

PERFORMANCE OF E-BANKING AND THE MEDIATING EFFECT OF CUSTOMER SATISFACTION

Dr. Shivangee Tiwari

Assistant Professor, Department of Management
Babu Banarasi Das Institute of Technology and Management Lucknow
Shivangeetiwari@bbdnitm.ac.in

Dr. Ratheesh. K. Nair

Assistant Professor, Department of Commerce, Government College Manathavady, Nalloorad
(P.O.), Wayanad- Pin-670645, Kerala, India
ratheeshknairkollam@gmail.co

Mr. Rahul Gupta

Assistant Professor, Management (Finance) Bharati Vidyapeeth Institute of Management and Research, Paschim Vihar, New Delhi, Affiliated to Bharati Vidyapeeth deemed to be university, Pune
Rahul.gupta@bharativedyapeeth.edu

Dr. M. Sekar

Associate Professor and Head Department of Commerce (Computer Applications),
KPR College of Arts Science and Research, Avinashi Road, Arasur, Coimbatore 641 407
super.sekarm@gmail.com

Dr. Purushottam Arvind Petare

Head School of Commerce at Faculty of Commerce and Management, Sanjay Ghodawat University, Kolhapur, Maharashtra, India
purudeeps@gmail.com

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ABSTRACT

The role of banks in modern economies is ubiquitous. The health of a country's banking system is crucial to the expansion and development of its economy. In order to achieve a wide range of investment goals, the public's savings need to be mobilized and made available via a reliable banking system. In this context, financial institutions are seen as the backbones of the

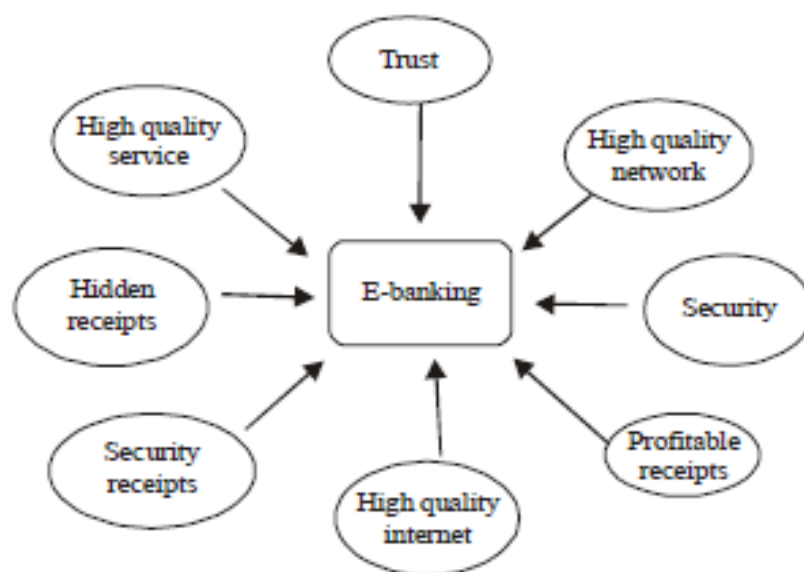
country's economic growth and prosperity. These monetary operations form the backbone of today's global economy. Every single corner of the country now has access to banking services. When it comes to a country's economic development, banks are a key facilitator. Similarly, banking has developed into an integral aspect of most people's life. There is no way to sustain a human life without banks and other forms of financial activity. India has both an organized and disorganized banking system. The aims of the current investigation are as follows: to outline the development of e-banking in India, to assess Level of Customer Satisfaction e- Banking and to understand customer perceptions of e-banking services. Convenience sampling was used to choose 200 participants to assess the relationship between E-Banking performance and customer satisfaction as a mediator. Using Google forms, we were able to gather information from a representative sample of the population. Banks may better meet the needs of their clients and save time and effort by embracing technological advancements. Banking in India has been revolutionized by the rise of digital technologies.

