CHAPTER 3

RESEARCH METHODOLOGY
In chapter try to explain the concept of research methodology reach-me-down for the current scenario of the study. The processes followed to run this study have been explained. Methodology in the study is very much crucial for every study to give shapes and directs to the work. Again it shows the credibility, quality, consistency, comprehensiveness, universality and objectivity of the study work. The in progress study is supportive to explain to execute of service quality models in Public Sector Banks in the economy of the India.

The ongoing study is based on primary and secondary data together from different source. In this part of chapter with the need of the research, objectives of the current research, major scope of the research, organisation of the research and limitations of the research. Each and every possible attempt has been taken or made to make the current research logical and practical.

Research methodology is a path to systematically explanation of the problem. Sometimes it is possible to understand the science of studying how research will do scientifically. In this part we will work on the various steps those are generally taken by a researcher in while doing research. Basically research problem are always systematic in nature, every research problem have logic behind them. The scope of research methodology is very much wider while understanding the research problem and provides assistance to solve them.
**Need of the Study**

Characterizing and observing the quality of a service is altogether different from characterizing and checking the quality of an unmistakable item. From an inward viewpoint, a producer can review bits of organic product got from a supplier as indicated by certain goal criteria, for instance, weight, size, shading, composition and so forth. Additionally, from an outer viewpoint, that is, a buyer's perspective, a quality appraisal of the organic product can be made in the general store preceding buy, by touching or feeling the stock, yet at a more subjective level. In both cases, the quality appraisal relates obviously to the completed item. With services, interestingly, clients make judgments about the quality of the service conveyance process, and also on the last result. The autonomous specialist, for occurrence, may evaluate quality of the records, yet on the phone way of the bookkeeper's workers and the pace with which the work is completed.

Here are several special explanations behind the need of the study:

- Speedy development of Public Sector banks in India.
- With individuals to find the awareness level.
- To realize that how service quality models helps service supplier and client to tentative the service quality.
- This study helps the Banks to develop their services

**Problem Statement**
There is gap between the customer expectations and customer perceptions.

**Objectives of the study**

1. To identify the gap between customer expectation and their perception of service quality provided by Public sector Banks.

2. To study the reasons for enduring the relationship of consumers associated with public sector banks.

3. To make suggestions to improve service quality in Indian banks on the basis of findings of the study.

4. To study the recent developments of Banking Sector in India.

5. To study the awareness among the client about the norms of banking given by public sector bank.

**Scope of the study**
The most important possibility of the study is incomplete to the customers of the Public Sector banks of Punjab. The study scope is restricted to banking sector. For the understanding and gathering of the primary data the study will be confined to PUNJAB state only. The area of PUNJAB is divided as per the geographical distribution. The sampling unit be clients of public sector banks of Punjab State Bank of Patiala, Punjab National Bank, Oriental Bank of Commerce and Punjab and Sind Bank from Majha, Malwa, Doaba and Powadh regions of Punjab.

**Research Design**

Research is being undertaken as Descriptive as a nature. The descriptive researches always attempt discusses with detail the correlation between different parts of a research difficulty. As an alternative of look at ‘what was’, it looks at ‘what’. The major reason of descriptive research is unfolding the condition of interaction as it exists at present.

The present study describes the characteristics of service quality in banking industry. It is a predetermined and prearranged design. The tools used to collect the data are pre-structured questionnaire filled from 400 clients of Public sector Banks from different areas of Punjab. As per geographical distribution of Punjab, the area of the Punjab is divided into 4 parts (i.e.) – Majha, Malwa, Doaba and Powadh.

Since the study explains the features of relevant groups namely customers, estimates the percentage of sample exhibiting a certain behavior, determines the perception and expectation on services quality in Public sector banks, determines the degree of association
between the profile variables and the service quality, and make some predictions in service quality of banks, it is descriptive in nature.

