Chapter: 2
Research Methodology
<table>
<thead>
<tr>
<th>Outline of the Chapter</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Introduction</td>
<td>61</td>
</tr>
<tr>
<td>2.2 Rational of the study</td>
<td>64</td>
</tr>
<tr>
<td>2.3 Objectives of the study</td>
<td>66</td>
</tr>
<tr>
<td>2.4 Review of literature</td>
<td>67</td>
</tr>
<tr>
<td>2.5 Hypothesis of the study</td>
<td>78</td>
</tr>
<tr>
<td>2.6 Universe and sampling plan</td>
<td>85</td>
</tr>
<tr>
<td>2.7 Period of data coverage</td>
<td>90</td>
</tr>
<tr>
<td>2.8 Source of data collection</td>
<td>90</td>
</tr>
<tr>
<td>2.9 Techniques of data collection</td>
<td>90</td>
</tr>
<tr>
<td>2.10 Analysis and interpretation of data</td>
<td>91</td>
</tr>
<tr>
<td>2.11 Scope for future research</td>
<td>91</td>
</tr>
<tr>
<td>2.12 Limitation of the study</td>
<td>93</td>
</tr>
<tr>
<td>2.13 Chapter planning</td>
<td>93</td>
</tr>
<tr>
<td>Reference</td>
<td>96</td>
</tr>
</tbody>
</table>
Chapter-2
Research Methodology

Title of the problem: “A Study of Customer Perspective for Innovative Banking Practices of Selected Public Sector and Private Sector Banks in Gujarat”

2.1 Introduction:-

2.1.1 Meaning of research

Research methodology is defined as what the activity of research is, how to proceed, how to measure progress and what constitutes success. Research is a systematic investigation to establish facts or principles or to collect information on a subject.

“Research is a scientific investigation aimed a discovering and applying new facts technique and natural laws.”

“Research is a systematic investigation towards increasing the sum of knowledge”

“Research is a careful investigation or inquiry specially through search for new facts in any branch of knowledge.”

“Research is the manipulation of thing’s, concepts or symbols for the purpose of generalizing to extend, corrects or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art”

The research refers to the systematic method consisting of enunciating the problem, formulating hypothesis, collecting the data, analysis of the data and reaching near the certain conclusion.

2.1.2 Information and Communication Technology (ICT)

The second Rangrajan Committee constituted in 1988 drew up a detailed perspective plan for computerization of in Banks and for
extension of automation to other areas like funds transfer, electronic mail, BANKNET, SWIFT, ATMs etc. The Committee also made recommendations on the 'Single Window Concept', 'all bank credit cards', ‘credit clearing/GIRO system’ and ‘office automation’ etc. In fact this report was the most comprehensive road map for Bank Automation considering the state of the art technology at that time.

Innovative banking practice in India started in 1991 marked the entry of foreign banks. They bought new technology with them. Banking products became more and more competitive need for differentiation of products and services was felt. The ICICI bank kicked off online banking in 1996 currently 78% of its customer base registered for on-line banking, 1996 to 1998 marked the adoption phase while usage increased only in 1999.

Thus the banking system has changed adequately, with the changing in times. Today, you need not visit your bank to conduct most of your banking transactions. Information Communication Technology (ICT) has made virtual banking possible and it is actually becoming a very popular way of banking. In Innovative banking, you can transfer money, get or alter your account information, pay your bills, order debit cards or checks and even apply for a bank loan at the click of a mouse.

2.1.3 Concept of Innovative Banking

In simple word Innovative Banking means, a technology based service provided by the bank, due to the burgeoning development of electronic commerce (e-commerce), the broader application of emerging services. Internet banking services have been introduced and provided by financial holding companies or banks at an accelerating rate in recent year since; they can provide efficient, reliable securable and convenient financial services, such as on-line payment, deposit/loan, trading and clearing/settlement via electronic channels for customers. E-banking
service not only can create new competitive advantages, but also can improve their relationship with customers for banks. Obviously, innovative banking can offer better services required by operations and individual.

Important Innovative banking services are ATM (Automatic Teller Machine), EFT(Electric fund transfer), SMS banking, EBP (Electric bill payment), E-Statement services, EDI (Electric data interchange), E-alerts, E-Cheque, mobile Banking, RTGS, Internet Banking, STEPS, Money transfer, ACH(Automatic clearing house), ATM cum Credit card and SSC and FEC.