Keywords: E-Banking, Customer Satisfaction, Banking digital technologies

INTRODUCTION

An emerging kind of electronic banking, "online banking" encompasses any service that lets users manage their money without physically visiting a bank branch. (a) a sizable portion of India's urban population works in the IT sector, guaranteeing access to the Internet 24/7, and (b) more Indians participate in international professional initiatives than citizens of other industrialized nations. Numerous stakeholders in India have pushed for the introduction of electronic banking. The great majority of Indian banks have recently implemented user-friendly, very strong online banking services to protect their consumers against online fraudulent behaviour. *Usman et al. (2020)[25]*. Because of its ease and time-saving characteristics, the Internet has become the preferred method of doing financial and banking operations for the vast majority of Indian Internet users. Unfortunately, unwary customers using internet banking are susceptible to fraud. The Reserve Bank of India (RBI) suggests using two-factor authentication to provide a consistent degree of safety. Online banking serves two main purposes for private and governmental financial institutions. Banks now provide a far broader selection of services because to advancements in information technology, which have revolutionized the industry overall. The traditional "Brick and Mortar" banking model is giving way to "click and portal" banking. Consequently, it has raised consumers' standards. PSBs may lack the adaptability of Indian private sector banks and foreign banks operating in India, both in terms of overall functioning styles, surroundings, and responsiveness to new circumstances. Actually, PSBs need a whole new set of abilities for competing in the future in the face of new competitive challenges, inherent rigidities to boost their overall efficiency. Customers' attitudes around

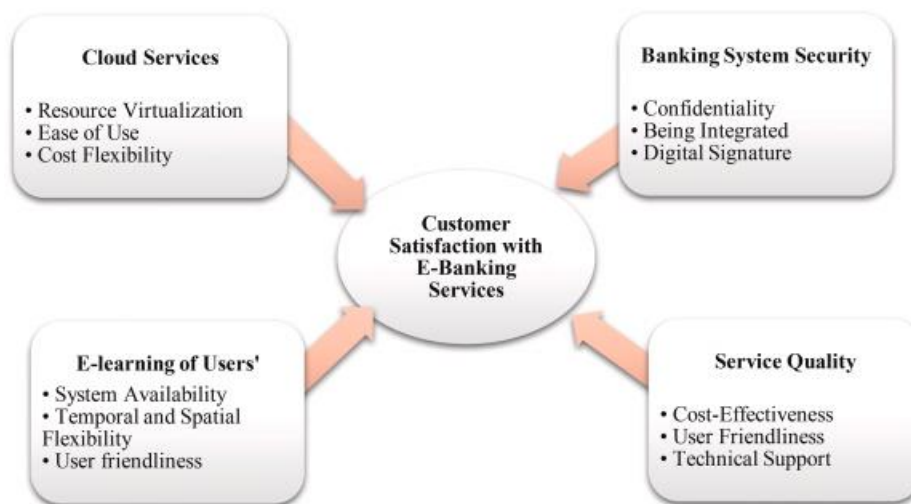
banking have undergone profound shifts as a result of the widespread deployment of IT by numerous financial institutions. Therefore, PSBs need to constantly evaluate how their customers feel about the different e-banking services they provide, the customers' changing and developing expectations, and the best ways to meet those needs. This calls for a persistent examination of consumer tastes.. *Rabia Najaf, Khakan Najaf (2014)*[26] the introduction of online banking has had a profound impact on Pakistan's financial sector. This research uses primary data to demonstrate the potential for E banking in low- and middle-income nations because to its low cost and time savings. Customers' opinions on electronic banking services were gleaned from the raw data. The study also aimed to analyse the effectiveness and impact of electronic banking in Pakistan. Technology now has an effect on everyone's daily lives. Electronic banking is becoming more common, not only in Pakistan but all across the world. The discussed what they found on the impact of strategic initiatives on IT and the function of risk aversion. The results of the research show that consumers may log in from anywhere with an internet connection. It was also found that over 90% of Pakistanis made use of e-banking. *Parasuraman (2002)*. [23].



