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### GROWTH AND PERFORMANCE OF CORE BANKING IN VIRUDHUNAGAR DISTRICT

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### Introduction

The rapid advancement in Information and Communication Technology (ICT) has had a profound impact on the banking industry and the wider financial sector over the last two decades and it has now become a tool that facilitates banks' organizational structures, business strategies, customer services and other related functions. The recent "Information Technology (IT) revolution" has exerted far-reaching impacts on economies, in general, and the financial services industry, in particular. Within the financial services industry, the banking sector was one of the first to embrace rapid globalization and benefit significantly from IT development. The technological revolution in banking started in the 1950s, with the installation of the first automated book-keeping machines at banks. Automation in banking became widespread over the next few decades as bankers quickly realized that much of their labour intensive information-handling processes could be automated with the use of computers. The first Automated Teller Machine (ATM) is reported to have been introduced in the USA in 1968, and it was only a cash dispenser. The advent of ATMs helped both to improve customer convenience and reduce costs, as before ATMs, withdrawing funds, accounts inquiries and transferring funds between accounts required face-to-face interaction between bank staff and customers.

Overall, technological innovation has brought about the speedy processing and transmission of information, easy marketing of banking products, enhancement of customer access and awareness, wider networking and, regional and global links on an unprecedented scale. IT development has thus changed the product range, product development, service channels and type of banking services, as well as the packaging of such services, with significant efficiencies not only in the banks, but also the ancillary and feeder services to banks. The financial services industry has thus become virtually dependent on IT development. Most banks make visible efforts to keep up with new systems and processes.

### **Core Banking**

Core banking is the services provided by a group of networked bank branches. Bank customers may access their funds and other simple transactions from any of the member branch offices. Core Banking is normally the business conducted by a banking institution with its retail and small business customers. Many banks treat the retail customers as their January 2017

core banking customers, and have a separate line of business to manage small businesses. Larger businesses are managed via the Corporate Banking division of the institution. Core banking basically is depositing and lending of money. The present study deals with growth and performance of core banking in Virudhunagar District.

## **Review of Literature**

Aaron M. French. (2012) Studied on "E-Banking Security - When Security Becomes Too Sophisticated for the User to Access Their Information". This study addresses the need for increased awareness of internal threats through security measures such as security awareness, policies, practices, and procedures. Online banks and other organizations should evaluate every aspect of security while taking into account the needs of the user. Technology should be an added convenience to the customer and not prohibit them from accessing their information. While security is important, organizations should balance the need for increased security with the desire to make systems easy to use and useful to the consumer.

Klomp, Jeroen and Haan, Jakob de. (2012) studied the "Banking risk and regulation: Does one size fit all?". The study shows that using data for more than 200 banks from 21 OECD countries for the period 2002-2008, they examined the impact of bank regulation and supervision on banking risk using quantile regressions. In contrast to most previous research, they find that banking regulation and supervision has an effect on the risks of high-risk banks. However, most measures for bank regulation and supervision do not have a significant effect on low-risk banks. As banking risk and bank regulation and supervision are multi-faceted concepts, our measures for both concepts are constructed using factor analysis.

Veerabhadra Rao, T (2012) evaluated the Risk management architecture; a cross comparison between select Indian and foreign banks -impact of risk based supervision. In the above analysis and discussion, the Researcher concluded that the effect of the Risk Management and Risk Based Supervisory measures initiated by the Reserve Bank of India have resulted in significant difference in the working of the sample Scheduled Commercial Banks. Sector wise analysis has established that the Public Sector Banks have shown significant difference.

#### Statement of the Problem

While adopting core banking technology, banks faced many problems like designing the structure of core banking, connectivity, acceptability of core banking system by employees, overwork, less operational reliability, error in transaction, traffic in network and so on. There could be breach of security, reluctance to change, chance of data loss and lack of awareness among the customers. The challenges in the wake of core-banking are formidable.