**Sampling and sampling design**

Sampling is the one of the most important part while doing research. It may be define as the selection of some area of totally aggregate on the basis of which a judgment or inference about the aggregate or totality is made. In simple words, it is the process of obtaining information about the population by examining only a part of it.

- **Sampling Unit:** It defines the target population that will be sampled i.e. it answers who is to be surveyed. In study, the sample unit taken as clients of public sector banks from Majha, Malwa, Doaba and Powadh regions of Punjab

- **Sampling Size:** It indicates the numbers of people to be surveyed. Though large samples give more reliable results than small samples but due to constraints of time and money, the sample size will be restricted to 400 clients of public sector banks to determine the level of service quality & discover the gap in service quality from beginning to end perception and expectations. And also take a sample size of 400 clients of public sector banks to check the awareness level of banking norms in them.
Sampling Design: while keeping responses from respondents’ one thing kept in consideration the nature of information necessary for the research, convenient sampling technique is adopt. The respondents are selected from the public sector banks of Punjab, information collected from the customers of four (4) public sector bank only. The sampling unit is clients of public sector banks of Punjab-

- State Bank of Patiala,
- Punjab National Bank,
- Oriental Bank of Commerce and
- Punjab and Sind Bank

As per geographical distribution of Punjab, the area of the Punjab is divided into 4 parts (i.e.) – Majha, Malwa, Doaba and Powadh. Responses taken from these areas.

Data Collection:

The technique of data collection is used for the research should be kept in consideration.

1. Primary
2. Secondary.

In the current research I have made use of primary data collected with the help of questionnaire. It contains also take material available on various web-sites and web-portals.

The current research made use of primary data collected through questionnaire filled from selected public sectors banks from the above public sector banks with in the selected areas of Punjab.

**Questionnaire Method:**

Data originally taken for an analysis is called primary data. This data is original used in character. Through questionnaire process one of is the most popular and important source of data collection. The primary data taken for this study with the help of questionnaire method while making the questionnaires more emphasis is on drafting of the questions as per logically, systematic, and ambiguous were trying to avoid.

There are two types of Questionnaires for primary data collection

- **Questionnaire A** – Consist of questions based upon Servqual Service quality model which helps to identify the gap between customer expectation and their perception of service quality provided by Public sector Banks.
- **Questionnaire B** - It consists of questions to study the awareness among the client about the norms of banking given by public sector banks.

**Pilot Survey Results of All the Two Questionnaires:**

Before launching the questionnaires for data collection, a pilot survey is conducted and find out the reliability and validity of these questionnaires with the help of SPSS.

1\textsuperscript{st} questionnaire is about the expectations and perceptions of the customer of PSU Banks.

2\textsuperscript{nd} questionnaire about the awareness among the client about the norms of banking given by PSU Banks.

**Results of 1\textsuperscript{st} questionnaire after implementing reliability and validity test through SPSS**

Questionnaire consists two parts one is Expectation and second is Perception (Experience). For calculation of this 100 respondents are selected

a) Result of Expectation
<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>.743</th>
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<tbody>
<tr>
<td>No. of items</td>
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**Scale Statistics**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Mean</td>
<td>370</td>
</tr>
<tr>
<td>Variance</td>
<td>318.857</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>17.85657</td>
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The validity and reliability is positive of the questionnaire, the Cronbach, Alpha as per the thumb rule. For finding the validity, KMO and Barkletts’s test of sphericity is used. For running this test description Item and Scale is used.

b) Result of Perception (Experience)
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<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.766</td>
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<td>No. of items</td>
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<tr>
<td><strong>Scale Statistics</strong></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
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<tr>
<td>Variance</td>
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<tr>
<td>Std. Deviation</td>
<td>17.60698</td>
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</table>

The validity and reliability is positive of the questionnaire, the Cronbach, Alpha as per the thumb rule. For finding the validity, KMO and Barkletts’s test of sphericity is used. For running this test description Item and Scale is used.