Customers' Satisfaction towards Adoption of Technology E-banking

The financial sector is experiencing unprecedented rates of change. Since millions of people still do not use a bank, and two groups exist: those who bank the old fashioned manner, and those who are comfortable with ATMs, online banking, and cashless economies, the industry has tremendous growth potential. The expansion of the Indian economy, the rise of the number of banks, the expansion of the money supply, and the reduction of interest rates offered by the government are all positive developments for the country's banking sector. The Indian consumer

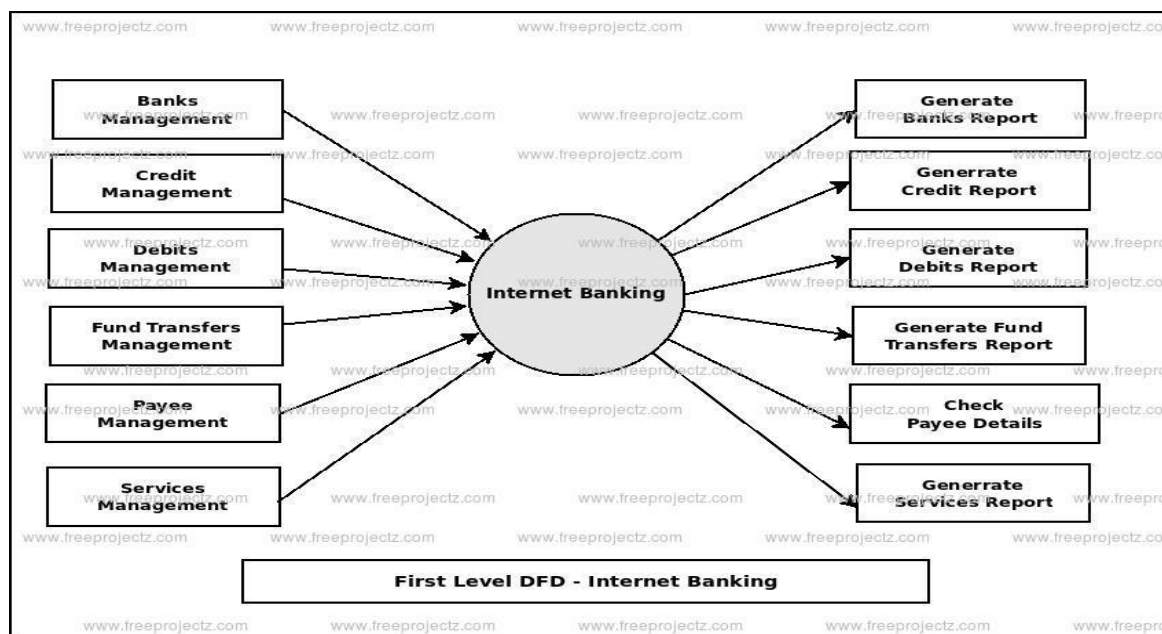
market is another major potential for the Indian banking sector. *Nagar and Ghai, (2019) [22]* Changes in consumer demographics, such as income and education levels, cultural norms, and desired lifestyle features, have been occurring for some time. The need for cutting-edge financial services that can compete in this new environment has grown as a result of this shift. Housing loans, credit cards, vehicle loans, long-term investments for children's higher education, retirement pension plans, life insurance policies, and soon have all found a place in the market in recent years. Banks in India's private sector and those from outside have turned the difficulty of penetrating the country's rural areas into an opportunity by merging with local institutions. For instance, ICICI Bank Ltd. combined with Bank of Rajasthan Ltd. to expand into the rural market and get a larger market share. *Usman et al. (2020)[25]*. Transaction times have been cut down thanks to electronic transfers, clearings, and settlements, and there is always room for improvement in these areas. The banking sector has to take advantage of mobile banking as a result of technological advancements. When it comes to reaching new consumers and up selling current ones, M-Banking provides banks with an extra avenue to do so. They may use m-banking to their advantage by tailoring their goods and services to each individual consumer, therefore boosting retention rates and opening themselves up to new income streams via things like subscriptions, in-app purchases, and word-of-mouth advertising. *Nagar and Ghai, (2019) [22]*



