CHAPTER – I

INTRODUCTION AND DESIGN OF THE STUDY
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1.1 INTRODUCTION

Finance is the lifeblood of all business activities. It is an important segment of the various sectors and acts as the backbone of our economic progress and prosperity. Banks play a very important role in all the financial activities of each and every business, industry, organization or individual. They are the financial institutions which provide banking and other financial services. In other words, they are organizations with whom businessman can deposit and borrow money. They are a subset of the financial services industry that forms the heart of the financial system. Banks role in an economy is of capital importance. They are, therefore, rightly referred to as the “departmental store” of finance. They must be managed prudently, safely and profitably to have a strong, growing and adaptable banking system capable of meeting the demands of society today. They generate profit from the interest on resources and hold on trust of the customers while paying them interest from it.

The Indian banking system is fastly adapting itself to the technological advancement. Fully computerized and networked branches supported by facilities like Automated Teller Machines (ATMs), 24-hour banking, tele-banking, mobile banking and so on are catching up the whole industry and they have changed the old world of banking\(^1\).

Information based companies are better competitors in global markets. They gain more profits in sustainable ways. It can provide all facilities to all citizens for their own purposes by their terms. To survive in this modern financial market, every

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bank implements many new innovative ideas, strategies and advanced technologies for mobilizing deposits and extending credit.

Information Communication Technology (ICT) is the competitive weapon for banking. “Adjust, adapt and change” is the message that technology has sent across the banks. The bankers are looking more and more to technology as a key not only to reach the higher level of operational efficiency through reduction in the transaction costs but also to enhance the customer’s satisfaction. Technology provides the customers with better service. It maintains the records in an effective manner and to the full satisfaction of bankers and customers. Thus, Information Communication Technology has brought a fundamental transformation in the way banking is done now. It has become the most important facilitator of financial intermediation.

In the ever changing global scenario, banking business proved to be agile in adopting latest technology to improve its services and efficiency. Implementation of technology in banks is to be driven by business compulsions rather than regulatory requirements. Selection of the most appropriate technology for a specific purpose from the lot of options available in the market is the most critical concern. It is essential to ensure that the solution offered should be scalable to future requirements, secure, user friendly, vendor supported and easy to handle. Absorption and effective utilization of new technologies involve changes in structure, organization, systems as well as attitude of the people working in banking industry.

The foremost impact of technology is that the existing manpower in banks manifested the resistance to the new systems. There are number of other factors which may be internal or external that influence use of technology by the employees of banks. Internal factors include the abilities and attitude of the employees and the

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2 Ibid., p.83.
external factors comprise of motivation and inspiration provided by superiors, bank policies, appraisals, rewards and facilities like, coaching and training made available to employees.

Change is inevitable and coping with it means learning something new. Quite obviously technology is merely an enabler. Neither the numerous positive features nor the negative features of the banking sector can alone be attributed to technology used by bankers. To make the transition smooth, one should anticipate change and keep ready themselves to affect it. Therefore, employees must constantly endeavour to expand their abilities. They must strive to be ready for the next role or learn related new skills before it is actually needed. They should also realize that learning can never stop. Willingness to learn also reflects adaptability, which is an indispensable factor for survival at the workplace.

The bank can cope with the changing condition in its environment through technology innovation. Banks should employ different methods to promote and use technology to promote its adaptability. Employees take the most active part, as they are directly involved in using technology to provide banking services. Many banks attempt innovation to improve customer satisfaction, to improve employee performance and to make more profit. Many banks have achieved all these, but most of them have failed to sustain these achievements. It is essential to assess the factors that have contributed to these and provide enduring solutions to enable them to survive in the competitive, dynamic and turbulent banking sector. Banks should ensure that it has capability, capacity and need for technology before using or

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3 Firdos Temurasp Shroff (2008) Modern Banking Technology Northern Book Centre 4221/1- Ansari Road, Daryaganj New Delhi 110 002 http://books.google.co.in/books?
embarking on it. Employee’s skills and competence have to be improved and managed to innovate and to manage banking performance for sustainability.

