

**THE IMPACT OF CYBER SECURITY ON E-BANKING SERVICES****\*Dr.B.Girimurugan, \*\*Dr.B.Ragul Gandhi, \*\* Arunsiva. R**

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**DOI : 10.48047/IJFANS/V11/Splis5/28****ABSTRACT**

The current world is all about getting everything at hand in a fraction of a second through the biggest medium of the internet. The banking services are the most important type of services for the services sector. Cybercrime is a major trouble in this international and normally all banking corporations rely upon the internet. Cyber-attacks have come to be a smooth alternative for cybercriminals to get right of entry to other confidential statistics thru the net, normally hackers are targeting client's records and budget, in addition to the bank's center structures. These cyber-assaults are typically carried out by using malware and phishing. When technology over internet is applied to the banking services are known as e-banking services. With the invent of recent generation, electronic way of banking reduces charges by way of the usage of offering clients with some other way of getting access to their payments without bodily travelling a financial institution. The Indian economic system has the banking device divided into public region banks and private banks. There is continually a thin of distinction in the availability and utilization of offerings for the public and private banks. This paper is an endeavour to take into count the comparison between the two opposite side of e-banking services through a detailed expert opinion and a detailed analysis through ANOVA followed by some suggestions and conclusion.

**Keywords**

Cyber security, cyber crime, E-Banking, Public, Private

## 1.INTRODUCTION

Banking is one of the major components of the financial institutions in any country irrespective it being developed and developing. When the discussion becomes specific about India it literally becomes the pillars for the financial system of the country. Also, it is that section of the service sector where customer satisfaction is very crucial as the people in the nation invest their trust and priorities in the banks since times immemorial. Coming to the structure Government sector banks started their life with the Imperial financial institution of India which became converted into the existing State Bank of India in the year 1955 accompanied through the setup of its seven subsidiary banks. Later, the nationalization of 14 commercial banks was taken place in the year of 1969, and July 19. The method was given finished with similarly nationalization

Private region banks are those which might be owned and managed by way of private gamers. Seeing that then, the style of public area banks is developing at the identical time as the ones of private region banks are lowering.

Cybercrime is one of the international's most distinguished and most involved forms of crime. The internet is in spite of everything, available to each person and that of course consists of dangers. It is risky to dedicate a crime the use of a gadget or different machine connected to the web and the identification of the suspect is tough to figure out. From phishing and funding fraud to ID theft and extortion, cybercrime can take numerous bureaucracy. Cybercriminals are targeting banks due to the fact their information is greater precious, generally cybercriminals reap their consumer information from social networks like Face book. The foremost aim of the assaults is to take over the consumer's financial institution bills and budget in such a way the attacker occupies the finances without proper expertise of the consumer. Some of the approaches to take manipulate of the consumer's account are defined in the subsequent phase

Electronic banking is the inculcation of technology into the banking services. because of the ton of benefits offered by the system such as reduced cost of processing the transaction, reduced time and better efficiency in the services which as a result ensures a better and enhanced banker-customer association. Through the E-banking gadget, banks are extending their client base with the assistance of various e-delivery mediums like ATMs, credit score/debit playing cards, net banking, telephone banking, EFTs and so forth. E-

banking is being supplied many banking establishments for you to continue to exist the global competitions, in case of delay in imparting transactions-primarily based offerings over internet; they'll lose their marketplace percentage. E-banking is all approximately enabling the customers to get entry to their bank bills at the easy attain of a personal pc and an efficient net provider.

But there constantly exists a distinction in how the services are furnished via the banks to the clients. They're constantly pertains a skinny line of distinction in how the public region banks use those services in addition to offer them their clients while in comparison to the personal region banks. The layman opinion always states that the authorities run establishments and banks lay a long way behind the private zone banks or institutions with regards to era and automation.

## 2.OBJECTIVES OF STUDY

1. Ascertain the actual meaning of E-banking and its importance to the banking sector.
2. Validate a proper comparison between the private and public sector banks with respect to the e-banking services being availed.
3. Understand the benefits of E-banking services and customers perception for the benefit.
4. Recommend possible recommendations to patch up the differences in delivery of e-banking services between the public and private sector banks.