Electronic Banking in Indian Banking Sector: An Overview

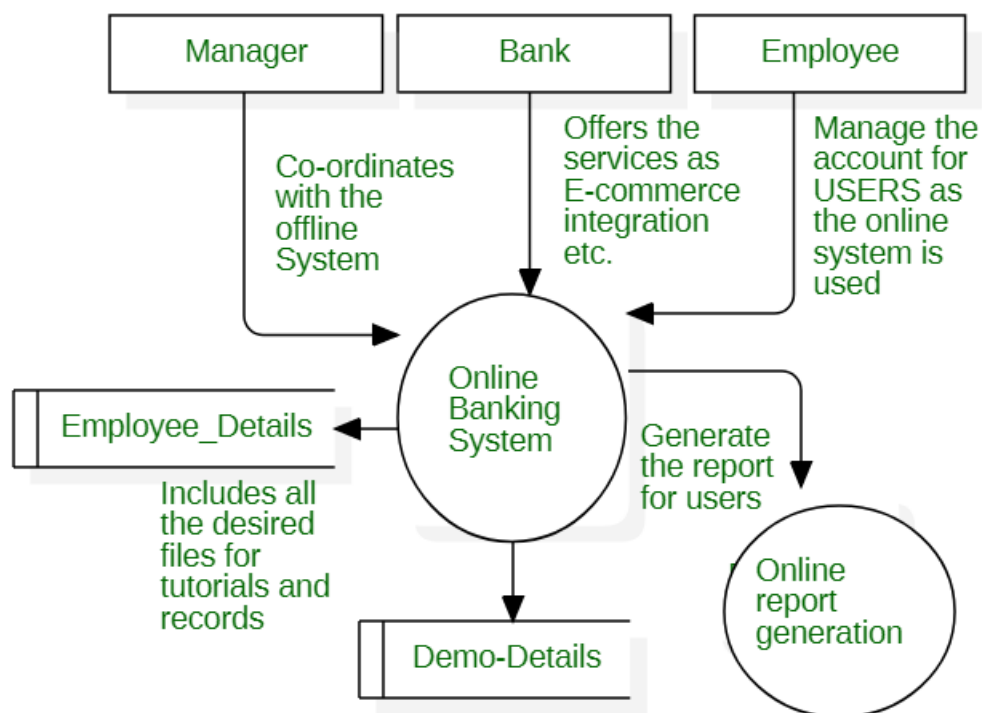
Faster service delivery solutions for financial goods may be made available to a wider audience if they were disseminated through digital means. In light of what has been said by . Most individuals who switch to internet banking do so because they have a recurring need to pay bills and would rather not deal with paper checks. Customers may keep tabs on their accounts; verify the authenticity of payments made by others, and so on with the help of internet banking. It also allows users the convenience of doing financial transactions online from any place. Due to

the increased availability of computer resources, many formerly in-person financial transactions may now be completed digitally. This has resulted in significant cost savings and time reductions.", *Money and Ezechirinum Leslie (2020)*, [20] Because of this shift, financial institutions may now store more data; save expenses, and improve the quality of their customer service. Customers may enjoy several benefits, including as minimal transaction costs and the ability to bank whenever and wherever it is most convenient for them. Online banking mostly helps banks since it makes them more competitive. Gains in customer loyalty and happiness, market share, and operational efficiency are only the beginning for these companies. *Khalfan et al., (2006)*. [12] Global financial institutions compete fiercely to provide their consumers the best possible online banking experience. This is done to ensure that all of their customers are happy with the services they have received. More and more customers are choosing to do their financial business electronically as e-banking becomes more widespread and a larger variety of interfaces becomes accessible. This is because there is an increasing variety of an interface via which one may access online banking services. *Nagar and Ghai, (2019)* [22] It's anticipated that the present trend will keep on for the foreseeable future. Banks that have chosen to keep large branch networks despite rising online competition are altering the duties of their branch personnel in anticipation of a cultural change toward a greater emphasis on personal relationships with customers. As the number of identical websites on the web grows, several measures are taken to keep up with the competition.