2.1.4 Innovative Banking (E-Banking) part of E-Commerce:

Innovative Banking (E-banking) is the part of E-commerce; it is classified are as under.

**Diagram no.2.1**

**E-commerce classification**
2.2 **Rational of the Research study**

Technological developments particularly in the area of information technology are revolutionizing many industries. Among them bank having the most important and attracts many attentions, because banks play important role in development of country; they can make it either strong or weak. At least every business relationship ends to a financial transaction that banks should support it. Innovative banking practices in banks means a technological based service provided by the bank. By adopting innovative banking services, banks can work as facilitators and accelerators for different industries and firms in several scales, small and large, so the business world will be found a new definition and the global market will become realistic. In this regard, many banks and financial institutions are actively developing new way of transaction for themselves and their customers throughout the world but still it is a very new market to enter and to work.

By the adoption of innovative banking, their traditional ways of doing business has changed to a highly dynamic communication that not only is cost-effective but also is revenue generating. It has been also proved that innovative banking is the cheapest transaction channel for banking services, so banks can get notable cost savings, reduce their branch networks and downsize the number of their service staff, all of which contribute in maximizing their profits. Therefore every bank its level best to offer innovative banking services to its customers. Hence there is an emerging need to study which innovative banking services are provided by different banks, what are customers’ expectation and what are customers’ perspective about innovative banking practices.

From the state’s point of view, the rationale of the study lies in identifying and highlighting consumers’ overall perspective about innovative banking practices and the problems areas of internet banking
channel, with special reference to Gujarat state. It has become almost a requirement for companies to establish themselves in the technological world if they want to survive in the more and more competitive future. This as stated earlier becomes more and more important for companies who want to “stay and alive in the market”

Therefore the present research study has been undertaken to study and review some aspects of innovative banking practices of selected public sector and private sector banks by collecting, analyzing and interpreting data from primary and secondary sources.

The present study will answer opportunities and challenges in the field of innovative banking practices in terms of selected variables. The opinions and suggestions of bank officers and bank customers will provide guideline for the future course to be followed. The present study will make significant contribution to the knowledge, for the bank and the society which is mentioned below

**Contribution to the knowledge:-**

Through this study the knowledge about internet banking concept will improve, the knowledge regarding various banking services provided by bank will improve, the knowledge regarding various types, components, benefits and limitation of internet banking will improve, the knowledge particularly regarding various committee, norms and ethics of banking systems will improve and the knowledge particularly regarding statistical tools and technique and statistical test will also improve.

**Contribution to the Bank**

Bank may be able to provide better innovative services to their customers’ to provide speedy and less costly internet banking services to their customers, to take state-of- the- art technology and step with the modern edge, and to focuses the competitors view of market trend and provide same competitive services to their customers.
**Contribution to the society**

Through this study, customer will able to know the real situation of internet banking services provided by bank, customer can take proper decision to choose better virtual bank and customers can define how to using the internet banking.

### 2.3 Objectives of the study

The present research study has been undertaken with the following objectives in view.

1. To study conceptual framework of banking sector.
2. To study conceptual framework of innovative banking, various innovative banking services and its current picture and state of art technology in innovative banking.
3. To study customers’ awareness about various technology based services offered by the banks.
4. To study the purpose of using innovative banking services by customers.
5. To study reasons responsible for choosing a particular bank and opening bank account especially innovative banking services.
6. To study respondents’ opinion about internet account creation procedure and hidden charges while using internet banking.
7. To study respondents’ opinion about finding difficulties when using internet banking.
8. To study respondents’ opinion about facilities they expect from banks.
9. To examine whether there is any relation with the demographic variable (Gender, age, education, occupation and income) and respondents’ perception about innovative banking services.
10. To study respondents’ perspective of innovative banking services with special reference to
   - Service level
   - Trust
   - Usefulness
   - Satisfaction level
   - Behavior of bank employee

11. To present overall findings and suggestions with a view to making innovative banking practices of selected banks more effective with special reference to Gujarat state.

2.4 Literature review

Researcher has been collected past reviews of literature, which are as follow:-

- **Shanti (1984)**
  The researcher has made a pioneering attempt to examine the issue relating to delivery of customers services in Indian banks. As against the backdrop of a sound conceptual framework, the research has done an empirical analysis of bank employee’s job behavior and its relationship with bank services delivery. The researcher has found that lack of job motivation, lack of freedom at branch level, lack of leadership qualities among bank managers, job security etc. have resulted in poor quality customer services in Indian banks.