The economic reforms in India for the last two decades have brought about sweeping changes in the Indian financial market. The recent trends in Indian banking reflect the efforts of the major players to adapt to a rapidly liberalizing and globalizing environment. As Information Communication Technology has brought about revolutionary changes in every walk of life, it has accelerated the pace of globalization. In the process of Globalization, Information has become a powerful tool. The quality of administration in the banking sector can be improved by means of advanced techniques and methods of collection, analysis, supply and interpretation of the data and information. Through technology, banks can also operate around the entire globe within a few seconds. Different technological innovations have changed the working systems of banks in each and every field.

Employees in banks are keeping records of business, personnel accounts, installment loans, mortgages, providing customer services and the bank's own accounts, such as payrolls, inventory and financial accounting. These are the regular jobs of bank clerks, typists, secretaries, file clerks, custodians, messengers, receptionists, safe deposit attendants and complete set of employees in the banks. In larger banks each employee specializes in one job. Basically banks safeguard money and provide loans. There has been an increase in the amount of technology used by banks in carrying out the functions. To illustrate some banks use cash dispensers and offer twenty four hours cash withdrawal facility, instant account details and money transfer through computer network. In spite of these changes, banks continue to

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maintain and perform their primary role accepting deposits and lending funds from these deposits\textsuperscript{5}. Virudunagar has got a rich business background status and settled during 19th century A.D. Virudunagar exports all kinds of oil to Dubai and Srilanka and also exports Cotton, chilli, spices, cardomom to USA and Singapore. Virudunagar is a famous business centre which serves local, regional, national and international markets. The Business people of Virudunagar play an important role in price fixation of consumer products. Hence, there is a popular saying, "Virudhunagar produces nothing but controls everything"\textsuperscript{6}.

1.2 STATEMENT OF THE PROBLEM

The choice is explicit but rapid and radical change and regulatory control may create problem that make it sometimes difficult to make a rational choice. The choice and the preference place on capital at the expense of labour may reduce labour cooperation, lowered their morale, productivity, create conflict that may reduce organizational profit. On the other hand, choice of labour may reduce the quality and quantity of goods produced and lowered organizational profit, competitiveness and profitability. Investors constantly face the dilemma of making rational choice and to balance the needs for each of them so as to make sustainable profit.

The Indian banking sector faces significant but varying challenges. Public sector banks are struggling to get computerized, while private sector banks are eager to adopt security mechanisms.

The online banking business in India is driven by private banks that have a very clear agenda in place to tackle the emerging challenges in this sector.


\textsuperscript{6} http://www.southindianstates.com/tamilnadu_districts/virudhunagar/virudhunagar-history.html
Meanwhile, public sector banks view the basic computerization of operations as a daunting task.

The challenges faced by the employees in banking sector due to the widespread use of ICT are many. Basically, the workers are afraid of the security of their job that may be questioned under ICT environment.

Lack of transparency results in the work tension of the employees in the new working conditions under ICT environment is more than the manual environment. The administrators shall need to take initiative to reduce this work tension of workers.

The bank employees are also worried about the elimination of them due to their inability to cope up with the changing working climate. The risk of job elimination made employees to step against the use of ICT.\(^7\)

The impact of change to existing operational procedure under ICT environment disturbs the regular functioning of employees in the process of discharging their day to day responsibilities. The necessity to change the usual process of performing a task makes the job of bank employees more complex and risky.

The bankers realize that computerized banking is the way to success and are moving frantically in this direction, but it will take time. An interesting factor is that 100 banking centers in India, with high level of internet connectivity, control 70% of assets and liabilities of the central financial system. This region has thus become a priority zone for the public banks.

