CHAPTER-VI

RESEARCH METHODOLOGY
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INTRODUCTION

To meet the growing need and expectations of customers, banks have revamped the entire working pattern, which includes product innovation, product delivery, employment and deployment of staff and motivating them. To enhance customer satisfaction level, various studies are made from the viewpoints of customers, bankers, Reserve bank of India, Finance Ministry etc. The preceding chapter includes the details about the views of experts and authors about the relative contribution on various aspects of customer service in general and more specifically in banks. The major contribution made by these categories has also been described in the previous chapters. The purpose of the present study is to find out empirically the level of customers satisfaction in major banks in Uttarakhand state. To accomplish this, it is necessary to have a specific plan of the research design and procedure. This chapter has been earmarked for this purpose.

RESEARCH DESIGN

The present study seeks to find out the determinants of the effective customer service and their relative contribution in banks’ business parameters (both financial and nonfinancial) and also in the proper deployment and development of human resources in banks. This requires the views, observation and expectations of both the customers and all the three categories of staff such as branch managers, officers and clerks. Besides, it is also pertinent to study the relationship of opinions expressed by the three categories of staff as well as that of customers.
The present study falls under the category of descriptive research. A descriptive study describes and interprets "that involves the description, recording, analysis and interpretation of conditions that exists now. Descriptive research according to Best John W. & James V.Kahn (2003) has following features:

1. They involve hypothesis formulation and testing;

2. They use the logical methods of inductive- deductive reasoning to arrive at generalizations.

3. They often employ methods of randomization so that error may be estimated when population characteristics are inferred from observations of samples.

4. The variables and procedures are described as accurately and completely as possible so that, other researchers can replicate the study.

Descriptive research methods are non experimental, for they deal with the relationships among non-manipulated variables. Since the events or conditions have already occurred or exist, the researcher merely selects the relevant variables for an analysis of their relationships.

Descriptive research seeks to find answers to questions through the analysis of variable relationships. What factors seem to be associated with certain occurrences, outcomes, conditions, or types of behavior? Because it is often impracticable or unethical to arrange occurrences, an analysis of past events or of already existing conditions may be the only feasible way to study causation. This type of research is usually referred to as ex-post-facto or causal-comparative
research or, when co-relational analyses are used, it may be referred to as co-
relational research.

The present study is more specifically an ex-post-facto study. It means 'what is
done afterwards' or 'what is interpreted after the incidence but operative
retrospectively'. Hence the researcher investigates possible cause and effect
relationships by observing an existing condition or state of affairs and searching
back in time for plausible causal factors. The investigator can't manipulate these
casual factors.

Kerlinger (1998) has defined ex-post-facto research more formally as that in
which the independent variable or variables have already occurred and in which
the researcher starts with the observation of a dependent variable or variables. He
then studies the independent variable or variables in retrospect for their possible
relationship to, and effects on, the dependent variable or variables. The
researcher is thus examining retrospectively the effects of a naturally occurring
event on a subsequent outcome with a view to establishing a causal link between
them.

Ex-post-facto investigations have a built-in weakness, i.e. lack of control of the
independent variable(s). As Spector (1993) suggests, it is impossible to isolate
and control every possible variable or to know with absolute certainty, which are
the most crucial variables. There are some more problems in ex-post-facto
research such as the information gathered may be incomplete or in sufficient, lack
of control or even of knowledge, makes casual statements difficult to make; and
the most serious danger of ex-post-facto and causal comparative research is the post-facto fallacy— the conclusion that because two factors go together, one must be the cause and the other the effect.

Ex-post-facto and causal comparative research is widely and appropriately used, particularly, in the behavioural sciences. In banking, because it is impossible, impracticable or unthinkable to manipulate such variables as likes and dislikes of customers at one hand and on other hand staff members’ knowledge, skill, attitude, aptitude, intelligence, personality traits, empathy, motivation, competence, top management’s perception etc; this method will continue to be used.

The present study has been conducted, keeping in mind the strengths and weaknesses of the ex-post-facto research methodology. The researcher has tried to focus on the prevailing banking climate, including the staff of all the three categories such as managers, officers and clerks of the sample bank branches in Uttarakhand state and the level of customer satisfaction in respect of various banking products and service.

**PROBLEM DEFINITION**

The statement of the problem, given below, gives the purpose of the study. As the liberalization and deregulation exercises are gathering momentum, Government is giving relook at the organizational preparedness of the public sector banks so as to enable them to face competition on national and global scene. Public sector banks are being asked to go to the market and raise funds to meet their capital
adequacy and also to reduce their dependence on the Government. Government has also relaxed the restriction on the entry of new private sector banks resulting in the establishment of a number of new banks in the private sector, which have been hopefully posing greater challenges to the public sector banks.