- **Hussain (1988)**
  In this study, the researcher has highlighted the importance of various banking sectors. During the introduction of any new technology or system in various organizational, financial and functional problems are faced in the initial stages. People are generally reluctant to accept new
systems. However, beneficial they may be most of the issue, which are involved in computerization have been critically and vividly discussed.

- **Khazeh and Dekar (1992)**

  Analyzed the determinates of consumers bank selection decision through a survey covering 1198 business school at mini consalisbury state university in many land using a questionnaire containing 22 factors that was identified to influence the banking decision service charges, the reputation of the bank, interest rates on levels, time required for loan approval and friendly teller were identified as the tops determinates of bank election decision. Effective advertising was considered as least important (Rank-22) whole ATM availability, proximity to work hope cleanness to home, were ranked 12, 16 and 17 respectively focusing customer attention on low ranking factors. May do little to attract new customers and on remaining the rating one.

- **Singh and Malhotra (1993)**

  They analyzed customer satisfaction in banking services in the Amritsar city. They concluded that PSBs should improve their services to attract the new customers. Bank management should prepare the list of existing and prospective customers and carry out detailed studies on customer satisfaction in order to improve their services. But this study is limited to only one district of Punjab.

- **Sharma and Singh (1993)**

  They analyzed the quality of customer services produced by Standard Chartered Bank (SCB) and Punjab National Bank (PNB), core branch of each bank situated in hall bazaar, Amrisar. With the sample of 40 respondents in total, they concluded that the quality of customer services of PNB branch is very poor in comparison to that Standard Chartered Bank branch, but major limitation of the study is that it is related to two banks only.
Thwaites and vere (1995)\textsuperscript{10}

In this study, the researcher studied the student buying behavior of banking services and concluded that students were not convinced the concept of financial supermarket and were more inclined to shop around for the best offer.

Edris and Almahmed (1997)\textsuperscript{11}

In this study, the researcher concluded that the true determinants of the bank selection decision made for business customers were more liable to be a function of both perceived importance of bank attributes and the differences among bank are given region with regard to each of these attributes.

Heggade (2000)\textsuperscript{12}

In this study, the researcher has studied the bank customer relationship in India. He analyzed response of 11 different classes of bank customers like businessmen, salaried persons and advocates etc. He analyzed customer’s views on one hand and employee’s view on the other hand. He concluded that there is a low correlation among the different occupations and satisfaction from services in the PSBs.

Shastri (2001)\textsuperscript{13}

In this study, the researcher has analyzed the effect and challenges of new technology for banks. Technology has brought a sea change in the functioning of the banks. The earlier manual system of preparation of voucher is slowly being automated. They are saving lot of time and effort. The use of ATMs and introduction of it is more in the recent times than in the past, especially in the post VRS scenario.
Varghese and Ganesh (2003)\textsuperscript{14}

They analyzed customer services in PSBs and old private sector banks based on the response of 776 customers of 10 PSBs and 13 old private sector banks operating in Kerala. They found that regarding “Time” spent on a transaction, there is no significant alternate in the two types of the bank branches.

Singh (2004)\textsuperscript{15}

He explained the appraisal of customer service of PSBs and concluded that level of customer services and satisfaction is determined by the branch location, design, variety of services, rates and charges, systems and procedures and attitudes and responses. His study is purely concerned with the customers of PSBs.

Atanu Nath And Liu Zheng, (2004)\textsuperscript{16}

In this study, the purpose of the researcher study was to see whether there are differences perceived by customers in service quality across online service based companies and identify the attributes responsible for any such perceived differences and the areas in which customers do not distinguish among providers. Finding of the study suggested that customers today set purely Internet based services company apart based on tangibility, reliability and responsiveness of the companies rather than their perceived creditability and security services offered, which this indicates a blurring down of the divisions between one-line and off-line service providing companies in the customer’s mind.

Olga Lustisik, (2004)\textsuperscript{17}

In this study, the researcher explores the implementation of technique of activity based costing (ABC) in banking sector on the example of an Estonial bank in order to analyze the cost structure for traditional and electronic channel transaction. This study shows how it is
possible to implement ABC in banking and prove empirically electronic channels that help to reduce cost of both of their clients.