Private banks standardize the using of the technology knowing that they have to use technology as a cutting edge tool for delivering services in areas that public

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sector banks cannot cater to. They are in a position to leverage information communication technology in their daily operations adopting a new technology for the delivery of various financial products.\footnote{Vadlamani Ravi (2007) “Advances in Banking Technology and Management: Impacts of ICT and CRM” IGI Global, 978-1-59904-675-4 pp.05-06}

Due to the implementation of ICT, the bankers can engage employees from any far away places where cheap labour is available. Hence, the employment of existing employees is challenged due to free flow of cheap labour to banking sector.

In order to examine the nature and effect of problems of using ICT by employees in banking services described above and offer suitable suggestions for overcoming the problems, a systematic enquiry is to be made. Hence, the researcher has undertaken to study on “Impact of Information Communication Technology on the Employees of Banks in Virudhunagar District”\footnote{http://www.tamilselvi.com/virudhunagar-district.html}.

1.3 OBJECTIVES OF THE STUDY

Based on the above research problem, the following objectives were set for the present study:

1. To describe the role of Information Communication Technology on the functioning of banks in Virudhunagar District
2. To make an account of profile of bank employees in Virudhunagar District
3. To assess the impact of using various information communication technology devices by the employees of banks in Virudhunagar District
4. To find out the difficulties in the use of information communication technology by the employees of banks in Virudhunagar District
5. To offer suggestions for the effective use of information communication technology by employees of banks in Virudhunagar District
1.4 HYPOTHESES

This study formulates the following hypotheses to test the relationship of profile variables like age, education and area of the situation of bank with specific variables with reference to different forms of using ICT like Mobile, Land Line, Computer, Fax and Intercom in line with the objectives mentioned above.

1. Ho: There is no significant relationship between profile variables and hours of use of different forms of ICT
2. Ho: There is no significant relationship between profile variables and number of years of use of different forms of ICT.
3. Ho: There is no significant association between profile variables and Purpose of use of different forms of ICT.
4. Ho: There is no significant association between profile variables and problems faced in using different forms of ICT.
5. Ho: There is no significant association between profile variables and Benefits of using ICT in Banks
6. Ho: There is no significant association between profile variables and Risk associated with using ICT in banks.
7. Ho: There is no significant association between profile variables and reasons for adoption of ICT in banks.
8. Ho: There is no significant association between profile variables and suggestions given for effective use of ICT in banks by the employees.

1.5 SCOPE OF THE STUDY

The study mainly concentrates on the impact of ICT on Bank Employees. In Virudhunagar district, there are 168 branches of Public, Private and Regional Rural Banks. This study has been undertaken from the point of view of bank employees. This study finds out the important factors which influence the use of ICT by bank
employees. The present study also identifies various problems faced by the bank employees in the study area and offers suitable suggestions for effective use of ICT. It excludes the technical and managerial aspects of using ICT in banks.

1.6 IMPORTANCE OF THE STUDY

The study finds out the forms of use of ICT by the employees in banks. The present study systematically analyses the various factors influencing ICT which are used by bank employees. It identifies various problems faced by the employees at the time of ICT implementation in Banks in Virudhunagar District. It also offers useful suggestions for overcoming the problems and suggestions for effective use of ICT by the employees in Virudhunagar District.

1.7 AREA OF THE STUDY

The geographical area selected for the purpose of the present research is Virudhunagar District in Tamilnadu State having eight taluks, namely, Aruppukottai, Kariapatti, Rajapalayam, Sattur, Sivakasi, Srivilliputur, Tiruchuli and Virudhunagar.

1.8 PERIOD OF STUDY

The primary data collected for the study relate to the period from April 2011 to March 2012.

1.9 RESEARCH DESIGN

The design of the study is descriptive one. It is based on statistical survey. The research problem, objective and questionnaire have been formulated accordingly. The suggestions of the study were offered based on the inferences drawn from the data collected during the sample survey.

