

# E- BANKING AND FINANCIAL PERFORMANCE OF PUBLIC SECTOR BANKS IN INDIA

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**ABSTRACT:** Banking sector has become highly competitive due to the changes in bank's external environment including globalization and de-regulation. Banks' find it hard to compete on price and requires looking at different ways to retain customers. As customers have become more knowledgeable, it becomes vitally important for banks to contemplate the use of technology to respond to the constant changing requirements. But current scenario, in India shows that the pace at which technology in e-banking is growing doesn't match with the customer usage rate, even after the banks are more interested in adopting new technology. In today's technological world, customers expect instant solutions for everything including banking activities for a simplified life. Banking industry in India are deploying the information technology and developing the service quality for the customers on a large extent. To overcome the competition and retain their customers, banks need to focus on their E-Banking facilities. This study is based on the secondary data collected from the annual reports of the banks and reports of Reserve Bank of India on the selected banks. The banks under study are State owned bank-State Bank of India and Public sector bank - Canara bank. The data under study is considered for 5 financial years starting 2013 -2014 to 2017 - 2018. Data is analysed using SSPS Version 25 with the use of correlation analysis for dependent variables. The study finally concludes that there exist a positive relationship between introduction of e-banking and financial performance

**Keywords:** E-Banking, Financial performance, Public sector banks, Annual reports

## INTRODUCTION

Electronic banking, which is also termed as online banking is a system through which electronic payments can be made by the customers of banks or any other financial institution through their websites. This system is connected and a part of the core banking system which is operated by the banks and is different from branch banking, which was the conventional way customers, accessed the banking services.

Banks always have been in the forefront of controlling and improving technology to improve their services, products and also efficiency. They have been using electronic media and telecommunication networks for delivering plenty of value added products and services for eternity now. The channels through which the services are provided or delivered include, direct dial-up connection, private networks and public networks, etc and the devices used are telephones, personal computers which includes the automated teller machines, etc. With the recognition and commonness of PCs, access to Internet and World Wide Web (WWW), banks have started using internet extensively as a channel for delivering their products and services to their customers as per the received instructions. The above mentioned form of banking is referred to as Internet/Online Banking, in spite of the fact that different banks offer different range of products and services which vary in their content as well as sophistication.

The levels of banking service (offered through internet) can be broadly categorised into three type's i.e.

- (i)The basic level service is the Banks' Websites; which has to circulate information on various products and services provided to customers and people in general. It might also respond to customers' queries on receiving through e-mails.
- (ii)The next level is Simple Transactional Websites; it lets the customers give in their applications for services, instructions based on it, and also queries of their balances, etc, but cannot authorize any fund-based transactions on their account.
- (iii)The third level being the Fully Transactional Websites; allows the customers to work on their accounts for fund transfers, payment of various bills, subscribe to products offered by banks and deal with the buying and selling of securities/stocks, etc.

## FINANCIAL PERFORMANCE OF BANKS

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales.

Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt.

There are many different stakeholders in a company, including trade creditors, bond holders, investors, employees and management. Each group has its own interest in tracking the financial performance of a company. Analysts learn about financial performance from data published by the company in Form 10K, also known as the annual report. The 10K is a required legal document that must be published by all public companies. The purpose of the report is to provide stakeholders with accurate and reliable financial statements that provide an overview of the company's financial performance. In addition, these statements are audited and signed by the leadership of the company along with a number of other disclosure documents.

- **Balance Sheet**
- **Income Statement**
- **Cash Flow Statement**

#### **FINANCIAL STATEMENT ANALYSIS<sup>1</sup>**

Financial statement analysis is the process of reviewing and evaluating a company's financial statements (such as the balance sheet or profit and loss statement), thereby gaining an understanding of the financial health of the company and enabling more effective decision making. Financial statements record financial data; however, this information must be evaluated through financial statement analysis to become more useful to investors, shareholders, managers and other interested parties