- **Uppal (2006)**
  
  With stratified sampling of 500 bank customers, the researcher explained the impact of computerization on the satisfaction of customers of all bank groups and concluded that customer services are quite better in fully computerized banks and further in e-banks as compared to that in partial or non-computerized banks. The researcher study was concerned only with the urban sector of Punjab.

- **Vasya Kenva and Patrick Jonassen (2006)**
  
  In this study, the researcher has identified various service quality dimensions like reliability, responsiveness, courtesy, communication, security, creditability, understanding and competence of E-banking services. They examined various factors that affected on-line banking services. The researchers have developed and later on modified theoretical modal for measuring the quality of on-line banking services in particular, as a result of conducted analysis, the initial theoretical model has been modified, so that the final version of the modal for measuring quality of on-line banking services includes four quality dimensions.

  
  In this research paper, the researcher has examined innovative mobile solutions in the field of mobile financial services (MFS) by using four cases studies from Germany and Switzerland representing two banks and two different technology solutions.

  The paper has scrutinized the strategic relevance of MFS to the competitor’s position of the firm concerned. The researcher has represented five propositions about the role of innovative business solutions in the banking sectors and recommended that a large scale empirical study to test these propositions be conducted in future.
Golrou Abdollahi (2008)21

In this thesis, the researcher has evaluated various internal attributes determining loyalty orientation for consumers. He also identifies customer loyalty intensity. The various attributes like family status, socio-Economics, traditions career status, value, life style choices and psychographics represent in broad categories. In determining the robust and predictive attributes for different industries, more than 100 variables have been considered.

Divya Singhal and V. Padhmanabhan (2008)22

This research study’s aim is to explore the major factors responsible for internet banking based on respondents’ perception on various internet applications. This study also examined whether there is any relation with the demographic variable and respondents’ perception about internet banking and whether the user and non-user perception differ.

The finding of the study indicates that “utility request”, “security utility” transaction, ticket booking and fund transfer are major factors, affecting internet banking.

Sara Naimi Baraghani, (2008)23

In this research study, the researcher has investigated customer adoption within the context of Iran Internet banking services and research frame work was based on the extension of technology acceptance model with theory of planned behaviors and trust theory was developed to identify factors that would influence the adoption of internet banking.

The results of the study show that attitude perceived behaviors control, perceived usefulness, perceived ease of use, trust significantly influence customers intentions towards adopting internet banking.
Roja Ghaseni, (2008-09)24

In this research, the researcher has examined the causal relationship among determinant factors of strategic value and adoption of electronic commerce as perceived by decision maker unit in Iranian banking industry. As the majority of studies of casual relationship between perception and adoption have been examined in Small Medium Enterprise, there is lack of focus in large companies and organization like banks.

Finding of the research study suggests that the perception of managers in banks cause e-banking adoption. It means that those banks who perceived e-commerce as adding strategic value to their organization have a positive attitude towards theirs adoption.

Yassaman Mastoori (2009)25

This research study’s aim is to find out why Iranian bank customers, in particular, those bank customers whom internal banking services have already been offered are not using internet banking. Furthermore, when non-adopters comprise the majority of the population, describing all non-adopters as one homogeneous group may not be accurate.

The finding of the study indicate main reasons which bar these customers from using internet banking are lack of knowledge about internet banking, lack of trust in the system and limited internet banking services.

Reeti Agarwal, Sanjay Rastogi and Ankit Malhotra (2009)26

In this research study, researcher has identified various factors affecting towards customer perception, attitude and satisfaction level. E-banking is an essential part of a banks strategy formulation process in an emerging economy like India to gain this understanding in respect of
Indian customers. The study was conducted on respondent taken from the northern part of India.

Finding of the research study indicates that security and trust are the most important factor affecting the customer’s satisfaction level and the customers find slow transaction speed.

❖ Ziagham Mahmood (2009)²⁷

In this research study, the author has described e-banking and its future level. The aim of his study was to get an opinion of the general public towards the use of e-banking. The researcher collected data through structured questionnaire.

The finding of the study indicates that 89% of the respondents have access to internet, nearly half of them were using e-banking and also found that main reason for e-banking were convenience, availability and saving of time.