### 2.1REVIEW OF LITERATURE

Cox, D. F. (2007) The financial institutions of the country especially banks act as the core to the saving and investment situation of the country. As the two main functions of any bank is accepting deposits and lending loans. The banking system in India is divided into public and private sector banks. With the growing populace and demand for the banking operations mechanization and automation of the banking activities is the need of the hour here comes the role and importance of E-banking services. But the services exhibit a different effect. The same is being exercised in the present section. Expert opinions on the services are highlighted and discussed in length by the author.

Puja okay and Yukti A expressed that Private Banks have more happy customers because of accurate offerings. Private area banks are properly maintaining degree of amount

of its clients via supplying better banking services whilst in comparison to the Public banks. In any economy, revolutionary technology and converting expectancies of markets, attention of outstanding of each and each company is important to decorate clients' satisfaction stage.

Gill HS, Arora S., (2013) observed that the personal banks are advanced technologically but the opposite state of affairs prevails inside the public area banks located from their assessment that that customer pleasure in banks range in step with the nice of offerings.

Jeucken M(2015)Nominal expenses of offerings, area of bank branches and employees mindset within the route of fixing issues of customers are the factors chargeable for maximum consumer's pride. Private financial institution clients are happier with their economic organization due to their multiple branches at on hand places and technological centres.

Dixit, Neha and S. K. Datta (2010) investigated the elements affecting the factors of e banking. In which attention to customers and the banking process has explained in Indian context. Online banking has explained the reality of banking and training and guidance to the audience from the group that belongs too.

R. Srinivasan & Krishnamoorthy, V. (2013) kingdom that it has always been a venture for the banks to retain their current clients.

Sharma, N. (2011) Financial institutions like the banks need to work out techniques for his or her long-time period survival and sustenance; including making a few modifications and modifications as consistent with the requests and goals of the customers or as an alternative they should instigate strong belief and dating with the existing customers.

Dr. Payal Bassi and Inder Pal Singh, (2017) explained that, to fulfil the want of the clients, each personal and public zone banks offer several net offerings to their clients.

Kumbhar and Vijay (2011), evaluated the affiliation amid the demographics & patron's delight in net banking. It additionally discovered out dating between provider exceptional and consumer's pride further to delight in net banking provider provided with the aid of the general public zone financial institution and private sector banks. The take a look at placed out that standard pride of personnel, businessmen and experts.

Bhardwaj (2013) explained that “... an strive through the banks to make the industries expand green and inside the device restores the natural environment.”

Blanas (2011) delivered a cause of the relationship maximum of the numerous organizational obligations (consisting of HR, advertising, inner aid control) to reap sustainability within the offerings the banks are providing.

## 2.2 RESEARCH SCOPE

The present study is useful since it helps to understand the detailed comparison between the General and the privatized banks in terms of their ability to deliver services to the customers through electronic banking as a medium. It helps to understand where the banks lack and where they succeed over the other in comparison. Hence the study provides great scope for further studies

## 2.3 RESEARCH METHODOLOGY

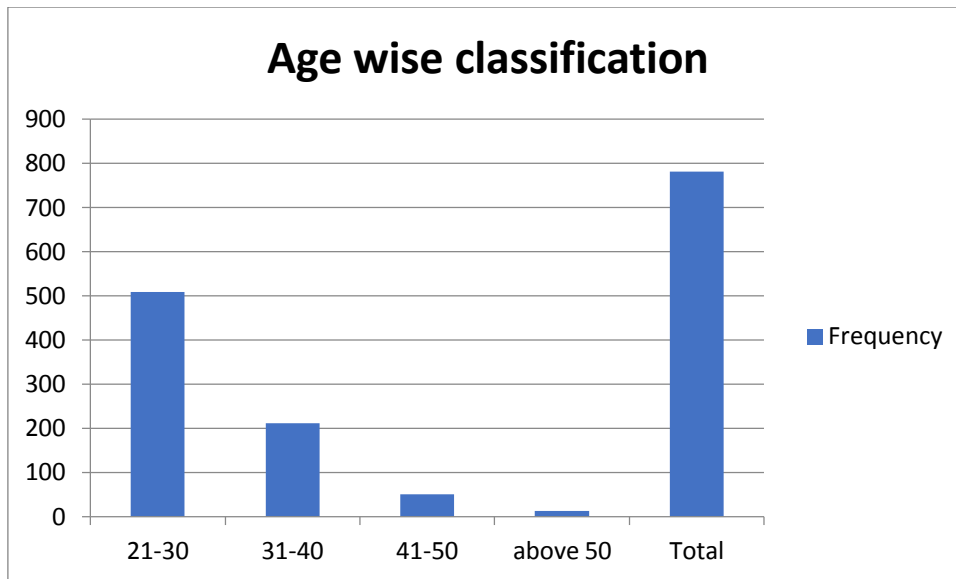
For the purpose of the study five nationalised banks and five private sector banks were selected. 782 respondents were selected as a sample size from the defined population. This study is a descriptive research and the data were collected on a probability sampling basis.

