Original Article

Impact Of E-Banking: Prior And After Effects On Banking Activities

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Abstract

The manual system of recording, storing, and retrieving banking data was in use before the introduction of electronic banking. The majority of banks, if not all, adopted the use of electronic banking (e-banking) for transactions as the winds of change started to blow. In India right now, e-banking is swiftly becoming the norm rather than the exception. There have been a number of strong arguments made in favour of this dynamic change in banking systems. One of them is the built-in benefit of e-banking, which promotes time savings and incredible efficiency in the pace at which financial processes are carried out, so enhancing the performance of banks. If precise data are input, this information's accuracy and dependability are also advantages.

The goal of this study is to gain a better understanding of the benefits and drawbacks of electronic banking for banks. Secondary data, which may be found in online computer databases, e-banking periodicals and magazines, annual reports, financial summaries of the bank throughout time, and annual reports, was the method used to obtain the data. The adoption of e-banking has enhanced banks' profitability (operating profit, profit before tax, and profit after tax).

KEY WORDS: Prior and After Effects of E-Banking, Banking Activities, E-Banking guidelines.

1. INTRODUCTION

Deposit taking and loan and advance disbursement were the only traditional banking activity. Today, banking is referred to as innovative banking. Customers' pleasure and customer service are their primary focus in the banking and finance industries, thanks to new advances brought about by information technology in product design and delivery.

Online banking has been available for a while. It was actually first launched in the 1980s, and a lot has changed since then. Over the past ten years, there has been a significant increase in the volume of internet banking transactions. Other pieces of legislation have also been introduced in this area. E-banking began in the 1980s, but it wasn't until the mid-1990s that it really took off. Customers are drawn to e-banking since it is available around-the-clock and transactions are straightforward.

The world has become a small, interconnected village because to tremendous advancements in information technology, which have also had a historically significant impact on the financial sector. These changes have been further sparked by significant advancements in telecommunications and electronic data processing technology. Automation has changed the financial and banking industries on a global scale. In addition to traditional brick and mortar branch banking, other options such as online banking, ATMs, telebanking, and mobile banking are becoming more and more prevalent.

At the time of nationalisation in 1969, the Indian banking sector was first focused on the domestic market. Banks played a major role in achieving national policy goals, including mobilising domestic savings, lending money to particular economic sectors, and obtaining funds to pay for public deficits. From the era of back office automation to the present, technology in Indian banking has advanced significantly. Today's solutions are online, centralised, and integrated. Without the aid of technology, it would be impossible to imagine services like contact centres, mobile and phone banking, or ATMs.Ironically, the majority of those products rely more on technology than banks. The banking sector started using IT heavily as soon as the Committee on Financial System's (Narasimha Committee, 1991) recommendations were implemented. One recommendation from the committee is to allow multinational banks and the private sector free entrance. Private and international banks offered new technologies like ATMs, credit cards, and online banking and gave customers access to top-notch services that PSU banks had never considered.

The move toward electronic distribution of banking products and services is influenced by both consumer demand and the fiercer competition in the global banking industry. The Internet has made consumers more price conscious and interested in specialized goods and services. Additionally, the rising competition from wholly online banks is placing pressure on profitability even on well-established brick and mortar banks. Only a few banks, nevertheless, have been successful in developing plans that fully use the opportunities offered by the Internet. Traditional banks need a clear and straightforward Internet commerce strategy to decide which specialized markets to target and what products and services to offer.

2. CONCEPTS OF E-BANKING:

E-banking is the practise of providing banking services to clients electronically, either at their place of business or house. Using a variety of delivery platforms that can be used with a variety of terminal devices, such as a personal computer, a mobile phone with browser or desktop software, a telephone, or a digital television, banks can provide their customers with information and services through electronic banking, according to Daniel (1999). Internet banking, mobile banking, ATMs, Fund Transfer Systems, Real Time Gross Settlement (payment & allotment Systems), Credit/Debit/Smart/Kisan Cards, Cash Government Services, Data Warehousing, Operational interpretation for MIS, and Customer Relationship Management are just a few of the services that fall under the umbrella term "e-banking."