Progress of E-Banking

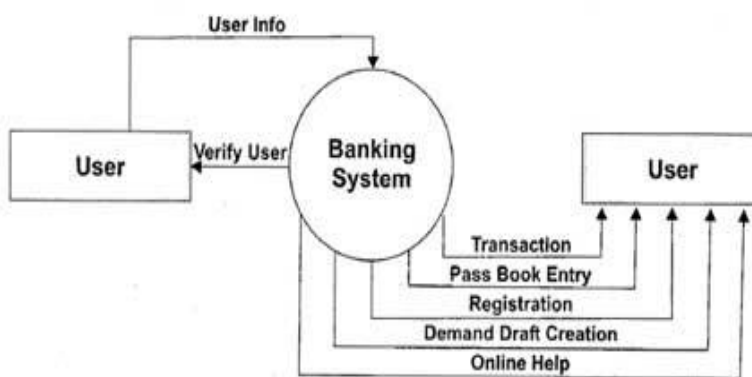
The same services are offered under both "virtual banking" and "Internet banking." It goes under many other names, including online banking, e-banking, virtual banking, etc. One possible synonym for "internet banking" is "Virtual banking," albeit this varies from person to person. Customers who want to utilize online banking services must first create an account with their financial institution and a password. With this data, we can confirm that the customer is a genuine user of the service. The need of a separate password for telephone banking from online banking is unusual. Financial institutions commonly issue client numbers, often known by various names. *Nagar and Ghai, (2019) [22]* The customers aren't showing any enthusiasm for the company's online banking solution makes no difference. The terms "customer number" and "account number" are usually not interchangeable. Since the same customer identification number may be used for several accounts belonging to different customers, this is the case. The customer's Social Security number will also not be linked to any debit or credit cards issued by the bank. This safety precaution is being taken for the sake of avoiding identity theft. For internet banking to work, a consumer must enter the bank's secure website. *Alkhowaiter, (2019)[4]* When they arrived there, they'd need to log into the online banking system using their customer number and password. While some financial institutions have taken precautions to ensure the security of online banking, the approach chosen by the many different kinds of financial institutions is sometimes uneven.



4 . Online Banking System

When the first ATM was introduced in Finland, it ushered in a new era in banking and quickly propelled the nation to the forefront of electronic banking (E-Banking) far ahead of its counterparts in the rest of the developed and developing world. Due to advancements in information technology and increased rivalry among financial institutions, "E-Banking," the delivery of financial services through electronic platforms, has lately gained popularity among consumers. *Lustsik (2004)*, [17] electronic banking (E-Banking) services include using the Internet, telephone, television, mobile, and computer to conduct financial transactions. As banking clients' access to and use of new technologies increases, so too do their wants and expectations in terms of service. The modern customer expects to be able to conduct all of his or her banking transactions without ever having to physically visit a branch, at any time that is

convenient for him or her rather than being restricted by the bank's business hours, and with the utmost efficiency and minimal outlay of time and money. Therefore, the quality of financial services should exhibit characteristics like autonomy, adaptability, freedom, and flexibility in order to satisfy these needs. *Gupta (2008)[10]* attempted to analyze the perception regarding e-banking. The survey found that security, confusion, and a lack of understanding are the three biggest problems facing the banking sector. Factor analysis and other statistical methods were used to examine the data. The author argues that the banking industry has made measures to inspire trust and encourage people to embrace online banking. By raising public knowledge regarding online and computer banking, banks might potentially enhance their current services in rural regions. The bank needs to be forthright about the modifications necessary for e-banking services