## 2.4 ANALYSIS AND INTERPRETATION

### DEMOGRAPHIC PROFILE OF THE RESPONDENTS

#### Classification of the respondents based on the age

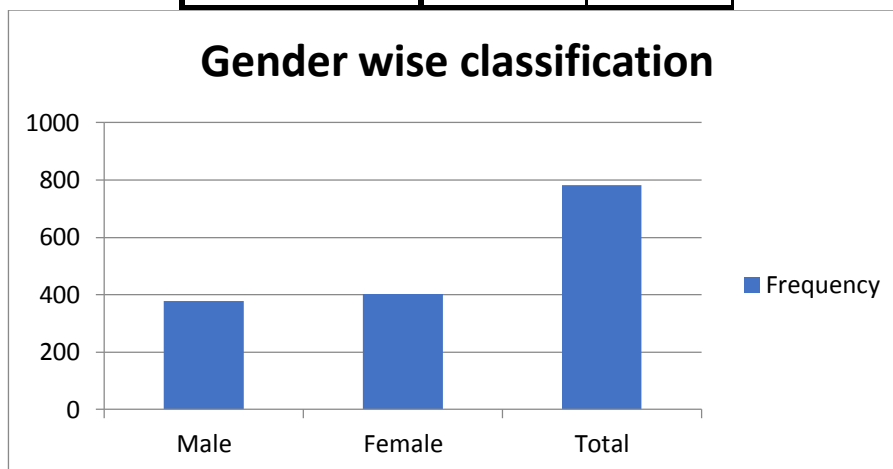
Age	Frequency	Percent
21-30	509	65.1
31-40	211	27.0
41-50	50	6.4
above 50	12	1.5
Total	782	100.0



Above table and the chart related to the Age wise Classification of the respondents, Majority 65.10% of the respondents belongs to the age category of 21-30, 27% of the respondents belong to the age category of 31-40, remaining respondents' lies in the category of 41-50 and above 50years.

**Classification of the respondents based on the Gender**

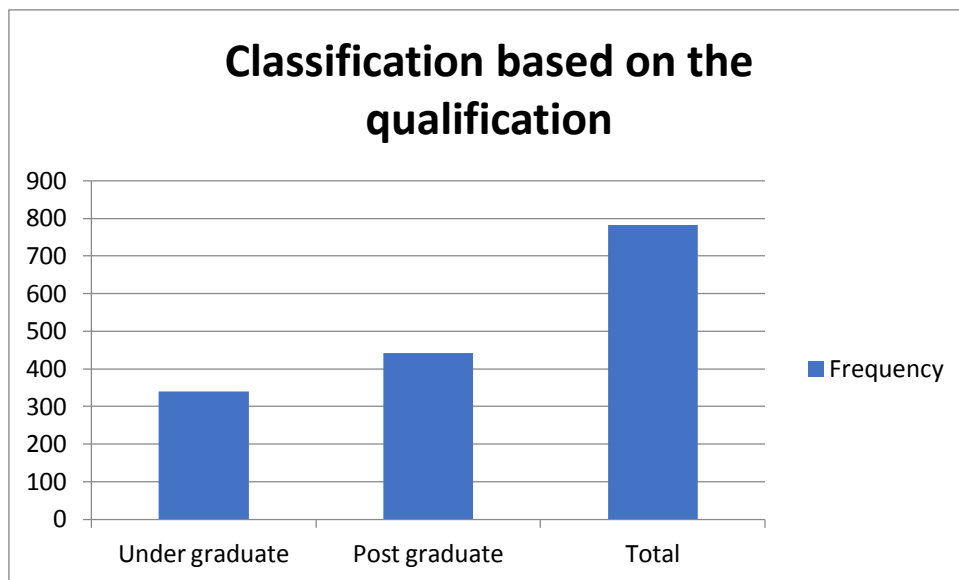
Gender	Frequency	Percent
Male	379	48.5
Female	403	51.5
Total	782	100.0



Above table and the chart related to the classification of respondents based on their gender, Majority 51.5% of the respondents were Female and 48.5% of the respondents were belongs to the category of Male.