This is the age of LPG (Liberalization, Privatisation, Globalization), where emphasis & concentration is given on customer retention more than searching for new customer. Hence, to encircle the existing and potential customers, the sprinkling of banking products and services must be different such that fleets of customers can be attracted to the branch. Under the above scenario, it is of great importance and necessity to get a feedback on how customers are treated when they are being offered various services of the banks. Further it is necessary to ascertain the degrees of retention from the point of view of marketing of banking products and services.

Besides, it is pertinent to know the role of top management and involvement staff at all levels in meeting ever-increasing expectations of customers; how effectively they (staff) can satisfy the customers to successfully market various banking products and services.

RESEARCH GAP
As detailed in previous chapters; fairly a good number of researches have been done in the field of customer service, customer satisfaction in banks and also in other related matters such as product development, distribution, pricing, marketing, human resources etc. These surveys are carried out both in and outside
the country by different banks, financial institution and outside agencies. From these studies, it is observed that there are lots of gaps exist between the expectations and views of customers on one hand and products and service delivery by banks on the other hand. Also there exist many socio-cultural-economic aspects quite specific and relevant from the viewpoint of customers as well as banks. Many of these issues are either not addressed so far or to a little extent. These can be summarized as hereunder.

(a) Issues, which have been covered by previous studies, as, explained above.

- Payment mechanism to be fast
- Speedy disposal of complaint
- Product quality, price (interest, service charges)
- Customer education
- Customer commitment
- Customer loyalty
- Redressal of grievances
- Customer committee and staff committee
- Technology upgradation: ALPM, TBA, CBS, E-see banking, ATM, Online banking
- Marketing of products and services
- Retail banking
- Proactiveness of top management for customers
- Proactiveness of top management for staff
Proactiveness of branch staff of all cadres

Well behaving front-line staff (clerks)

Improving HR system

(b) However, the researcher has come across either very ‘little’ or ‘nil’ study in certain areas and these are:

- Views of staff members regarding top management’s concern regarding their proper placements, incentives, motivation aspects
- Customer’s choice and preference of type of ‘deposits’, ‘loans’ and ‘services’ product.
- Customer’s views on the qualitative aspects of supervisory and clerical staff
- Customer’s views on the infrastructure available in branch; such as premises, security, parking space, drinking water etc
- Customer’s views on banking holidays available
- Customer’s views on adherence to ‘time norms’ for completing different transactions
- Staff member’s views on adherence to ‘time norms’ for completing different transactions
- Customer’s views on interest and other service charges levied by banks for different transactions
- Speedy disposal by branch staff on certain basic banking; such as opening of accounts, renewal of fixed deposits, replying to letters of NRE customer etc
- Customer's views on benefits of technology such as ATM, ABB, CBS, e-banking, single window etc.
- Overall satisfaction of customers on three different types of banking products; deposits, loans and services
- Opinion of customers (intra opinion) based on the period of their experience in banking
- Opinion of staff (intra opinion) relating to three broad categories: branch manager, officer and clerk

Apart from the above, very little or no research has been done on all the above mentioned aspects; in Uttarakhand state.

The present research is a humble attempt to cover the gaps in the previous studies made as enumerated above.

**OBJECTIVES OF STUDY**

The relevance of this research is both from banking (bank as well as customer) and academic point of view. The overall purpose of this research is to determine the effects of customers' likes, dislikes, preferences, needs, grievances, views and expectations of various products and services of banks. The study particularly focuses on customers and bank staff of major commercial banks in Uttarakhand state. To accomplish the research purpose, the following objectives have been
formulated. The objectives are to determine, for a sample of customers and bank staff:

1. Likes, dislikes, preferences, expectations, needs, views and grievances of the customers regarding various types of banking products & services

2. Involvement of staff members to meet the ever-increasing needs and expectations of customers

3. Concern and proactiveness of top management of banks in meeting the expectations of customers

4. Concern and proactiveness of top management of banks in streamlining the work force to render effective customer service

5. Various determinants that facilitates customers’ satisfaction

6. Various determinants that help staff members achieve higher level of customers’ expectation

7. Various determinants those help top management of banks as well as other policy makers such as Reserve Bank of India and Finance ministry to enhance customer satisfaction to optimum level

8. Relationship of opinion among three categories of bank staff (branch managers, officers and clerks) on different banking and non banking parameters

9. Relationship of opinion among customers depending on their period of banking experience, on different banking and non banking parameters
10. Relationship of opinion between bank staff and customers on various banking and nonbanking parameters

11. Opinion of customers regarding qualitative aspects of different categories of staff members of banks, in meeting the desired level of customer satisfaction

12. To suggest remedies for improving customers satisfaction at branch and bank level

In short; the present research aims to establish how banks can effectively and successfully market their products & services with the view to retain & enhance their customer-base amidst stiff competition among themselves and also from other foreign and private sector banks.