1.10 DATA COLLECTION

Data, which is a vital aspect in any research, has been collected through various resources for the study. Both secondary data and primary data have been collected and used for the research.
1.10.1 SECONDARY DATA

The secondary data is an integral part of any research study as it provides basic information on key variables, which form the significant part of data relating to research. The secondary data have been gathered from various sources like standard text books of related topics, journals, newspapers, websites and so on.

1.10.2 PRIMARY DATA

Primary data have been collected through statistical sampling survey directly from the bank employees in Virudhunagar District. Questionnaire specially designed for the study was used for the data collection.

1.10.3 CONSTRUCTION OF QUESTIONNAIRE

Based on the information collected from secondary sources and from preliminary study, the specific variables to be learned from employees of bank in virudhunagar district identified, arranged and finalized. The type of questions used in the study was dichotomous, Likert 5 point scale, multiple choice and open ended questions. Structured and undisguised form of questionnaire was used to collect the necessary primary data that specifically relate to the objectives.

1.10.4 PRE TEST

The questionnaire for the present study was pre-tested during January 2012 with 15 employees from various banks in Virudhunagar district. Based on the results of the pre-test, the questionnaire was revised and finalised. The finalized questionnaire used for survey is given in Appendix of this research report.

1.11 POPULATION

The population for the study consists of all the bank employees in Virudhunagar District. As per RBI report 2012, there are 1406 employees in all bank branches in Virudhunagar district\(^\text{10}\). From 1406 bank employees, 400 employees are

\(^{10}\) RBI Master File Report as on 24-02-2012, www.rbi.org.in
selected on the basis of the years of appointment of employees in Virudhunagar bank branches.

1.12 SAMPLING DESIGN

To be representative, samples are drawn from each of the eight taluks in Virudhunagar district. Based on the time and resource available, a sample size of 400 employees (28.45% of population) is considered adequate. Individual samples are drawn from each of the eight taluks depending on the number of bank branches in each taluk randomly. Thus, stratified random sampling technique is adopted for this study. The sample numbers employees studied from each of the eight taluks in Virudhunagar district, number of banks and percentage to total samples are given in Table 1.1.

**TABLE 1.1**

**TALUK WISE SAMPLE EMPLOYEES**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Taluk</th>
<th>Number of Banks*</th>
<th>Sample Employees #</th>
<th>Percentage to Total Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aruppukottai</td>
<td>22</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Kariapatti</td>
<td>04</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Rajapalayam</td>
<td>35</td>
<td>100</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Sattur</td>
<td>19</td>
<td>30</td>
<td>7.5</td>
</tr>
<tr>
<td>5</td>
<td>Sivakasi</td>
<td>41</td>
<td>120</td>
<td>30</td>
</tr>
<tr>
<td>6</td>
<td>Srivilliputtur</td>
<td>18</td>
<td>30</td>
<td>7.5</td>
</tr>
<tr>
<td>7</td>
<td>Tiruchuli</td>
<td>05</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Virudhunagar</td>
<td>24</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>168</strong></td>
<td><strong>400</strong></td>
<td></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: *www.rbi.org.in #Primary Data

1.12 FIELD WORK

Field work of the present study has been carried on personally by the researcher himself. The survey was conducted during February to November 2012. The researcher himself visited and personally met all the respondents for obtaining the
necessary data. Completed questionnaire was checked and edited immediately on the
spot as to its completeness and correctness in order to avoid revisits.

1.13 DATA PROCESSING
After completing the data collection work, the filled in questionnaire were
coded for enabling data processing. The tabulation work is done with the help of
SPSS Software. In order to analyse the data relating to study various tools have been
used. To compare among different attributes of a variable Percentage Analysis was
used. To find out the extent of performance of a variable Weighted Arithmetic Mean
was used. Garrett ranking method has been used for identifying important factor
among various variables. The hours of use of mobile, landline phone, computer, fax
and intercom use in banks were compared with profile variables using chi-square test.
The purpose of use of different forms of ICT like mobile, landline phone, computer,
fax and intercom was analysed by One way Anova test. The nature of impact on use
of ICT and Level of improvement of fax, computer and intercom is analysed by
weighted mean score.