#### Classification respondents based on the qualification

Qualification	Frequency	Percent
Under graduate	340	43.48
Post graduate	442	56.52
Total	782	100.0



Above table and the chart related to the Educational Qualifications of the respondents, Majority 56.52% of the respondents were qualified as Post Graduate and 43.48% of the respondents were Undergraduates.

#### ANOVA – PUBLIC SECTOR BANKS WITH E- BANKING SERVICES

*Null Hypothesis:* There is no significant effect of the public sector banks with e-banking services

Statements	F value	P Value	Hypothesis
Providing better qualities of service	0.696	0.036	H1 accepted
Expanding branch network	0.546	0.027	H1 accepted

Empowered with better access to information	2.213	0.000	H1 accepted
Not necessary to visit the banks	1.257	0.048	H1 accepted
Minimal error of incidence	0.274	0.000	H1 accepted
More benefits and rewards	0.847	0.008	H1 accepted
Speed and efficiency	1.394	0.024	H1 accepted
Security	3.705	0.036	H1 accepted

The above table shows that p value is less than 0.05; hence null hypothesis is rejected. It concluded that there is a significant effect of the public sector banks with e-banking services

#### ANOVA – PRIVATE SECTOR BANKS WITH E- BANKING SERVICES

*Null Hypothesis:* There is no significant effect of the private sector banks with e-banking services

Statements	F value	P Value	Hypothesis
Providing better qualities of service	6.160	0.023	H1 accepted
Expanding branch network	4.116	0.041	H1 accepted
Empowered with better access to information	3.259	0.021	H1 accepted
Not necessary to visit the banks	2.679	0.046	H1 accepted
Minimal error of incidence	7.942	0.038	H1 accepted
More benefits and rewards	6.160	0.032	H1 accepted
Speed and efficiency	4.116	0.007	H1 accepted
Security	3.259	0.021	H1 accepted

The above table shows that p value is less than 0.05; hence null hypothesis is rejected. It concluded that there is a significant effect of the private sector banks with e-banking services.

#### 2.5 FINDINGS OF THE STUDY



- Majority 65.10% of the respondents belongs to the age category of 21-30, 27% of the respondents belong to the age category of 31-40, remaining respondents' lies in the category of 41-50 and above 50years.
- Majority 51.5% of the respondents were Female and 48.5% of the respondents were belongs to the category of Male.
- Majority 56.52% of the respondents were qualified as Post Graduate and 43.48% of the respondents were Undergraduates.
- Factors included for the study is to be Providing better qualities of service, Expanding branch network, Empowered with better access to information, Not necessary to visit the banks , Minimal error of incidence , More benefits and rewards, Speed and efficiency and Security
- Findings for the public sector banks denoted that there is a positive effect of the public sector banks with e-banking services
- Findings for the private banks denoted that there is a significant effect of the private sector banks with e-banking services

## 2.6 SUGGESTIONS

1. Customers happen to pick out the non-public area banks over public area banks because of choice and attention that the non-public sector banks pay over the customers in comparison. This element has to be blanketed up by the general public area banks.
2. The public region banks need to make certain that their offerings are competitive and additionally guarantee that the privacy and protection troubles of clients are well addressed.
3. Customers of the public sector banks are most often no longer aware of the benefits of e-banking services which are present within the current instances the understanding of same must be provided by means of the general public banks through messages mails and packages that encourage them to avail the advantages of e-banking offerings.
4. Ease of use issue ought to be acknowledged to the customers of public sector banks like its miles finished inside the private region banks.
5. The customers need to be attracted toward the brand new updates within the e-banking services via attractive offerings and schemes.

### 3.CONCLUSION

In the modern study the researcher tries to make a comparative analysis between the non-public and public region banks in recognize of ways the e-banking services are availed. Through the findings the researcher can mark up a listing of benefits gathered thru the e-banking services. Despite the advantages there nonetheless exists distinction in how the e-banking offerings. Efforts need to be exercised with the aid of the banks in influencing and directing the customer opinion which is likewise identified in the have a look at. Possible recommendations to work out the same have been mentioned in duration. Finally, human beings must be privy to their credentials and ensure that it isn't always misused; precise efforts need to be made by using way of banks to spread focus and make sure that the clients do no longer fall prey to the scams. These measures can growth cyber protection inside the banking zone

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