LIMITATION OF THE STUDY

No empirical study of the present type can be conducted if its scope in terms of its variables and sample of subject is unlimited. The time factor, practicability and resources availability; make it more necessary that the study be limited in its scope. Due to the above constraints, the present study is limited to selected branches of selected banks of selected districts in Uttarakhand state with details as follows:

There are 13 districts, 39 banks and 1135 branches in the state of Uttarakhand but the present study is confined to 72 branches of 10 banks in 7 districts of the state. These seventy-two bank branches have branch managers (one at a branch), officers and clerks. The present study is confined only to those staff members who
are interested to cooperate with the researcher in giving the response, both through questionnaire and interview schedule. Total 350 staff members (72 branch managers, 131 officers and 147 clerks) are selected as stated above. The researcher has selected all the 343 customers attached to these 72 branches. Here also, the study is confined to those customers who are willing to cooperate in giving response to both the questionnaire and interview schedule. To sum up, this study is confined to four to six customers and almost equal number of staff members per branch.

HYPOTHESES
After establishing objectives of the study, the next step is to formulate hypotheses, so as to find out tentative causes or possible explanations for the problem. The process of establishing hypotheses is an important step in the research process because any conceivable pertinent hypothesis is the basis for tracing out the possible causes of the problem. Accordingly, the following hypotheses have been formulated and verified in the present research work:

Hypothesis-I

\( H_01: \) There is no significant difference in opinion among three categories of staff (branch manager, officer and clerk) regarding the necessity of marketing of banking products and services for improving customer satisfaction level in banks.
H$_{11}$: There exists significant difference in opinion among three categories of staff (branch manager, officer and clerk) regarding the necessity of marketing of banking products and services for improving customer satisfaction level in bank.

**Hypothesis-II**

H$_{02}$: There is no significant difference in opinion among three categories of staff (branch manager, officer and clerk) that customer service has direct relations to business growth at branches.

H$_{12}$: There exists significant difference in opinion among three categories of staff (branch manager, officer and clerk) that customer service has direct relations to business growth at branches.

**Hypothesis-III**

H$_{03}$: It is hypothesized that customers’ satisfaction level in respect of various deposits products in banks is not excellent.

H$_{13}$: It is hypothesized that customers’ satisfaction level in respect of various deposits products in banks is excellent.

**Hypothesis-IV**

H$_{04}$: It is hypothesized that customer satisfaction level is not excellent in respect of various loan products in banks.

H$_{14}$: It is hypothesized that customer satisfaction level is excellent in respect of various loan products in banks.
Hypothesis-V

H₀₅: It is hypothesized that customers are not highly satisfied (excellent) in respect of various ‘services products’ (non financial products) in banks.

H₁₅: It is hypothesized that customers are highly satisfied (excellent) in respect of various ‘services products’ (non financial products) in banks.

Hypothesis-VI

H₀₆: It is hypothesized that NRE customers are not highly satisfied (excellent) in respect of promptness of responses of branches.

H₁₆: It is hypothesized that NRE customers are highly satisfied (excellent) in respect of promptness of responses of branches.

Hypothesis-VII

H₀₇: It is hypothesized that level of customer service after computerizations is not excellent.

H₁₇: It is hypothesized that level of customer service after computerizations is excellent.

Hypothesis-VIII

H₀₈: It is hypothesized that customers are not able to get all types of banking facilities at a “single counter”.

H₁₈: It is hypothesized that customers are able to get all types of banking facilities at a “single counter.”
Hypothesis-IX

$H_0^9$: It is hypothesized that level of customer satisfaction in ATM/ABB facilities is not excellent.

$H_1^9$: It is hypothesized that level of customer satisfaction in ATM/ABB facilities is excellent.

Hypothesis-X

$H_0^{10}$: It is hypothesized that majority of customers do not take part in the customers meet organized by banks and their suggestions are never implemented fully.

$H_1^{10}$: It is hypothesized that majority of customers take part in the customers meet organized by banks and their suggestions are implemented fully.