Some of the well-known services provided by E-banking include Automated Teller Machines, Credit Cards, Debit Cards, Smart Cards, Electronic Funds Transfer (EFT) System, and Mobile Banking.

The following are the main advantages of e-banking:

- The operating cost per service unit is cheaper for banks.
- Customers gain because it is convenient for them not to have to travel to the bank's premises.
- Error rates are incredibly low.
- The customer can use ATM machines at any time to get cash.
- Customers can get discounts from retail establishments by using their credit cards and debit cards.
- The customer can move money electronically with ease from one location to another.

2. LITERATURE REVIEW RELATING TO E-BANKING

Numerous empirical and theoretical studies have been carried out at the national and international levels to investigate the effects of e-banking on customers of the banking sector, service quality, and payment systems. Studies primarily focus on how core banking systems, electronic cash transfers, real-time gross settlement systems, and electronic clearing services affect productivity and profitability as a result of e-banking. The analysis of the subsequent studies clarifies several aspects of e-banking.

In order to comprehend the effects of e-banking on many elements, the research studies carried out for the review have been classified into four categories: studies connected to banks, studies related to customers, studies related

to service quality, and studies related to technology.

2.1 Studied Related to Banks:

Studies on a variety of transformation-related topics and their impact on banks' performance in other countries have been conducted, however Chand Suresh claims that in India (1986). The findings indicate that a transformation is taking place, and IT is playing a critical role in bringing about this change. The current study is focused on how Indian banks are changing, how e-channels contribute to banks' efficiency, and what bank clients and employees think of the banks' e-services. The degree of service in banks that are both partially and entirely IT-oriented is also evaluated in the study. The paper examines the difficulties banks have in managing IT transformation and offers some suggestions for possible fixes based on actual evidence. According to the report, both traditional private sector institutions and public sector banks face a challenging opportunity as a result of e-banking.

Mali A.K. (1995) looked at how computerization of banking operations affected organisational structure, work processes, user morale and motivation, as well as productivity. The impact was tied to the nature of technological development. Simple statistical methods like the mean and chi-square test are used in the study's surveys and interviews. According to the study's findings, technological change has enhanced user productivity, and users are accepting the change due to their own enthusiasm rather than a management initiative that was carefully thought out.

When Malhotra and Singh (1998) examined the theoretical underpinnings of online banking, they discovered that it enables banks to offer services to customers more economically and conveniently than any other contemporary delivery method. The study found that dangers exist in relation to operational security, privacy, reputation, legal concerns, etc. online. Only 33 institutions, or 37% of all Indian commercial banks, presently provide transactional banking services in some capacity, according to the study's analysis of the current condition of online banking in India. Only 4 of the new private sector banks are fully transactional, and only 15% of them are FBs. The share of new private sector banks is higher. All of their institutions offer internet banking.

Kamesam (2001) did research on "the impact of electronic banking on bank performance; a study of first bank of Nigeria". The adoption of e-banking has enhanced banks' profitability (operating profit, profit before tax, and profit after tax). According to the research, banks should upgrade their information and communication technology infrastructure, and the cost of doing so should be kept to a minimum or governed by law.

Durkin and Howcroft (2003) found that using mobile, phone, and internet banking strengthened the relationship between bankers and customers. The authors concluded that the internet played a significant effect in how competitive and profitable banks have become as a result of new technology. It was investigated how bank employees and customers perceived internet use. Relationship management will be more crucial as customer use of remote bank delivery channels rises, they pointed out. Additionally, if used properly, the mix of old and new delivery channels can increase their productivity and profitability.

In a 2008 investigation, Kaleem A. and Ahmad S. gathered the opinions of bank personnel regarding the potential benefits and risks of electronic banking in Pakistan. The benefits of electronic banking that public bank employees with professional degrees find to be most and least significant, respectively, are "minimizing transaction costs" and "reduction in HR needs." According to private bank employees with master's or bachelor's degrees and less than ten years of experience, the main benefits of electronic banking are "time saving and minimizing trouble." The empirical study reveals that Pakistani bankers see online banking as a tool for reducing inconvenience, lowering transaction costs, and saving time.