❖ Emma Anamuah Mensah and Georgia Marfo,²⁸

This research study was on case study of four banks in Ghana, two private sector and two state banks. This study only sought to examine the adoption of e-business in the Ghanaian banking industry with respect to the expected benefits derived by adopting e-business, the barriers that prevent firms from taking advantage of e-business adoption and the challenges firms encounter when adopting e-business.

❖ Shrinivas Anumala, Bollampally Kishore Kumar Reddy,²⁹

The purpose of the study was to gain a better understanding of the benefits of E-CRM to customers and organization in banking industry. The finding and suggestion of the study shows that Swedish banks are well aware of the benefits and applications of the E-CRM and use the system to maintain good relationship with their customers. The researcher also found that both the banks seem to have same description about the benefits of E-CRM.
Mohammed Sadique Khan and Siba Sankar mahapatra,30

In this research study, the researcher has evaluated the service quality of internet banking service in India for customer’s perspective. A structured questionnaire containing 44 quality items was administered among various target groups. The researcher has included seven quality dimensions like reliability, accessibility, user friendliness, security, efficiency, responsiveness and fulfillment.

The finding of the study indicates that customers are satisfied with quality of service on four dimensions, such as reliability, accessibility, security and responsiveness, but least satisfied with the user friendliness dimensions.

Vasilis Aggelis, Dimitris Christodoulakis.31

In this research study, the researcher has examined rules of association and its relation between e-banking and also indicate various factors effected to the e-banking. The scopes of this research are the demonstration of the application of data mining method to e-banking. In other word, association rules consideration e-banking are prediction using different technique and predication modal is established, depending on e-banking parameter like the transactions volume conducted through this alternative channels in relation with other crucial parameters like the number of active users.

K. Mohan,32

In this research study, the researcher has examined the gainful effects of the use of information technology and also has given a critical analysis of the impact of IT and banking performance and customer services. Information technology is viewed more as reconciliation equipment for the office and ledger mechanism for front office. Customer
is a world where banking is increasingly becoming a consumer center service provider.

❖ M. Sadiq Sohail, 33

In this research paper, the researcher has examined the current trends in the e-commerce revolution that has set in motion in the Malaysia to study the customers’ preferences for electronic banking and the factors, which they considered influencing the adoption of electronic banking.

The finding and suggestion of the study indicate that, there is no significant difference between the age and educational qualification of the electronic and conventional banking users. Some differences exist among other demographic variables.

❖ Santosh Dwivedi Bernnard Menezes & Ashish Singh 34

The researchers have described the advantages of application service provide based on supply chain management and presented a much simplified database scheme for this application. A common user query which provides input to decision making system relevant to supply chain optimization is listed. The researcher has also examined the use and short coming of oracle’s virtual pvt. Database is a component of a database their fire well.

❖ Narayan Rangraj 35

In this research paper, the researcher has summarized some key modeling approaches and paradigms that emerge when looking at analysis and decision making in the areas of e-business and supply chain management. It has provided three examples of application, two semi-automated systems that could be used in procurement and marketing and one from an e-business perspective on a large transport organization. The Indian railways also followed e-business model as applicable situations.
K. Ganesh 36

In this research paper, the researcher has studied the effectiveness of monitoring system profit center, standard for comparison and management information system. The study suggested that the working fund as the base for the purpose of comparing profitability at the branch level is inadequate; it has been related to the total business.

Subodh Chandra Garai and Sanjib Chandra Basu 37

The researcher has studied how to apply multy variant discriminate analysis technique for differentiating a prior bank group operating in India, using the data of some financial ratios published by the RBI relating to individual bank for the financial year 1995-96, 1996-97 and 1997-98. In the research study, to consider the efficiency of banks with regard to management of lending activity, ratios regarding non-performing assets were given due importance.

Bajezidur Rashid patwary 38

The researcher has attempted to understand the design of an ATM, a device used by bank customers to process account transaction. He explained the process of ATM when ATM card enter in ATM machine. He has covered the benefits, barriers and challenges for using ATM machine from customers’ perception.

All these studies reveal the fact that number of researches have come out on e-banking. But a research on innovative banking practices with special reference to public sector and private sector banks of Gujarat state has not been undertaken to the best of researcher’s knowledge. Hence the present research study attempts to study and review customer perspective for innovative banking practices of selected public sector and private sector banks in Gujarat.
2.5 **Hypothesis of the study**

Hypothesis of the present research study have been made through following variable and parameters.