#### **LITERATURE REVIEW**

- (Akram jalal, 2011), in his article entitled on **“Evaluating the Impact of Online Banking factors on motivating the Process of E-Banking”**, about the statistical analyses result which shows that the three factors i.e., perceived usefulness (PU), perceived ease of use (PEOU) and perceived credibility (Security and Privacy) are the important determinants with respect to the user's adoption of e-banking services. All three factors have a great influence on the customers' acceptance of the system, moreover the system's credibility disturb both the current and potential customer who intended to use internet banking services because of the risk that their personal information might fall in to wrong hands or may lose their money during the transaction process.
- (Saluja, 2012), in their article on entitled on **“E-Banking: the Indian Scenario”**, states that to encourage customers to opt for e-banking, the bank employees must be trained precisely for the usage of e-banking facilities so that they in turn can motivate them. E-banking services can be modified based on different segmentation of age group, occupation and gender, so that accordingly the requirements and needs of every individual are honoured.
- (Bahram Meihami, 2013), in their article entitled on **“The Effect Of Using Electronic Banking On Profitability Of Bank”** indicated a direct connection between e-banking and profitability. As e-banking means electronic transferring of funds from one account to another without any physical aspects involved for instance like cheques or cash. By means of such costs being eliminated, e-banking can increase incomes of the bank. The findings of this research also state that there is a constructive and powerful connection between e-banking and its various components (like telephone banking, automated teller machines (ATM), bank cards, internet banking and point of sale) with the income of banks. Out of these components automated teller machines (ATM) is the one which has major influence on bank incomes and telephone banking has the least.
- (Kumar, 2014), in their article entitled on **“Impact of Internet Banking on Customer”**, amidst all technological revolutions, for consumers internet banking was a notion that changed the way as it was embraced when the internet as a channel was slow-going. To enhance their chances for survival banks in India have already begun using new technologies, while different banks are at various separate stages of technology acceptance. This research has been aimed at studying the impact of internet banking on customers as in the present time this type of banking has acquired a lot of attention in the Indian market and seems to be catching up with many banks entering the fray. This is changing the industry of banking rapidly with substantial effect on the banking relationships. It has been found beneficial for the NRIs as it cuts down expenses and time for conducting transactions through Indian banking system as physical appearance/contact takes a back seat and isn't that necessary these days. Yet Indian banks have a long way to go when compared to the banks abroad.

#### **RESEARCH METHODOLOGY**

##### **STATEMENT OF THE PROBLEM**

Today the banks have been providing services like Automated Teller Machine (ATM), Internet banking, Mobile-banking, Tele-banking, Electronic-clearing service etc. to improve its service quality. Service performance has rapidly changed after the advent use of technology. Therefore with the above problems, researcher wants to study, “The Impact of e-banking on Financial performance of some selected public sector banks”. The following research questions are address

- Do technological advancements impact financial performances?
- Status of E- Banking In India.

<sup>1</sup> Justin.Paul&Padmalatha Suresh.2006. Management of Banking and Financial Services, New Delhi, Pearson Education

Luther, J.C.1976. Report of JC Luther, Committee on Productivity, Efficiency & Profitability in Commercial banks, Bombay 1976.

## OBJECTIVES OF THE RESEARCH STUDY

The primary objective of the study is to know the impact of E-banking on financial performance of public sector banks in Karnataka, in addition to this primary objective, the following supplementary objectives have been set as under:

- To study the history and development of banking in general and in India in particular.
- To know the impact of E-banking on the performance of the banks.

## HYPOTHESIS

**H1** : There exists a statistically significant relationship between electronic banking and the performance of the banks.

## SCOPE OF THE STUDY

The examination proposes to cover the impact of electronic banking performance regarding public sector banks. Electronic banking isn't new and it has been rehearsed for quite a while. For the most part, it manages an expansive number of monetary and legitimate marvels. Due to the plain truth of its wide degree, its definition likewise varies relying upon one's focal point of the current issue. The present study is restricted to just analyze the "Impact of E-Banking on financial performance of selected public sector banks". Tentatively, State Bank of India and Canara Bank were selected to test the concept, and the geographical area of the study will be confined to India

## RESEARCH METHODOLOGY OF THE STUDY

Secondary data will be collected through bank's annual report, books, journals, newspapers, websites and through other relevant sources.