Janson N. examines how the major volatility caused by internet banking affects the bank's ability to control a liquidity crisis in Northern Rock Bank (2009). The study shows that the Bank of England's contradictory policies led to the initial bank run and, because they persisted, also had a role in the bank's eventual failure. Despite the

existence of a lender of last resort and a deposit insurance programme, the study's findings indicate that market participants and individual depositors in particular resent receiving inconsistent information during trying times.

In 2009, Thulani D., Tofara C., and Langton R. investigated how widely commercial banks in Zimbabwe were using internet banking. Although most banks in Zimbabwe have adopted internet banking, the study concludes that usage rates have remained low since few people in Zimbabwe are adopting this innovation. Incompatibility with old systems, high installation costs, and security concerns are just a few of the challenges banks face while deploying IB.

2.2 STUDIED RELATED TO CUSTOMERS:

To better understand how and why consumers choose to utilise or reject online banking, Taylor and Todd (1975) performed a study. This research stream has been studied using the comprehensive and quantitative causal models and theories from the adoption and diffusion literature, which explain the dependent variables of interest, namely behavioural intention to use and usage. A person is said to have behavioural intention if they believe they will likely engage in a specific activity. Usage quantity is often determined by usage frequency, length, and intensity. When Erol and El-Bdouron (1989) studied Jordanians' attitudes toward interest banking, they came to the conclusion that there are other factors that influence customers' decision-making criteria in addition to religion, which is not the main factor influencing which financial institution they choose. The degree of profitability, or returns on their investment, is the key factor in this situation.

Ongkasuwan and Tantichattanon (1991) found that internet banking benefits banks in many ways, including cost savings, customer base growth, the ability to mass customise business services, the expansion of marketing and communication channels, the search for new innovation services, and the exploration and growth of non-core businesses. They conducted their study on the factors that influence a customer's decision to use Internet-based banking services. Depending on a variety of factors, such as the interface's usability, the user's previous Internet experience, the services being offered (such as e-mail, file transfer, news, online financial services, shopping, and multimedia services), the user's attitude and perspective, access, and delivery.

Metawa and Almossawi studied Bahraini consumers' attitudes on e-banking in 1998. They found that most consumers of Islamic banks are satisfied with their offerings. The reason why the customers have expressed dissatisfaction is the outrageous cost of the services that the Islamic banks have imposed. Religion, not financial gains, was the primary factor in the decision to adopt an Islamic banking system. While most customers are aware of the e-banking services provided by Islamic banks, many are not familiar with the complex Islamic financial system.

In his investigation of the user's adoption of e-banking services, Poon, W.C. (2005) looked at the effect of Internet banking on Malaysia's monetary and credit policies. If the Internet is only used to facilitate ordinary payment operations and provide financial services, it might not have an impact on monetary policy. However, as private sector initiatives produce electronic forms of money like e-cheques, account-based cards, and digital coins, their potential impact on the monetary system cannot be disregarded. Little has changed in terms of monetary policy, even in highly developed i-banking countries. This risk is not yet being addressed because Internet banking is still relatively new in India.

Study on 160 Chandigarh users' impressions of credit cards, namely their rise in India, was conducted by Ahuja G. and Singh in 2006. The article claims that ICICI, which has a customer base of more than 3 million, is the largest card issuer in India. However, these cards are only used by 14% of Indians, who are also between the ages of 40 and 50. There are almost two thirds more men than women. The general finding of the study is that banks should treat female customers equally, offering them special discounts and other incentives while also assuring their security from usage-related fraud.

Bank Net India (2006) conducted "An online survey on 316 ATM users" to learn more about consumers'

perceptions. The poll was only accessible to citizens of India. The majority of ATM usage (56%) is for pre-paid cell recharge and bill payments, and 64% of respondents feel secure using ATMs to deposit cash or checks, although they must wait in long lines and discover there is no money left in the machine. Sakkthivel A.M.570 internet-using Bangalore residents took part in the survey, which had the express goal of identifying the role that demographics play in influencing Indian Internet users to utilise a variety of services online. The study concludes that age and occupation have a substantial impact on the use of a number of internet service categories. The study also indicates how demographic characteristics play a significant role in affecting the use of online services in the developing Indian market. Right now, there are tons of opportunities for internet marketers to profit from India's quickly growing online market.