2nd questionnaire about the awareness among the client about the norms of banking given by PSU Banks
The validity and reliability is positive of the questionnaire, the Cronbach, Alpha as per the thumb rule. For finding the validity, KMO and Barklett’s test of sphericity is used. For running this test description Item and Scale is used.

In Secondary data will also use information available on web-portals, Websites, Previous researches held in similar fields, Newspapers, Govt. Reports and Journals.

Nature of the Study
The “Descriptive Research” has been used in study. The basic condition is to get awareness and to get hold of new and a variety of insights along with full describing the accessible and existing facts.

**Statistical Tools and Techniques**

In this present research a mixture of statistical tools, methods and techniques are used, as per the requirement of the study, out of them explained are as following:

The **t match paired test** is based on paired observations is defined by the following formula:

\[
\bar{d} = \frac{\sum d}{n}
\]

Where \( \bar{d} \) = the mean of the differences

\[
S = \sqrt{\frac{\sum d^2 + n(\bar{d})^2}{n - 1}}
\]

Where \( S \) = the standard deviation of the differences

\[
W = \frac{X_{1W1} + X_{2W2} + \ldots \ldots X_{nWn}}{W_1 + W_2 + \ldots \ldots W_n}
\]

Where \( W \) represents the weights attached to variable values.

**WeightedAverage**
For any type of research this is significant and a difficult to take conclusion how to make was whether to implement or use qualitative or quantitative research techniques and methods or a mixed or combine method approach.

In general these were two types of quantitative research techniques used on collected data and analysis them:

1. Survey: The survey methods concerned on the gathering of data by means of a questionnaire to find the opinion of a population, this method is based on a sample of the population.

2. Experiment: the Experiments were accepted away to investigation the correlation among customer Expectations and perceptions.

**Testing and Scaling**

1. Use of Likert Scale in Service Quality dimension

2. Use of T- Test for testing the Gap in Expectations and Perceptions.

3. Chi Square for testing the Gap in Expectations and Perceptions.

**Processing and Presentation of Data**
The statistics following gathering have to be procedure and presented in agreement with the summarize in the research study plan. That is required to get suitable outcomes, for this systematic research and meant for to make certain that we completed to classify & sum up data watchfully in order to enlarge its validity in a method that enable to correlate serious tip with the research objectives in simple, effective and efficient approach. First thing is that, the data was shortened, coded and then classified as per the requirement. In categorize to build the composed data self talking, attractive, interesting & much clear, this has been presented in the shape of tables, diagrams and charts.

**Analysis and Interpretation of data**

The necessities of the research, equally the quantitave and qualitative data has been together. The research in the field of “Applications of Servqual Models in PSU Banks” necessary the relevance of confident statistical as well as scaling methods in order to have appropriate and scientific examination and explanation of data. The keep fit of statistical method was in the light of nature and correctness of in sequence accessible and requirements of analysis. The statistical techniques used are the measures of average and chi-square method. These used to include comparison among the data together from various districts of Punjab. As on the scaling method, the five point scale used with points of 5, 4,3,2,1 assign strongly agree to strongly disagree.
Relevance of the Study

It provides support to the public sector banks to get better the service quality and help in thoughtful concerning the customer’s expectations concerning the service quality.

Tentative Chapter Scheme
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<td>1.</td>
<td>Introduction</td>
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<td>2.</td>
<td>Review of The Literature</td>
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<td>3.</td>
<td>Research Methodology</td>
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<td>4.</td>
<td>Public Sector Banking and To Study The Recent Development of Banking Sector In India</td>
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<td>5.</td>
<td>Data Analysis &amp; Interpretation</td>
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<tr>
<td>6.</td>
<td>Findings, Conclusion, Recommendations, Limitations &amp; Scope for further Works</td>
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<td>8.</td>
<td>Appendix</td>
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<td>9.</td>
<td>Acknowledgement</td>
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