## STATISTICAL TOOLS USED

- Correlation analysis- To test the correlation between various variables
- Descriptive statistics- Measures of central tendency and measures of dispersion to study the quantitative aspects of the data
- Graphs and Charts- Graphical representation of data for increased efficiency

## LIMITATIONS OF THE STUDY

Though proper care will be taken, the present study is subjected to certain limitations which are inherent to this type of study. The important limitations are as under:

- There are numbers of factors that influence e-banking on banks' but the present study will be restricted to performance only.
- The study will be restricted to two selected public sector banks only.

## ANALYSIS AND INTERPRETATIONS

As the name implies, electronic banking or e-banking involves combination of banking sector with electronic technology, which means to provide banking products and services through electronic delivery channel. Under this system, the banking services are delivered by way of a computer controlled system. E-banking involves providing banking and related service through extensive use of information technology without direct recourse to the bank by the customer. With growing popularity and benefits of e-banking, lot of banks have realized the importance, competition and challenges brought forth with this new technology and are adapting to this new-age banking. Electronic banking is defined by Barron's Dictionary (2006)<sup>2</sup> as a form of banking where funds are transferred through an exchange of electronic signals between financial institutions, rather than an exchange of cash, checks, or other negotiable instruments.

Table 1 shows the Start and growth of digitalisation of the banking operations in India.

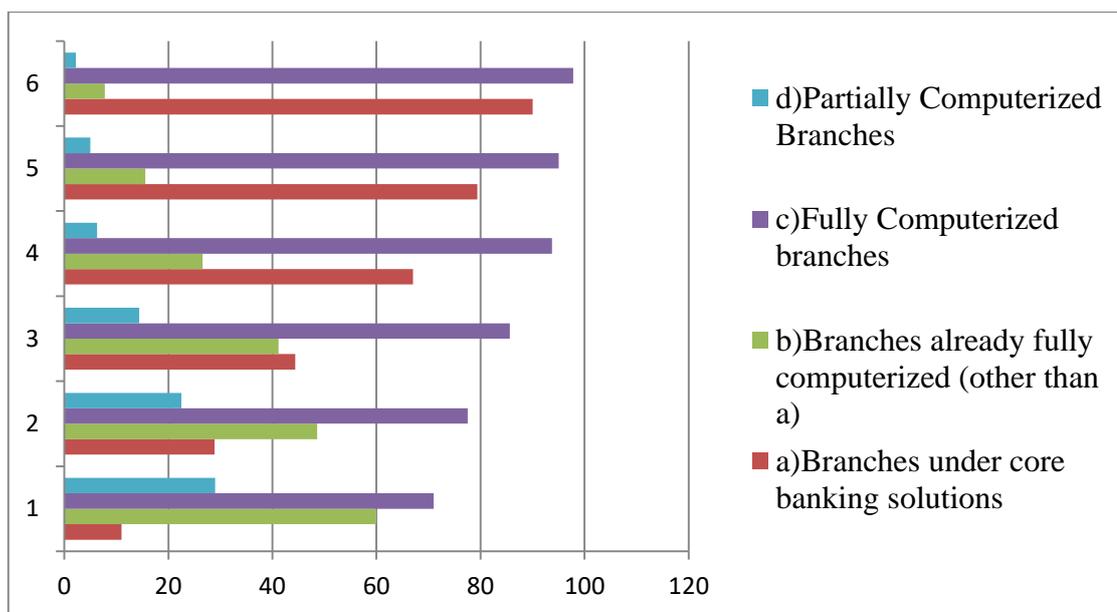
**Table 1 Computerization in Public Sector Banks (%)<sup>3</sup>**

<sup>2</sup> Dictionary of finance and Investment Terms (Barron's Business Dictionaries)

<sup>3</sup> Source: Statistical table relating to Banks in India/RBI (2009-10)

| Categories   | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------|------|------|------|------|------|
| a)Branches under core banking solutions              | 11   | 29   | 44   | 67   | 79   | 90   |
| b)Branches already fully computerized (other than a) | 60   | 49   | 41   | 27   | 16   | 8    |
| c)Fully Computerized branches                        | 71   | 78   | 86   | 94   | 95   | 98   |
| d)Partially Computerized Branches                    | 29   | 23   | 14   | 6    | 5    | 2    |

Source: Statistical table relating to Banks in India/RBI (2009-10)



The computerisation of Banking sector has seen a tremendous growth year after year. If compared 2005-2010 there is a growth of approximately 1000% in computerisation. The banks are aiming to increase their electronic base to enhance customer satisfaction and competitiveness among its counterparts. In today's competitive world it is imperative to be in par with technological up gradation to achieve competitive advantages and satisfaction of the stakeholders of the banks.