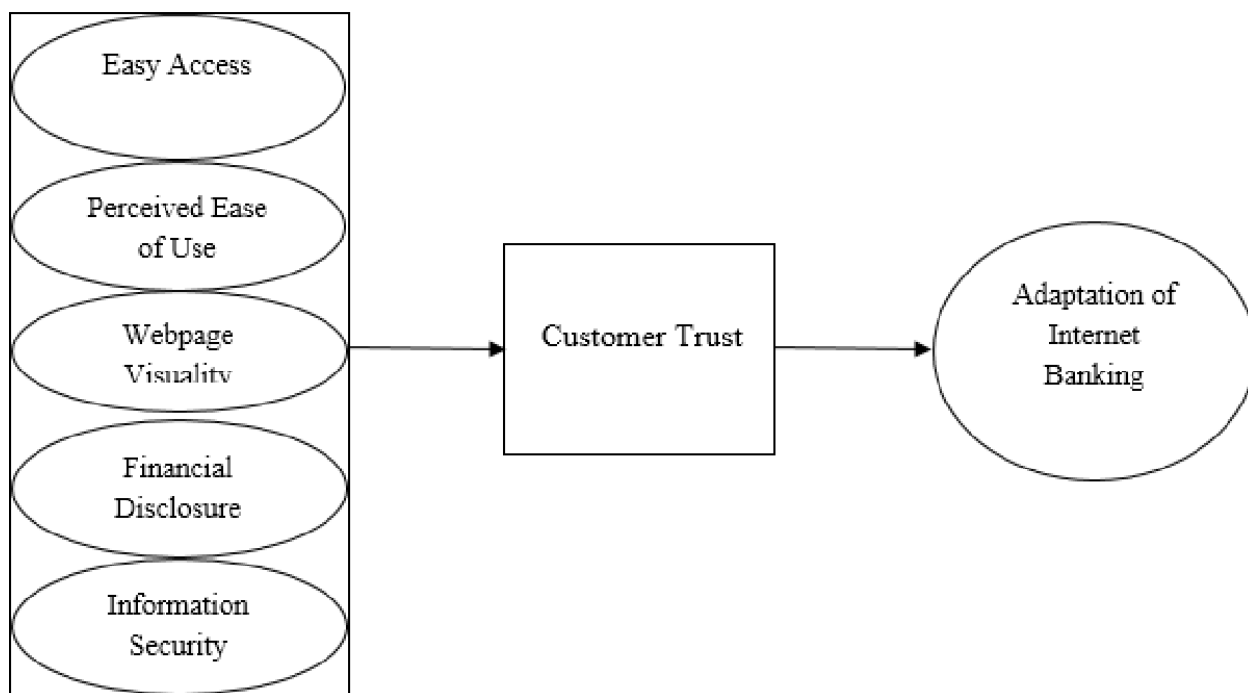


Level 0 DFD of a Banking System

E-Banking and the Mediating Effect of Customer Satisfaction

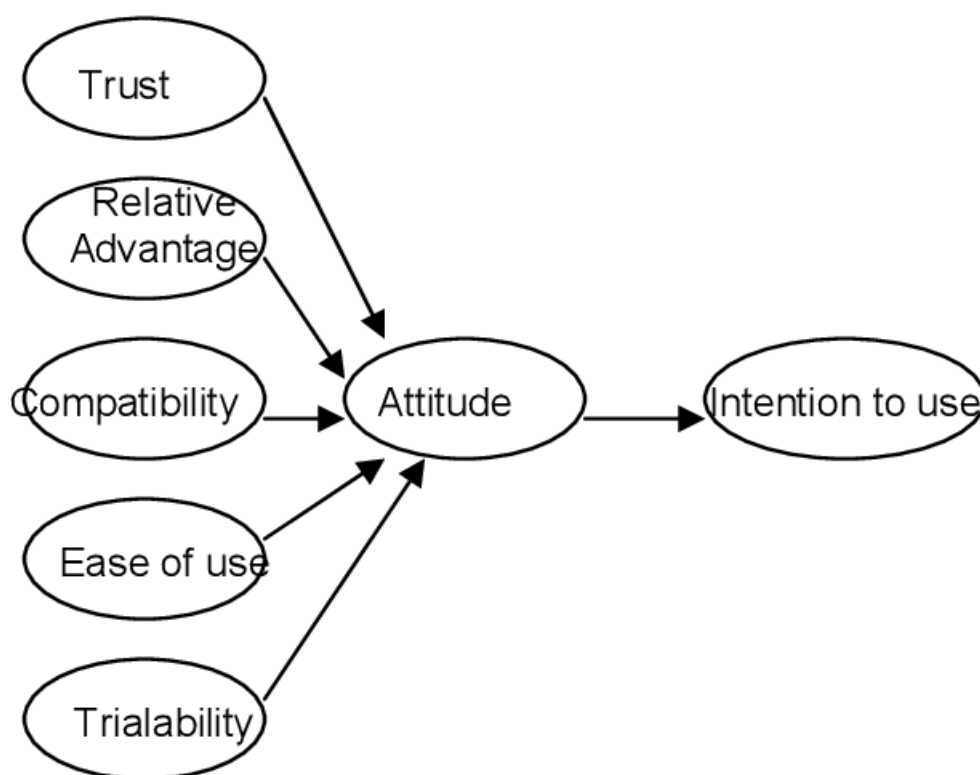
One of the most essential topics in modern marketing research is the idea of customer satisfaction. In a broad sense, it connects activities leading up to a purchase with after-the-fact events including opinion shifts, further purchases, and brand loyalty. The concept of "consumer satisfaction" has been variously defined. However, it appears that all of these definitions share the idea that actual product or service performance is compared to the consumer's prior conceptions. The term "satisfaction" described the subjective evaluation one makes after using a product or service. The author argued that "consumer reaction to the appraisal of the apparent gap between expectations and ultimate outcome after consumption" best captured the essence of customer satisfaction. Customer feedback on the quality of a service or product after purchase, as contrasted with the customer's expectations before purchase, is another definition of satisfaction (*Kotler & Keller, 2011*). However, some researchers have shown that the influence exercised throughout the buying and using stages of the product or service may also have a significant