Hypothesis-XI

$H_0^{11}$: It is hypothesized that the infrastructure facilities such as location, accessibility, parking facility and suitability of branch premises are not excellent.

$H_1^{11}$: It is hypothesized that the infrastructure facilities such as location, accessibility, parking facility and suitability of branch premises are excellent.

Hypothesis-XII

$H_0^{12}$: It is hypothesized that the upkeep and ambience of branch premises (V45) are not excellent.
H₁₂: It is hypothesized that the upkeep and ambience of branch premises (V₄₅) are excellent.

Hypothesis-XIII

H₀₁₃: It is hypothesized that availability of various amenities in the branch premises; like drinking water, resting chairs, writing table etc is not excellent.

H₁₁₃: It is hypothesized that availability of various amenities in the branch premises; like drinking water, resting chairs, writing table etc is excellent.

Hypothesis-XIV

H₀₁₄: There is no significant difference of opinion among the three categories of staff (branch managers, officers and clerks) regarding conducting staff meetings at branches and implementing the suggestions made in the meeting.

H₁₁₄: There is significant difference of opinion among the three categories of staff (branch managers, officers and clerks) regarding conducting staff meetings at branches and implementing the suggestions made in the meeting.

Hypothesis-XV

H₀₁₅: It is hypothesized that staff members are not the main source of imparting information to customers regarding various types of ‘loan’ and ‘service’ schemes available in banks.
H15: It is hypothesized that staff members are the main source of imparting
information to customers regarding various types of ‘loan’ and ‘service’
schemes available in banks

Hypothesis-XVI

H016: It is hypothesized that overall customer satisfaction level in banks is not
“excellent”.

H16: It is hypothesized that overall customer satisfaction level in banks is
“excellent”.

POPULATION

Uttaranchal state has total 13 districts; 6 in Garhwal mandal (division) and 7 in
Kumaon mandal (division). Population of the state as per 2001 census is 84.80
lakhs. The total land of the state is 53331 sq. km and the density of population is
159 per sq km. All the thirteen districts are covered by banks. The state has thirty
nine banks (23 PSBs, 3 RRBs 2 cooperative banks and 11 private sector
banks). All banks put together have 1135 branches (as on September 2006) with
647 rural, 285 semi urban and 203 urban branches). The details about the state are
given separately in Chapter-IV (Uttaranchal State)

SAMPLE OF THE STUDY

(i) Selection of districts:

Uttaranchal state has total 13 districts; 7 in Garhwal mandal (division) and 6 in
Kumaon mandal (division). To have a fair coverage of the state, the researcher
selected 7 districts (54% of total districts), 4 in Garhwal mandal (57% of Garhwal mandal) and, 3 in Kumaon mandal (50% of Kumaon mandal). These seven districts are Dehradun, Hardwar, Tehri, Pauri, Almora, Nainital and Udham Singh Nagar (Annexure-16). Banking business in these seven districts constitutes about 90.5 percentage of the total business of the state. These seven districts have total 894 bank branches which are about 78.8 percentage of the total branches in the state. Even from other aspects such as population, literacy, employment, trade, industries and business point of view, these seven districts have more than 75 percentage shares in the whole of the state. Hence, these seven districts may be said to be the true representation of the whole state (population) for this study purpose.

(ii) Selection of banks:

The state has total 39 banks (23 nationalized banks, 3 regional rural banks, 2 cooperative banks, 11 private banks). These banks have total 1135 branches (694 of nationalized banks, 167 of regional rural banks, 218 of cooperative banks and 56 of private banks). The researcher has selected 10 banks (25.6% coverage); eight nationalised banks, one regional rural bank and one private bank. These ten banks have 676 branches which are about 59.55 percentages of total branches in the state. These ten banks’ total business is Rs.26851 Crores and this amounts to 75.92 percentage of the total business of all banks. List of these banks are given in Annexure-17. Hence these ten banks may be taken as the true representative of all banks in the state.
(iii) Selection of branches:
Out of total 1135 branches of all banks in the state, the number of rural, semi urban and urban branches in the state are 644, 285 and 206 respectively and their percentage to total is 57 percentages, 25 percentages and 18 percentages respectively. Out of these, the researcher has selected 10 banks, their total branches in the state is 676; the share of rural, semi urban and urban branches are 409, 177 and 90 respectively and their percentage to total is 61 percentages, 26 percentages and 13 percentages respectively.
Out of 72 branches, selected by the researcher as sample for this study purpose; the share of rural, semi urban and urban branches being 29, 23 and 20 respectively; their percentages are 40, 32 and 28 respectively. Also these branches are having adequate coverage of small, medium, large and extra large category.