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Hence, there is an imperative need to undertake a study to identify the core banking services offered by the banking companies, to evaluate the security and control in core banking and to provide suitable solutions to bankers using core banking technology besides giving suggestions to customers using the core banking services provided by the banks in Virudhunagar District of Tamilnadu.

# Scope of the Study

The banking companies under core banking system have introduced many of the services like Real Time Gross Settlement (RTGS), National Electronic Fund Transfer (NEFT), Electronic Clearance Service (ECS), Cheque Transaction, Cheque Collection, Clearing, ATMs, SMS banking, internet banking related to cash payments, transfer of funds, payment to utility bills, dividends and so on. The present study focuses on the recent developments of core banking. The study also covers the growth and performance of core banking and its services to customers. The study concentrates on the problems of bankers as well as the customers related to the adoption of core banking technology by banks.

# Importance of the Study

Banking industry is getting globalized. Therefore banks need flexible, customer centric core banking environment which should be equipped with multi-currency and multi-lingual features. Having computerized the banking business, it is important to study the evaluation of core banking in Virudhunagar district by means of recent trends in core banking services and growth of core banking and also to analyze its performance on the basis of attitude of bankers and customers.

# **Objectives of the Study**

By means of the present study, the researcher endeavors to undertake a comprehensive enquiry to fulfill the objectives set out below:

- To investigate the attitude of the customers towards the core banking services.
- To evaluate the opinion of bank managers and customers regarding the security and controls in core banking.
- To offer suitable suggestions for improving the services of core banking based on the findings of the study.

# Hypotheses

Based on the objectives of the study, the following hypotheses have been formed:

• There is no significant difference of opinion among the customers relating to security and controls of core banking.

## Opinion about the Security Controls in Core Banking by the Customers

A bank in the process of implementing CBS had a central support team at the Computer Planning and Policy Department (CPPD). These users were allowed unrestricted remote access to the branches. One employee used this facility to transfer funds from inoperative accounts of branches to a particular account. The money is subsequently withdrawn. This came to light during regular concurrent audit of the bank when the auditor noted that there was movement in the in-operative account. The implementation team was given unrestricted remote access to the branches which is not in line with best practices. Enabling only appropriate access rights and monitoring activities of users could have prevented the fraud. Opinion about Security and controls in Core Banking Services by the customers are given in Table 1.1

| SI. | Statements                                                                      | No of respondents 520 |                |                |                |              |       |  |
|-----|---------------------------------------------------------------------------------|-----------------------|----------------|----------------|----------------|--------------|-------|--|
| No  |                                                                                 | Very<br>High          | High           | Moderate       | Low            | Very<br>Low  | Total |  |
| 1.  | Security policy of this<br>bank                                                 | 158<br>(30.38)        | 232<br>(44.62) | 32<br>(6.15)   | 58<br>(11.54)  | 40<br>(7.69) | 520   |  |
| 2.  | Staff are properly<br>trained about security<br>policy                          | 127<br>(24.42)        | 165<br>(31.73) | 103<br>(19.81) | 112<br>(21.54) | 13<br>(2.5)  | 520   |  |
| 3.  | Access controls to<br>access violations                                         | 113<br>(21.73)        | 279<br>(53.65) | 31<br>(5.96)   | 72<br>(13.85)  | 25<br>(4.81) | 520   |  |
| 4.  | User account get locked<br>out after a fixed number<br>of failed login attempts | 127<br>(24.42)        | 250<br>(48.08) | 46<br>(8.85)   | 67<br>(12.88)  | 30<br>(5.77) | 520   |  |
| 5.  | Physical access to core<br>banking system<br>components is secured              | 139<br>(26.73)        | 219<br>(42.12) | 35<br>(6.73)   | 77<br>(14.81)  | 50<br>(9.62) | 520   |  |
| 6.  | Prevent unauthorized access to other accounts                                   | 158<br>(30.38)        | 239<br>(45.96) | 34<br>(6.54)   | 71<br>(13.65)  | 18<br>(3.46) | 520   |  |
| 7.  | Control the access of<br>bank employees                                         | 163<br>(31.35)        | 228<br>(43.85) | 30<br>(5.77)   | 82<br>(15.77)  | 17<br>(3.27) | 520   |  |
| 8.  | Security procedures for storing ATM cards                                       | 169<br>(32.5)         | 241<br>(46.35) | 24<br>(4.62)   | 72<br>(13.85)  | 14<br>(2.69) | 520   |  |

