. Customers do not need I-banking services because they could do whatever they want by using these banking facilities. In order to facilitate the utility of retail I-banking, banks should provide unique services or discounted rates that are not offered in other banking facilities. Customers are more likely to register for I-banking if they think that I-banking offers services that do not offered via ATM, EFTPOS, phone banking and counter services.

Customers are less likely to register for I-banking if they consider it is complicated to use. Providing an I-banking demonstration at the bank's web site increases the likelihood of registration as it reduces customers' concerns regarding the complication of I-banking. All Indian banks provide I-banking demonstration except Corporation Bank and Panjab National Bank. Although Corporation Bank and Panjab National Bank provide FAQ, as do other Indian banks, they should also provide I-banking demonstrations to increase their I-banking customers.

Besides, the security of transactions, up-to-date information, services free from technical problems, response time and download time are also important than other factors such as the provision of bank information and bank's product information. Customers consider that factors such as the use of attractive graphics and the use of animations are not as important because they perceived that the use of animations slows down response time.

Most customers use retail I-banking to check bank statements and account balances. Some activities such as the ordering of cheque or deposit books and the purchase of bank's products are only offered by a particular bank (HDFC Bank and ICICI Bank respectively) but they have reasonable usage. This implies that customers consider these activities to be useful. Banks that do not offer these services should consider implementing them in addition to their current retail I-banking services. It was noted during the study that banks were adding features and functionality to their web sites.

In general, Indian banks perform extremely well in providing up-to-date information. It is shown that the security of transactions and the ease of use are
considered in Indian banks' web sites. Customers consider that Indian banks perform quite well in terms of security, but as security is the most important concern, further improvement is required. Indian banks did not do well on providing good download time and the provision of attractive graphics and animations. Considering that customers treat download time as an important factor, improvement in this area is necessary. Further improvement on response time and providing services free from technical problems is also required. Indian banks should concentrate on the improvement of these important factors rather than providing attractive graphics and animations. This is because customers perceive that providing attractive graphics and animation are the two least important elements in terms of I-banking.

Large banks do not always provide better retail I-banking offerings than small banks. It implies that small banks could provide better retail I-banking services if they organize and correctly manage their service offerings. Banks being early to provide retail I-banking services do not mean that they will provide better services than the services provided by later adopters. Banks that aim at providing services free from technical problems, good response time, up-to-date information, easy to use interface and the consideration of security issues are more likely to be accepted by customers.

It is found that banks do not provide retail I-banking services that meet customer requirements. Only offering a variety of services is not enough. Services must be of good quality in order to meet customer requirements and expectations. Banks are therefore encouraged to focus on factors that are considered important. These factors include the security of transaction, response time, services free from technical problems, up-to-date information and the ease of use. The consideration of these factors in a bank's web site increases I-banking performance. Providing good quality of services is a strategy for banks to differentiate themselves from competitors.

ICICI Bank is the only bank that has the same ranking (first) in the web site evaluation and in the customers' perspectives. This implies that ICICI Bank is the best bank in the provision of retail I-banking services. HDFC Bank ranks second in the web site evaluation but it ranks fifth in the customers' perspectives. The extreme difference indicates that HDFC Bank offer a range of services and information, but the service quality is not as good as other Indian banks such as ICICI Bank and Bank of Panjab. A customer is more likely to continue to use retail I-banking in the next twelve months if he/she is satisfied with the services provided. Improving the service
quality of retail I-banking could increase customer satisfaction and enhance the retention of current I-banking users.

Internet banking adoption is anchored to utilitarian outcome rather than hedonistic outcome. Thus banks should minimize the hedonistic content of their internet banking sites as hedonism is not a salient usage factor. Since customers attach greater importance to the transaction related features of the Internet Banking website rather than the entertainment features, a good strategy to enhance adoption would be to emphasize the former and minimize investment in the latter. Since the process of downloading the entertainment features in a website takes time and slows down the transaction circle time, cyber banks will increase efficiency by reducing or even eliminating unimportant hedonic features. Marketing experts had long advised that businesses should provide services and features that add value to customers. Therefore, since the internet banking users as shown in this study do not see much value in the entertainment features of the system, it will benefit both the customer and the firm to minimize them, and in their places improve on the transaction-related features. It is important to jog the mind of cyber bankers that creating value that are not needed or appreciated by customers is worse than not creating value that customers need, because the former will not only leave in its wake dissatisfied customers just like the latter, but also make a waste of the firm's resources that have been channeled towards creating such value.