**Future of E-banking in India:**

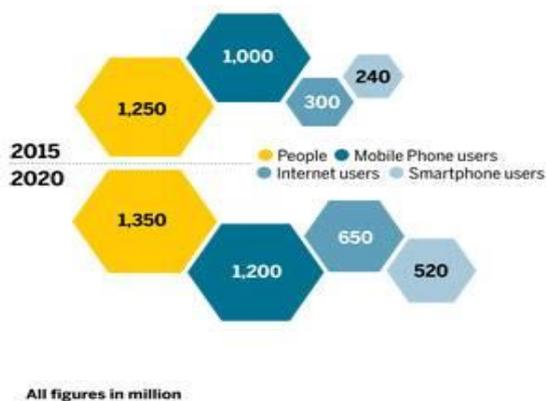
Online banking users in India to reach 150 million by 2020 according to a study. With the ongoing digital drive in India, the number of users opting for Online Banking is expected to double to reach 150 million marks by 2020, from the current 45 million active urban-online-banking-users in India.

In a report entitled “**Encashing on Digital: Financial Services in 2020**” the two firms, namely Face book and the Boston Consulting group have highlighted the rising influence of digital in Financial Services and the transformation required to make the most of this revolution. The report also says that “India could not be more ready for a digital revolution in financial services- with the government interventions on one hand and the growing consumer awareness on the other hand.”

The improved customer level profitability can add to retail profit pool by \$3-\$3.5 billion by 2020 while reducing the cost of acquisition and cost of servicing to 1/10th.

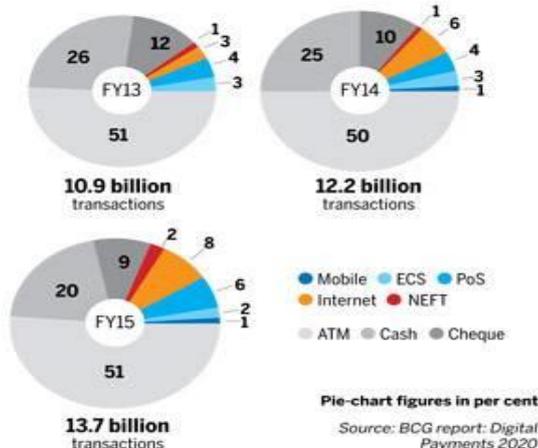
### TOWARDS A SMARTER INDIA

The adoption of smartphones is seen increasing from 19% of the Indian population in 2015 to 38% in 2020



### THE SLOW MARCH OF DIGITAL

Digital commerce is still a thin wedge in the transactions pie. The most notable increase has been in internet-based transactions



4

### DESCRIPTIVE STATISTICS

Descriptive statistics refer to the study of sample size, which summarises the central tendency and measures of dispersion. This statistical information is used to analyse the data. The table below shows the financial performance ratios of Canara bank. The ratios are selected on the CAMEL Model and dummy variables are assigned to e-banking. Introduction of e-banking is given 1 and non e banking is assigned 0. The mean capital adequacy ratio is 11.242 which is in accordance with the RBI guidelines.

Table 2 Canara bank- financial performance ratios

| Canara Bank             | 2014  | 2015  | 2016  | 2017  | 2018   | Mean Scores | Standard dev |
|-------------------------|-------|-------|-------|-------|--------|-------------|--------------|
| Capital Adequacy Ratio  | 10.63 | 10.56 | 11.08 | 12.86 | 11.08  | 11.242      | 0.93676      |
| Asset T/o Ratio         | 0.09  | 0.09  | 0.08  | 0.07  | 0.07   | 0.08        | 0.01         |
| Loans T/O               | 0.15  | 0.14  | 0.13  | 0.12  | 0.11   | 0.13        | 0.015811     |
| NP Margin               | 6.16  | 6.17  | -6.38 | 2.71  | -10.23 | -0.314      | 7.553524     |
| Operating Expense Ratio | 13.46 | 14.15 | 14.97 | 16.72 | 18.91  | 15.642      | 2.195489     |
| e-banking               | 3     | 3     | 2     | 1     | 1      | 1           | 0            |

Descriptive statistics refer to the study of sample size, which summarises the central tendency and measures of dispersion. This statistical information is used to analyse the data. The table below shows the financial performance ratios state bank of India. The ratios are selected on the CAMEL Model and dummy variables are assigned to e-banking. Introduction of e-banking is ranked on the basis of some statements related to e- banking. The mean capital adequacy ratio is 12.758 which is in accordance with the RBI guidelines.