Table 1.1 Opinion about Security and controls in Core banking by the customers

Source: Primary data

Note: Figures in parentheses indicate percentage to total

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It is revealed from the table 1.1 that out of 520 respondents, majority of 232 (44.62 per cent) whose opinion regarding security policy of the bank was high, followed by 158 (30.38 per cent) whose opinion was very high, 58 (11.54 per cent) whose opinion was low, 32 (6.15 per cent) whose opinion was moderate. In the case of staff are properly trained about security policy, maximum of 165 (31.73 per cent) had opinion high. Comparative Financial analysis of Public Sector and Private Sector Banks before and after Implementation of Core Banking

The researcher has compared the mean, standard deviation, co-efficient of variation, compound growth rate of total financial assets before and after the implementation of core banking solution in all the public sector and private sector banks in the study area. The researcher has evaluated the performance of public sector banks before and after implementation of core banking through the analysis of Mean, Standard Deviation and Co-efficient of Variation of total assets before and after the implementation of core banking solution in Public Sector Commercial banks depicted in table 1.2

| SI. | Name of                      | Mean value   |              | Standard     | Deviation    | Co-efficient of Variation |            |  |
|-----|------------------------------|--------------|--------------|--------------|--------------|---------------------------|------------|--|
| No  | the bank                     | Before       | After        | Before       | After        | Before                    | After      |  |
| 1   | State Bank of<br>India       | 21876227.75  | 63042269.1 3 | 7774726.33   | 24107565.2   | 35.53961                  | 38.24032   |  |
| 2   | State Bank of<br>Travancore  | 1269105.2    | 4193956.833  | 554381.354 3 | 1044191.07 5 | 43.68285                  | 24.89752   |  |
| 3   | Allahabad Bank               | 2212515.18 2 | 8504844.8    | 1004495.476  | 2321271.761  | 45.40061                  | 27.29352   |  |
| 4   | Bank of Baroda               | 5939866.545  | 18837233.8   | 2040582.076  | 5892030.49 5 | 34.35401                  | 31.27864   |  |
| 5   | Bank of India                | 6297396.25   | 20523379.5   | 2445721.10 5 | 5003786.219  | 38.83702                  | 24.38091   |  |
| 6   | Bank of<br>Maharastra        | 1745967.091  | 4969121.4    | 899271.1447  | 1415140.7    | 51.50562                  | 28.47869   |  |
| 7   | Canara Bank                  | 7447266.538  | 15563852.33  | 4075444.36 3 | 10079175.7 3 | 54.72403                  | 64.76016   |  |
| 8   | Central Bank<br>of India     | 3978819.4    | 11444614     | 1415843.522  | 4117644.788  | 35.58451                  | 35.97889   |  |
| 9   | Indian Bank                  | 2814032.25   | 14164559.25  | 1056461.397  | 12403959.1 3 | 37.54262                  | 87.57039   |  |
| 10  | Indian<br>Overseas Bank      | 2582343.222  | 8064294.286  | 810181.795 5 | 2669592.532  | 31.3739                   | 33.10386   |  |
| 11  | Oriental Bank<br>of Commerce | 1847028.25   | 7533202.75   | 814266.1737  | 3370951.688  | 44.0852                   | 44.74792   |  |
| 12  | Punjab<br>National Bank      | 3924267.333  | 14977135.3   | 876372.9404  | 7338342.38   | 22.33214                  | 48.99697   |  |
| 13  | Union Bank of<br>India       | 4683722.69 2 | 10150975     | 2599376.073  | 5988066.545  | 55.49808                  | 58.99006   |  |
| 14  | UCO Bank                     | 2454808.3    | 8834522.16 7 | 926681.6983  | 2877529.64 5 | 37.74966                  | 32.57142   |  |
| 15  | Syndicate Bank               | 1931611.16 7 | 7205605      | 429812.0249  | 3936554.53 5 | 22.25147754               | 54.6318397 |  |