**Variable:-**
1. Gender
2. Age group.
3. Education level.
4. Occupation
5. Income level.

**Parameters:-**
1. Operating system
2. Agreement policy and security policies
3. Internet account creation system.
4. User charges.
5. Service level.
6. Trust.
7. Usefulness.
8. Satisfaction level.
Diagram: -2.2
Cross relationship between variable and parameters

Parameters
- Service level
- Trust
- Usefulness
- Satisfaction level
- Behaviour of employee
- Operating system
- Agreement policy and security Policies
- Account creation procedure
- User Charges

Variables
- Variable-1: Gender
- Variable-2: Age group
- Variable-3: Education level
- Variable-4: Occupation
- Variable-5: Income level
The present research study is based on following null hypothesis:

**Null Hypothesis**

1. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding operating system of innovative banking with their gender.

2. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding knowing banking agreement privacy and security polices with their gender of innovative banking with their gender.

3. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding internet account creations procedure with their gender.

4. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding internet banking user charges with their gender.

5. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding service level of innovative banking services with their gender.

6. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding trust of innovative banking services with their gender.

7. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding usefulness of innovative banking services with their gender.

8. **Ho:-** There is no significance differences in mean score of respondents’ opinion regarding satisfaction level of innovative banking services with their gender.
9. Ho:- There is no significance differences in mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their gender.

10. Ho:- There is no significance differences in mean score of respondents’ opinion regarding operating system of innovative banking with their age group.

11. Ho:- There is no significance differences in mean score of respondents’ opinion regarding knowing banking agreement privacy and security polices of innovative banking with their age group.

12. Ho:- There is no significance differences in mean score of respondents’ opinion regarding internet account creations procedure with their age group.

13. Ho:- There is no significance differences in mean score of respondents’ opinion regarding internet banking user charges with their age group.

14. Ho:- There is no significance differences in mean score of respondents’ opinion regarding service level of innovative banking services with their age group.

15. Ho:- There is no significance differences in mean score of respondents’ opinion regarding trust of innovative banking services with their age group.

16. Ho:- There is no significance differences in mean score of respondents’ opinion regarding usefulness of innovative banking services with their age group.

17. Ho:- There is no significance differences in mean score of respondents’ opinion regarding satisfaction level of innovative banking services with their age group.
18. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their age group.

19. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding operating system of innovative banking with their education level.

20. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding knowing banking agreement privacy and security polices of innovative banking with their education level.

21. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding internet account creations procedure with their education level.

22. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding internet banking user charges with their education level.

23. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding service level of innovative banking services with their education level.

24. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding trust of innovative banking services with their education level.

25. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding usefulness of innovative banking services with their education level.

26. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding satisfaction level of innovative banking services with their education level.
27. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their education level.

28. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding operating system of innovative banking with their occupation.

29. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding knowing banking agreement privacy and security polices of innovative banking with their occupation.

30. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding internet account creations procedure with their occupation.

31. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding internet banking user charges with their occupation.

32. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding service level of innovative banking services with their occupation.

33. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding trust of innovative banking services with their occupation.

34. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding usefulness of innovative banking services with their occupation.

35. **Ho:** There is no significance differences in mean score of respondents’ opinion regarding satisfaction level of innovative banking services with their occupation.
36. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their occupation.

37. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding operating system of innovative banking with their income level.

38. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding knowing banking agreement privacy and security polices of innovative banking with their income level.

39. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding internet account creations procedure with their income level.

40. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding internet banking user charges with their income level.

41. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding service level of innovative banking services with their income level.

42. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding trust of innovative banking services with their income level.

43. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding usefulness of innovative banking services with their income level.

44. **Ho:**- There is no significance differences in mean score of respondents’ opinion regarding satisfaction level of innovative banking services with their income level.
45. **Ho**: There is no significance differences in mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their income level.

### 2.6 Universe and sampling plan

#### 2.6.1 Universe

The universe of the research study includes public sector and private sector banks located in Gujarat state and the customers who are using internet banking services.