effect on the customer's assessments of happiness. In this way, customer satisfaction may be defined as the response of a buyer to the performance of a product or service in comparison to his or her expectations. Customer satisfaction may be thought of as the outlook the consumer takes after utilizing any kind of E-Banking services. This is true not just of first-world nations, but also of many third-world ones, since modern banking cannot exist without some type of electronic data storage and processing. Providing excellent customer service is crucial to the success of any service business in today's cutthroat market. *Alkhowaiter, (2019)[4]* The banking sector's service quality is crucial, since it directly affects their bottom line and hence their capacity to stay in business.



The banking business is continually evolving as a result of globalization and the spread of information technology. The advent of modern communication technologies has resulted in profound shifts in both the means of delivery and the nature of financial services themselves. Changes in retail banking's product lineup and distribution methods are a direct result of technological advancements. Businesses can't afford to provide subpar customer service, and technology is a key factor in ensuring customer satisfaction. Internet technology is often seen as the third wave of revolution, after the agricultural and industrial revolutions, since it was instrumental in bringing about an information revolution in society. Information systems professionals have often considered their work as supporting other departments. *Keller & Lehmann, 2006*). As the price of IT has dropped and computer processing speeds and power have increased, however, the information system's traditional function as a back-office support

application has given way to chances for major competitive advantage. When it comes to e-banking, it's all about making the most of the digital age's infrastructure to open doors at home and abroad. The advent and widespread use of the internet by businesses have made the world a more unified and interconnected community, where barriers of time, space, and communication no longer exist. There are many external and internal variables that affect banks to examine their technology and analyze their electronic commerce and internet banking strategies, and the financial industry is no exception. The widespread use of e-banking has improved the efficiency and friendliness of monetary transactions throughout the world. Financial institutions have been able to provide more services to their customers at lower transaction costs as a result. In 2005-06, only 48.5% of India's public sector banks were computerized; by 2009-10, over 100% had made the transition. Not only has e-banking made financial transactions faster, it has also decreased geographical boundaries, making their firm truly worldwide. In today's highly competitive banking industry, e-banking has emerged as a valuable "value added" tool for attracting and retaining new clients while reducing operational expenses like paper processing and teller contacts. More and more financial institutions see the availability of electronic banking as a need rather than a perk. In the end, e-banking helps save money and boosts productivity in the banking industry.