Table 3 State Bank of India- financial performance ratios

| SBI                     | 2014  | 2015 | 2016  | 2017  | 2018  | Mean Scores | Standard dev |
|-------------------------|-------|------|-------|-------|-------|-------------|--------------|
| Capital Adequacy Ratio  | 12.96 | 12   | 13.12 | 13.11 | 12.6  | 12.758      | 0.473096     |
| Asset T/o Ratio         | 0.09  | 0.09 | 0.08  | 0.08  | 0.07  | 0.082       | 0.008367     |
| Loans T/O               | 0.13  | 0.13 | 0.12  | 0.12  | 0.12  | 0.124       | 0.005477     |
| NP Margin               | 7.49  | 8.17 | 5.54  | 0.1   | -1.98 | 3.864       | 4.550234     |
| Operating Expense Ratio | 2.72  | 2.82 | 2.5   | 2.61  | 2.66  | 2.662       | 0.119666     |
| e-banking               | 3     | 3    | 2     | 1     | 1     | 1           | 0            |

4 Source:- BCG report: Digital Payments 2020

**HYPOTHESIS TESTING**

**H1** : There exists a statistically significant relationship between electronic banking and the performance of the banks.

**Table 4 State Bank of India- Correlation analysis**

|                         |                     | <b>Correlations</b>    |                      |           |           |                         |           |
|-------------------------|---------------------|------------------------|----------------------|-----------|-----------|-------------------------|-----------|
|                         |                     | Capital Adequacy Ratio | Asset turnover Ratio | Loans T/O | NP Margin | Operating Expense Ratio | e-banking |
| Capital Adequacy Ratio  | Pearson Correlation | 1                      | -.734                | -.540     | -.032     | .447                    | -.631     |
|                         | Sig. (2-tailed)     |                        | .158                 | .347      | .959      | .451                    | .254      |
|                         | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |
| Asset turnover Ratio    | Pearson Correlation | -.734                  | 1                    | .949*     | .657      | -.913*                  | .913*     |
|                         | Sig. (2-tailed)     | .158                   |                      | .014      | .228      | .030                    | .030      |
|                         | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |
| Loans T/O               | Pearson Correlation | -.540                  | .949*                | 1         | .759      | -.970**                 | .866      |
|                         | Sig. (2-tailed)     | .347                   | .014                 |           | .137      | .006                    | .058      |
|                         | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |
| NP Margin               | Pearson Correlation | -.032                  | .657                 | .759      | 1         | -.737                   | .783      |
|                         | Sig. (2-tailed)     | .959                   | .228                 | .137      |           | .156                    | .117      |
|                         | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |
| Operating Expense Ratio | Pearson Correlation | .447                   | -.913*               | -.970**   | -.737     | 1                       | -.764     |
|                         | Sig. (2-tailed)     | .451                   | .030                 | .006      | .156      |                         | .133      |
|                         | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |
| e-banking               | Pearson Correlation | -.631                  | .913*                | .866      | .783      | -.764                   | 1         |
|                         | Sig. (2-tailed)     | .254                   | .030                 | .058      | .117      | .133                    |           |
|                         | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

There exists a negative relationship between capital adequacy ratio, Operating expense ratio and E- banking which means that as the e- banking services are increasing the operating expenses are decreasing, which is a positive impact of the latest trends of banking on the financial performance

There exists a statistically significant relationship between electronic banking and the Financial performance of State Bank of India, The E- banking row has all positively strong relationship with all the Camel model variables