#### 2.6.2 Sampling Plan

From the above universe, the researcher has selected 10 public sector and 10 private sector banks, from the recent report of RBI trend and progress. On the basis of profitability variable, top 10 public sector and top 10 private sectors banks have been selected under the samples plan. The list of these 20 banks is as under:-

<table>
<thead>
<tr>
<th>Public sector banks</th>
<th>Private sector banks</th>
</tr>
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<tbody>
<tr>
<td>1. State bank of India</td>
<td>1. ICICI Bank</td>
</tr>
<tr>
<td>2. Punjab National Bank</td>
<td>2. HDFC Bank</td>
</tr>
<tr>
<td>3. Bank of Baroda</td>
<td>3. Axis Bank</td>
</tr>
<tr>
<td>5. Union Bank of India</td>
<td>5. Jammu &amp; Kashmir Bank</td>
</tr>
<tr>
<td>7. Indian Bank</td>
<td>7. Federal bank of India</td>
</tr>
</tbody>
</table>

Regarding bank customers, the customers who are using internet banking services of selected 20 banks have been selected as respondents.
Total 1000 respondents have been selected by using multi stage sampling method. Under multi stage sampling methods respondents have been selected by applying following methods.

(1) Area sampling.
(2) Stratified random sampling.
(3) Convenient random sampling.

Under area sampling method 25 districts of Gujarat states have been included in the sampling plan, in order to cover the entire Gujarat state.

Under stratified random sampling method the researcher has stratified bank of Gujarat states into two strata’s
- Public sector banks.
- Private sector banks.

Due to constrain of time limit co-operative banks have not been covered.

Under convenient random sampling method respondents from above mentioned stratas have been selected. Respondents have been equally distributed among 25 districts of Gujarat state.

Details sampling plan is shown in below table no. 2.1, 2.2 and 2.3.
### Table no. 2.1

**Sampling plan of Gujarat state area**

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Table no. 2.3
Sampling plan of Private sector banks
2.7 **Period of data Collection**

The present research study has covered the financial data for the period of five year from 2005-06 to 2009-10.

In the present research study, the questionnaire for primary data has been filled up during the time period February 2013 to December 2013.

2.8 **Source of data collection**

Collection of data is very important part of research process. There are two basic types of data collection.

a). Primary data.

b). Secondary data.

2.8.1 **Primary data**

The primary data has been collected from customers selected as respondents by utilizing multiple – choice questionnaire.

2.8.2 **Secondary data**

The researcher has used the data published in IBA Bulletins, professional banker, various books, banks annual reports, journals, magazines, newspapers and unpublished Ph.D. thesis. annual recent trend and progress of Reserve bank of India for March 2010 and 2011, the survey published in financial express for top banks and other related websites have been referred by the researcher.

2.9 **Techniques of data collection:**

The data in the present research study has been collected by using multiple choice structured questionnaire.

2.9.1 **Questionnaire :**

**Questionnaire-1**

Multiple choice structured questionnaires has been prepared so as to get comprehensive information as per objectives of the study. The multiple choice questionnaire has been divided into three sections.
Section-1 Personal information
Section-2 Main question
Section-2 has been sub divided into two parts- namely-
   A. Internet banking habit of the customers
   B. Innovative banking services
Section-3 Customers’ perspective of innovative banking service

Questionnaire - 2
An open ended questionnaire has also been prepared to get bank manager’s response about Innovative banking practices.
The researcher visited 25 districts, talukas and villages of Gujarat state to fill up open ended and multiple – choice questionnaire.

2.10 Analysis and interpretation of data
The data collected through questionnaires are properly edited, classified, tabulated, analyzed and interpreted with the help of suitable statistical method, whenever needed. The analyses and interpretation of data have been done with the help of SPSS, My stat and Microsoft excel computer software programmer, consistent with the objective of the study. Different technique like simple average, percentage methods, bar chart and diagrams have been used for the analyses of data. In case of hypothesis testing, advanced statistical tools have been used. The data has been analyzed and interpreted on the basis of the variables selected such as age, education, income, gender, occupation etc.

The hypothesis have been tested at the 5 % level of significance by applying F- test one way ANOVA.

2.11 Scope for future research
The present research study is on “A study of customer perspective for innovative banking practices of selected public sector and private sector banks in Gujarat”. In the present research study, the researcher has attempted to collect information through questionnaire from 1000
respondents and 10 public sector bank and 10 private sector banks of Gujarat state.

Innovative banking is very wide subject and there are many public sector banks, private sector banks, foreign banks and co-operative banks. So this research study opens doors for future research on banking sector. Therefore there is scope for future research for banking sector as mentioned below and the present research study can be helpful in the future research.