Statement of the Problem

Liberalization of financial services and technological advancements have had a profound effect on the banking industry, which has experienced a period of profound change. *Alkhowaiter, (2019)[4]* Transition from a highly regulated to a highly competitive market environment has occurred in the banking sector. Public sector banks have been met with several challenges as they have sought to react to the need to expand swiftly in a highly competitive and dynamic market, including a focus on transparency, the streamlining of operations, and the development of relevant human capabilities. Transitioning to Internet banking and other IT-based technologies is the most challenging job confronting public sector financial institutions today. The lack of familiarity with internet banking is a significant obstacle to its wider use. *Money and Ezechirinum Leslie (2020),[20]* To protect customers, the government has not yet established a complete set of cyber rules and a legal framework for e-banking. The slow computerization of banking procedures and the low density of telephone lines are two further challenges for e-banking in India. Financial institutions can only provide cutting-edge services like online banking if they are located in big metropolitan areas. A large portion of the rural population has not benefited. Despite the fact that technological advancements have made banking more convenient and efficient than ever before, banks nevertheless have a civic duty to guarantee that their customers are able to fully take advantage of the opportunities presented by these innovations. Foreign and private banks are more prevalent when it comes to technologically-based services like wire transfers, online bill payments, account openings, clearings, demats, and online trading. However, the public sector lags behind the private sector in offering convenient online banking to its customers. *Parasuraman (2002).[23]*

Research objectives

The aims of the current investigation are as follows:

1. To outline the development of e-banking in India.
2. To assess Level of Customer Satisfaction e- Banking.
3. To understand customer perceptions of e-banking services

Research Methodology

Convenience sampling was used to choose 200 participants to assess the relationship between E-Banking performance and customer satisfaction as a mediator. Using Google forms, we were able to gather information from a representative sample of the population.

Analysis, Inference and Result

The prime objective of this research is to analyze the customer's perception on various services offered by banks. In order to find the utilization of various services by the sample respondents, a thorough knowledge of customer profile is necessary. The research is focused

customer's perception about ATM, Internet Banking, Credit card and Mobile banking and the motivating factors that drive consumers. The study focuses on how consumers have accepted e-banking and the ways to improve the usage rate.

Table `1

Level of Customer Satisfaction e- Banking

Particulars	Mean	Std.Deviation	Mean Rank
Diversity of services provided by e-banking	2.92	1.189	4.58
Transaction fee of e-banking is cheap	2.98	1.446	4.97
Lack of advertising about e-banking	3.06	1.171	4.84
Bank provides e-banking help-desk	3.26	1.136	5.32
Internet banking is safer and more secure	3.27	1.129	6.49
Easily acquires information on products and services through e-banking	3.31	1.154	5.56
Internet banking helps to transfer of funds & making payments	3.46	1.128	6.21
Internet banking helps to review accounts balances easily	3.50	1.305	6.09
e Programs /campaigns increase user's awareness	3.53	1.356	6.07
Rules and statutory regulation on e-banking is effective	3.57	1.032	6.01

Source: Primary Data

The customer believed that internet banking help to "Safer and more secure" at the highest ranking with a mean of 6.49. It is followed by Internet banking helps to transfer of funds & making payments with mean score of 6.21. Internet banking review account balances and easily gets rank three with a mean score 6.09. The result of the significance in the ranking is given below.

Table 2: Friedman Test

N	200
Chi-Square	89.581
Df	9
Sig.	0.000

The Friedman ranking shows that the calculated value of the Chi-Square (89.581) for the degree of freedom 9 is significant at 1% level ($p=0.000$). It is concluded Internet Banking is more effective by customer.

CONCLUSION

Banks and other financial institutions are crucial to the expansion and diversification of every economy. There are many service industries in today's society, but none of them would be able to exist without banking. *Alkhowaiter, (2019)[4]*. The integrity with which banking rules are enforced and the financial system is constituted is crucial to their ability to support a development process. Since globalization's inception, several international banks have entered the Indian market. The private banking industry in India is regulated by the competitive services it can provide, but the existence of public sector banks is unavoidable. Customers' happiness is the bedrock of a successful retail banking institution. *Nagar and Ghai, (2019) [22]*. Banks may better meet the needs of their clients and save time and effort by embracing technological advancements. Banking in India has been revolutionized by the rise of digital technologies

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