**Table 5 Canara bank- Correlation analysis**

|                        |                     | <b>Correlations</b>    |                      |           |           |                         |           |
|------------------------|---------------------|------------------------|----------------------|-----------|-----------|-------------------------|-----------|
|                        |                     | Capital Adequacy Ratio | Asset turnover Ratio | Loans T/O | NP Margin | Operating Expense Ratio | e-banking |
| Capital Adequacy Ratio | Pearson Correlation | 1                      | -.251                | -.536     | -.270     | -.816                   | -.455     |
|                        | Sig. (2-tailed)     |                        | .683                 | .351      | .660      | .092                    | .441      |
|                        | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |
| Asset turnover Ratio   | Pearson Correlation | -.251                  | 1                    | .873      | .905*     | .544                    | .906*     |
|                        | Sig. (2-tailed)     | .683                   |                      | .053      | .035      | .343                    | .034      |
|                        | N                   | 5                      | 5                    | 5         | 5         | 5                       | 5         |
| Loans T/O              | Pearson Correlation | -.536                  | .873                 | 1         | .796      | .824                    | .963**    |
|                        | Sig. (2-tailed)     | .351                   | .053                 |           | .107      | .086                    | .008      |

|  |                     |       |       |        |       |      |       |
|--|---------------------|-------|-------|--------|-------|------|-------|
|  | N                   | 5     | 5     | 5      | 5     | 5    | 5     |
| NP Margin  | Pearson Correlation | -.270 | .905* | .796   | 1     | .379 | .923* |
|  | Sig. (2-tailed)     | .660  | .035  | .107   |       | .529 | .025  |
|  | N                   | 5     | 5     | 5      | 5     | 5    | 5     |
| Operating Expense Ratio                                      | Pearson Correlation | -.816 | .544  | .824   | .379  | 1    | .669  |
|  | Sig. (2-tailed)     | .092  | .343  | .086   | .529  |      | .216  |
|  | N                   | 5     | 5     | 5      | 5     | 5    | 5     |
| e-banking  | Pearson Correlation | -.455 | .906* | .963** | .923* | .669 | 1     |
|  | Sig. (2-tailed)     | .441  | .034  | .008   | .025  | .216 |       |
|  | N                   | 5     | 5     | 5      | 5     | 5    | 5     |
| *. Correlation is significant at the 0.05 level (2-tailed).  |                     |       |       |        |       |      |       |
| **. Correlation is significant at the 0.01 level (2-tailed). |                     |       |       |        |       |      |       |

There exists a negative relationship between capital adequacy ratio -4.55 and E- Banking. There exists a statistically significant relationship between electronic banking and the Financial performance of State Bank of India, The E- banking row has all positively strong relationship with all the Camel model variables. Asset T/o Ratio, Loans T/O, NP Margin, Operating Expense Ratio had correlation of .906\*, .963\*\*, .923\* and .669 respectively with E- Banking

## FINDINGS, CONCLUSIONS AND SUGGESTIONS

### Findings

- The computerisation of Banking sector has seen a tremendous growth year after year. If compared 2005-2010 there is a growth of approximately 1000% in computerisation.
- Banking industry is anticipated to twofold to reach 150 million marks by 2020, from the current 45 million active urban-online-banking-users in India.
- The mean capital adequacy ratio of Canara Bank is 11.242 and SBI is 12.758 which is in accordance with the RBI guidelines
- CAMEL Model ratios were used to ascertain the financial performance of the banks
- There exists a statistically significant relationship between electronic banking and the Financial performance of State Bank of India and canara bank
- SBI has a greater impact of E- Banking on the financial performance of banks as compared to the Canara bank

### Suggestions

- In today's competitive world it is imperative to be in par with technological up gradation to achieve competitive advantages and satisfaction of the stakeholders of the banks.
- The study highlighted the rising influence of digital in Financial Services and the transformation required to make the most of this revolution
- Since there is a significant relationship between e-banking and financial performance is it essential to make continuous developments in the digitalisation process of the banks

### Conclusions

- The banks are aiming to increase their electronic base to enhance customer satisfaction and competitiveness among its counterparts.
- India could not be more ready for a digital revolution in financial services- with the government interventions on one hand and the growing consumer awareness on the other hand
- The study concludes that e- banking has an impact on the financial presentation of the banks and thus, requires more attention and significance in the company decisions.

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