1. A study of customer perspective for innovative banking practices of selected public sector and private sector banks in the state other than Gujarat.
2. A study of customer perspective for innovative banking practices of selected public sector, private sector and foreign banks in Gujarat.
3. A study of customer perspective for innovative banking practices of selected public sector, private sector and foreign banks in the state other than Gujarat.
4. A study of customer perspective for innovative banking practices of various co-operative banks in Gujarat.
5. A study of customer perspective for innovative banking practices of selected banks by applying TAM model, SERQUEL model and E-SQ model.
6. A study of customer perspective for innovative banking practices of selected banks through parameters like service reliability, access, courtesy, responsiveness, communication, credibility, Security, understanding of service, tangible and assurance and empathy in any state of India.
7. A comparative study of innovative banking / e-banking practices of selected banks of any two states in India.
8. A study of service marketing practices of selected banks
9. A study of customer perspective for innovative banking practices of selected public sector and private sector banks in Gujarat.

2.12 Limitation of the study
The present research study is subject to following limitations:-
1. The study is limited to Gujarat state only.
2. The study is conducted to the selected sample size.
3. The answers given by respondent may be followed by some prejudice.
4. The respondent may reply incomplete questionnaire.
5. The researcher has used primary data in the study, so researcher has to depend upon respondents’ preference. Respondent’s bias will affect the result.
6. Non availability of useful data on some aspects may restrict the research study to certain limitations.

2.13 Chapter planning
The present research study divided into eight chapters:-

Chapter 1: Introduction
This chapter deals with meaning and definition of bank, history of banking in the world, history of Indian bank, various development phase of the bank, types of bank, Basel-II accord and function of modern banking.

Chapter 2: Research methodology:
This chapter deals with title of the study, rational of the study, objectives of the study, review of literature, hypothesis of the study, universe and sampling plan, period of data coverage, sources of the data collection, techniques of data collection, analysis and interpretation of data, scope for future research, limitations of the study and chapter planning.
Chapter 3:- Innovative Banking
This chapter deals with concept of innovative banking, techniques of innovative banking, history of innovative banking, world scenario of internet banking, history of innovative banking in India, internet banking in India-RBI guidelines, RBI role in computerization of Indian bank, RBI first step toward information technology, types of internet banking computerization, types of internet banking, functions of innovative banking, innovative banking and its technology vendor, computerization of intra bank and interbank application.

Chapter 4:- Innovative banking services
This chapter deals with innovative banking services like ATM (Automatic Teller Machine), CBS (Core Banking Solution), net banking and mobile banking, tele banking, credit card, smart card, EFT (Electronic Fund Transfer), EBP (Electronic Bill Payment), EDI (Electronic Data Interchange), E-cheque, MICR (Magnetic Ink Character Reader), RTGS (Real Time Gross System), STEPS (State Bank Electronic Payment System ), Shared payment network system, Electronic authentication and signature, SWIFT(Society for Worldwide Interbank Financial Telecommunication), ACH (Automatic Clearing House), SSC and FEC (Settlement Securities System & Foreign Exchange Clearing), digicash, netcash, millicent and mondex.

Chapter 5:- Internet banking: - State-of-art-technology
This chapter deals with internet banking state-of-art-technology, high tech banking technological services, the identities of Indian bank-taglines, future innovative services of the bank, credit rating of CIBIL and CERSAI for bank, banking supervision committee,
information technology act 2000 for bank, innovations in terms of services and service innovation in banks.

**Chapter 6:- Profiles of respondents**
This chapter deals with profile of respondents- gender, age group, marital status, education, occupation and income level, classification of respondents according to types of banks, multiple bank transaction, telephone banking service, respondents’ purpose of visiting bank branch, performing activities on-line, using web browser for internet banking activities, use unique password for banking transaction, read banking agreement privacy and security policy and bank managers’ response according to innovative banking.

**Chapter 7:- Data Analysis and hypothesis testing**
This chapter deals with analysis of data collected through questionnaires. Data has been properly edited, classified, tabulated analyzed and interpretation with the help of suitable statistical method.

**Chapter 8:- Finding and Suggestion**
This chapter deals with overall findings and suggestions. Various suggestions have been recommended with a view to making innovative banking practices of selected banks more effective with special reference to Gujarat state.
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