1.14 LIMITATIONS OF THE STUDY
Every research study suffers from errors and limitations. Some of them are
incurrent to the research design of the study, while some others are emanating from
the difficulties faced during the different stages of research. The following are the
constraints and limitations of the present study.

a) The design of the research is descriptive and so the approach to the
problem may be given at a higher narrative level than exercising an in-
depth study or experimentation.

b) The area of this study is limited to Virudhunagar district only. Hence, a
finding of the study may not be generalized at state or national level.
c) The limitations and biasness of sampling techniques used in the present study might influence the findings of the study, despite every effort made to have the representative sample.

d) The data gathering instrument may be another source of error. The questionnaire used for this study, despite pre-testing, might remain a source of error. Moreover, the translation of the questions in Tamil, vernacular could create response errors, especially ambiguity in understanding the question as well as the answers.

1.15 CHAPTER SCHEME
This thesis is presented in seven chapters including the present one.

The first chapter titled “Introduction and Design of the Study” includes introduction, statement of the problem, objectives of the study, hypotheses, scope of the study, importance of the study, area of the study, period of study, research design, data collection, sampling design, field work, data processing, limitations of the study and chapter scheme.

The second chapter named “Review of Related Literature” includes ICT in banking industry, ICT in other industries and conclusion.

The third chapter named “Information, Communication and Technology in Banks – An overview” projects meaning of information communication technology, definition of information communication technology, history of ICT in banking sector, Indian banking transformation the starting point, forces for change in Indian banking, banking innovations and conclusion.

The fourth chapter titled “Profile” presents profile of the Virudhunagar district, gender classification, age wise classification, educational qualification, marital status, area of living, area of location of bank, year of appointment, nature of employment, gross salary and conclusion.
The fifth chapter entitled ‘ICT devices used by Bank employees and their Impact’ presents forms of ICT use in banks, duration of mobile phone use in banks, duration of landline phone use in banks, duration of computer use in banks, duration of fax use in banks, duration of intercom use in banks, number of years mobile phone use in banks, number of years landline phone use in banks, number of years computer use in banks, number of years fax use in banks, number of years intercom use in banks, nature of mobile phone use in banks, nature of landline phone use in banks, nature of computer use in banks, nature of intercom use in banks, nature of fax use in banks, internet facility in banks, types of internet facility available in banks, purpose of mobile phone use in banks, purpose of landline phone use in banks, purpose of computer use in banks, purpose of intercom use in banks, purpose of fax use in banks, number of reports prepared by banks, factor influencing ICT use in banks, separate computer facility available in the home, purpose of computer use in the home, nature of impact on use of mobile phone, nature of impact on use of landline phone, nature of impact on use of computer, nature of impact on use of intercom, nature of impact on use of fax, level of improvement of mobile phone in carrying out bank activities, level of improvement of landline phone in carrying out bank activities, level of improvement of computer in carrying out bank activities, level of improvement of intercom in carrying out bank activities, level of improvement of fax in carrying out bank activities and conclusion.

The sixth chapter titled ‘Problems and Suggestions’ presents problems faced in using computer based network in banks, problems faced by using intercom in banks, problems faced by using fax in banks, satisfactions with security of computers in banking, level of security performing transactions through bank website, satisfactions by use of ICT facility provided by the bank, quality of service provided
to customers by using ICT, employees perceptions of the benefits of ICT in banking, employees perceptions of the risks associated with ICT in banking, factors influence the ICT adoption in banks, relationship between personal variables and ICT facilities provided by banks, suggestions for effective use of ICT tools in banks, general suggestions and conclusion.

The seventh chapter captioned “Summary of Findings and Conclusion” summaries information communication technology in banks, profile, ICT devices used by the bank employees and their impact, problems and suggestions, conclusion and scope for further research.