Poon, W.C. (2008) focusing on consumers' adoption of e-banking services: the Malaysian perspective The results of this study show that consumer adoption of online banking is primarily influenced by perceived usefulness, perceived usability, consumer awareness, and perceived risk. The study's findings indicate that usefulness, system usability, understanding of the risks involved, and convenience of use are the main factors driving people to adopt online banking services.

Richard S., Nafis A., Mudiarasan K., Murali R., and Nafis (2008) analyzed the consumer perceptions of the value of e-services and Malaysia's adoption of online banking. 150 Klang Valley retail banking customers provided the data, which is gathered. Results reveal that expectations for e-service quality are different for Internet banking users compared to non-users. The respondents don't all find all of the dimensions to be favourable. The study also examines the results, limitations, and suggestions for Malaysian Internet banking service quality improvement.

Evaluation of client acceptance of online banking as conducted in the study of Qureshi T.M., Zafar M.K., and Khan M.B. According to the study's findings, the majority of consumers in Pakistan are adopting the online banking culture due to a number of positive characteristics. Usefulness, security, and privacy are the top deciding factors.The amount of information that is given to clients through various channels, such as advertisements in print and electronic media, is another aspect that contributes to their adoption of online banking in Pakistan. The acceptability of the online banking system by customers is greatly and favourably influenced by these factors. Due to the growing nationwide acceptance of the internet banking system, about 50% of customers have shifted from traditional banking to it.

2.3 RESEARCHES CONCERNING SERVICE QUALITY:

With the aid of qualitative and quantitative analysis, Unninthan (2001) described "the impact of e-banking adaptation on Australian and Indian banking sectors. The researcher found that Australia had a strong platform for e-banking growth with 37.7% of the population willing to engage in e-banking, mostly in urban areas due to literate young working population with discretionary income. India, in contrast, struggled with a lacklustre infrastructure, poor PC penetration, and hesitant consumers in the rural sector. E-banking, however, was a successful strategic tool for banks in both nations to maintain profitability in a turbulent and cutthroat market.

In 2001, Yakhlefanalysed the services offered via the internet and websites. The study looked into the main online services offered by Swedish banks. The study's findings showed that while internet banking offered clients safer, more convenient, and more effective services, brick and mortar was still preferred over the internet in terms of direct communication and information. Although the internet has reduced the number of bank branches, improved consumer value, recruited more clients, and created more specialised services, it also necessitates significant infrastructure investment and skilled bank staff.

In Kanchipuram town, Tamil Nadu, Ramalingam P. (2008) researched the credit card usage habits of SBI, ICICI, and ABN customers. According to the report, people with higher incomes and married people use their cards the most, mostly for impulsive purchases out of convenience. Citibank cards also tend to be more popular due to their advertising dominance. The report also shows that Master and Visa cards are the most popular card brands in India and advises banks to improve overall performance to offer delighted credit card services.

The effectiveness of e-banking services in a changing environment was examined by Uppal R.K. (2008). There are 25 bank customers in the sample. In May 2006, a well-designed and pre-tested questionnaire was used to gather the data in Ludhiana, Punjab. The survey comes to the conclusion that e-banking clients are content with the various e-channels and their offerings in the expansion of e-banking services.

With the aid of factor analysis, JhamVimi and Garg P. (2009) investigated the variables that improve satisfaction with e-banking services. Customers do not favour using the internet for many transactions, according to the study's findings. Therefore, the needs for foreign currency and credit card payments are the least satisfied, yet trust and privacy are essential factors in internet usage, even though satisfaction is relatively low. Customers are extremely delighted with the buying and selling of stocks, and the majority of loan applications are made online in India. Customer happiness in India is based on dependability and effectiveness.

An empirical study on service quality evaluation in internet banking was conducted in India by Khan, M. S., and Mahapatra, S. S. (2009). The study attempts to assess the level of customer satisfaction with Indian online banking (e-banking) services. To diverse target groups, a standardised questionnaire with 44 quality items is given. Based on main component factor analysis, seven quality dimensions—reliability, accessibility, user friendliness, privacy/security, efficiency, responsiveness, and fulfillment—were discovered. Gender is rarely a factor in how well i-banking is used and evaluated across a variety of consumer categories, according to demographic analysis of the data.