| Table 1.2 Comparative analysis of Total Assets before and after the Implementation of Core |
|--------------------------------------------------------------------------------------------|
| Banking Solution in Public Sector Commercial Banks                                         |

Source: Computed data (The value of total assets of Public sector banks are given in Appendix V)

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It is revealed from Table 2.1 that the total assets before and after the core banking solution in public sector banks, almost all the public sector banks have generated three fold of total assets as indicated by mean assets during the period under study. According to the co-efficient of variation, stability was found in generation of total assets for Bank of India, Allahabad bank, Bank of Maharastra, Bank of Travancore, Bank of Baroda and UCO bank. A high fluctuation was observed in all other banks under study. Table 1.2 indicates the growth rate of total assets before and after the implementation of core banking in public sector banks.

# Summary of Major Findings

- After the implementation of core banking, almost all the public sector banks have generated three fold of total assets as indicated by mean assets during the period of study.
- Among public sector banks, Allahabad bank, Bank of Baroda, Bank of India, Bank of Maharastra, Canara Bank, Central Bank of India, Indian Bank, Indian Overseas Bank, Punjab National Bank, UCO Bank and Syndicate Banks achieved the highest growth rate after implementation of core banking.
- The other public sector banks, State Bank of India, Union Bank of India, Oriental Bank of Commerce, State Bank of Tiruvancore, should also take initiatives to achieve highest growth rate.
- Among private sector banks, the highest total assets generated after the core banking operations of banks are Catholic Syrian Bank, City Union Bank, Federal Bank, HDFC Bank, ICICI Bank, Indus Ind Bank, Karur Vysya Bank, Lakshmi Vilas Bank, Tamilnadu Mercantile Bank and Axis Bank.
- The other private sector banks should also concentrate in enhancing their total assets.
- The highest fluctuations were observed after the core banking operations in banks namely, Axis Bank, HDFC Bank, ICICI Bank and Federal Bank as per coefficient of variation.
- The highest growth in total assets after core banking operations was found in City Union Bank, HDFC Bank, Karur Vysya Bank, Lakhsmi Vilas Bank, Tamilnad Mercantile Bank.
- During the year 2003-2004 to 2010-2011 the average number of inter-bank remittance was found high compared to inter-bank clearing. But a high fluctuation was found in inter-bank remittance than the inter-bank clearance as co-efficient of variations. The compound growth rate to total RTGS was found 218.01 per cent, out of which, customer remittance, inter-bank remittance and inter-bank clearing settlement were 110.97 per cent, 14.52 per cent and 66.37 per cent respectively.

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- The average number of fund transfer from 2003-2004 to 2010-2011 was 319.21 lakhs and the average amount was Rs.22109.4 crores.
- It is the responsibility of the bankers to inform and educate all it customers about NEFT and RTGS, so that the customers can better utilize these unique facilities of CBS.
- The total ATMs were located in rural areas was 32.7 per cent at the end of March 2010. Public sector banks have contributed much in providing ATM services in rural areas.
- Out of 57 respondents faced problems 'less operational reliability' was ranked as first (mean score 82) followed by 'failure of network services' (mean score 79). The reliability of Core banking solutions should be strengthened and network failure should be corrected within a reasonable time.

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