2.4 STUDIED RELATED TO TECHNOLOGY:

A general approach for evaluating how technology is likely to impact market structures and company strategies is provided by Benjamin et al. (1987). First, the authors point out that marketplaces or hierarchies can be used to move goods through the value-added chain. Supply and demand forces, which operate through the market mechanism, are what define a specific good or service's design, price, quantity, and delivery schedules. In contrast, hierarchies use the administrative hierarchy to control the flow of commodities and services through the value-added chain.

The need for computerization in the Indian banking system is examined by Sharma (1993). The article comes to the conclusion that banks are now more productive and efficient as a result of computerization. Even though there are certain issues, we can fix them by improving banking and computer education. Then, modern computerised banking can be implemented to improve quality of life while using the least amount of resources. With the use of credit cards and ATMs, computerization has made banking activities simple, time-saving, inexpensive, and convenient.

Agboola A. A. (2006) looks at telebanking and electronic payment systems in 36 Nigerian banks. In 2005, bank employees completed questionnaires to provide the data. The results show that connectivity through the use of LANs and WANs has facilitated electronic fund transfers. To facilitate the sharing of account information, 35 banks have fully networked their systems. The study comes to the conclusion that, if its associated issues are resolved, tele-banking can increase client relationships, maintain customer loyalty, and help banks reach a commanding height of market share.

Using a Fourier-flexible cost function specification for the years 1995–2002, Kasman and Kasman (2006) examined the effects of technical development on the costs and environmental aspects of banking enterprises operating in 11 countries in Central Europe. It has been determined that technological advancement has, on average, decreased the total cost of banks in five nations, which ranges from 0.48 percent to -0.25 percent. The decrease in technological advancement from 2000 to 2002 suggests that new technology has been completely embraced after 2000. The study finds that larger banks profit from cost reductions much more than smaller banks, and it proposes merging smaller banks to maximise the advantages of cost reduction brought on by technological

advancement.

In their 2006 study, Tiwari B. and Herstatt looked into the implementation of mobile banking and other financial services offered in Germany and other nations. In total, 50 banks from around the world were chosen, with half of them coming from Germany in May and June 2005. Bank of Punjab, HDFC, and ICICI are the leading Indian banks in terms of offering mobile financial services to their clients. According to the study's findings, banks are increasingly using mobile banking applications, and it is suggested that mobile banking will eventually resemble online banking.

By performing an experiment to find out how people perceive internet banking, Hua G. (2009) investigated the adoption of online banking in China. The study involves 110 undergraduate students from Chinese University. According to the survey, users' adoption of online banking is significantly impacted by both perceived ease of use and privacy policies. The study also looks into the relative weights of perceived security, privacy, and convenience of use. Privacy and security are more important than perceived ease of use. The primary aspect affecting user adoption is security.

Between 2000 and 2007, Uppal R.K. (2010) evaluated the use of mobile banking in the Indian banking sector. The study comes to the conclusion that among all e-channels, ATMs are the most efficient. Mobile banking, on the other hand, does not hold a strong position in the public or old private sector banks, but is adequate in new private sector banks and foreign banks, where nearly 50% of average branches offer m-banking services. M-banking users are also the most numerous in e-banks, which benefits these institutions' net earnings and business generated per employee. In terms of offering m-banking services, international banks lead the pack, followed by new private sector banks, and they also perform significantly more effectively than other groupings.
In their work "Does information technology provide banks with profit?," Shu, W. and Stresemann, P. A. (2005) studied 12 banks operating in the US from 1989 to 1997 and discovered that, while being one of the least productive inputs overall, IT cannot enhance banks' profits. The beneficial impact of IT spending on corporate value, on the other hand, is supported by several studies.

3. FINDING AND CONCLUSION

According to the results of the performed literature review, information technology and communication are essential to today's banking systems' success. The financial industry now plays a larger part in the economy. Now, it's simple and quick to handle financial transactions and payments. In the cutthroat financial market, banks with the newest tools and methods fare better. As a result of their increasing ability to generate revenue, they are now more profitable.

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