(iv) Selection of staff members:
All banks in Uttaranchal state have in total 8690 staff members (1135 branch managers, 2065 officers and 5400 clerks). Out of these; total staff strength in these 72 branches is 677 (72 branch managers, 170 officers and 435 clerks). Out of these 677 staff members, 350 staff members are randomly selected as follows:
Branch managers- 72 (out of 72 branch managers available in the sample)
Officers- 131 (out of 170 officers available in the sample)
Clerks- 147 (out of 435 clerks available in the sample)
Out of 350 staff members taken in the sample, 65 members are from rural branches, 114 are from semi urban and 171 are from urban branches. Their percentages are 19, 32 and 49 respectively.

It may be pertinent here to mention here that, the staff strength in branches has considerably gone down, after the last VRS (voluntary retirement scheme) in 2000; wherein about twenty percent of staff in all banks has been retired under VRS; and fresh staff members recruited in banks is almost negligible. This has drastically reduced manpower especially in rural branches; where the staff strength in average has been reduced to 4(branch manager, one officer and two clerks). Therefore, the researcher could not get adequate respondents in rural branches and has to compensate from urban and semi urban branches.

(v) Selection of customers:
There is no confirmed data available regarding the total number of ‘bank customers’ in Uttaranchal state. However from the latest SLBC report (State Level Bankers’ Committee report of November 2006) and from discrete enquiry made by the researcher, the followings are the available data in this respect:

- Total number of deposit accounts- 55,21,065
- Total number of loan accounts- 8,19,134
- Total number of accounts (both deposit and loan) = 63,40,199
- Average number of accounts, a customer has in a bank: 5 accounts

Therefore, the total number of customers in Uttaranchal state is around 12.68 lakhs.
In the above-mentioned trend, it can be said that these 72 sample branches have about 80.24 thousands customers with them. It was a pretty difficult task for the researcher to select 343 customers from them, in average six to seven customers per branch. With the help of concerned branch manager, local block development officer and local village head (‘gram pradhan’), the researcher selected 343 customers on simple random basis. They comprise various age group, occupation, trade, industries, student, professionals, non resident Indians, pensioners, senior citizens etc.

In short, the researcher selected the sample of 350 staff members (72 branch managers, 131 officers, 147 clerks) and 343 customers related to 72 branches of ten banks in seven districts of the state. And this sample may well be construed to be the true representation of the entire population of the state.

PROCEDURAL STAGES

A planned procedure facilitates the conduct of the study. It guides the researcher what to do, how to do and when to do. The procedural steps have been outlined as follows:

(i) Study area:

The area for the present study is Uttaranchal state. The state was carved out of Uttar Pradesh, as a result of the U.P. reorganizations Act of 2000 passed by the Indian Parliament and came into existence on November 9, 2000.

For this research purpose, seven districts are covered, 4 in Kumaon mandal and 3
in Garhwal mandal. The population of these 7 districts is more than 90 percentage of the state population. Also the total banking business of all banks in this seven districts Rs.32026 crores, which is 90.5 percentage of total business of the banks in the state.

Also these seven districts are true representative of the various types of activities of the state such as social, financial, agricultural, industrial, business, trade, professional, social, educational, cultural aspect of the whole state.

Also out of the above-mentioned 39 banks, the researcher has selected 10 banks; 8 in public sector, one each in private sector and regional rural banks. Seventy two branches are selected from these ten banks and from seven districts. Thus customers and staff members attached to branches of these 10 banks and functioning in the above said seven districts are considered for this research.

(ii) Identifying the customer service determinants:

The researcher identified the major customer service determinants on the basis of his experience as an officer and branch manager in a nationalized bank for more than three decades. Then these were discussed and corroborated by educational experts, customers, other officers, bank staff, senior bankers, office bearers of unions and associations, faculty members of staff colleges of many banks, government officials, RBI and NABARD executives etc.

He developed Questionnaires (viz. CVEQ-A and SVEQ-B) and Interview schedule to be administered to customers, staff members and top executives of banks for finding out the customer service determinants.
(iii) Developing tools for the study:

As described earlier, various tools viz. CVEQ-A, SVEQ-B and interview schedules were developed.

(iv) Establishing reliability and validity:

The reliability and validity of each tool was established in consultation with experts. The statistical techniques were also used for establishing reliability and validity of the various questionnaires. These tools were put to vigorous use for collecting the data, the details of which are given in the latter part of this chapter.

(v) Data collection:

The tools mentioned above namely CVEQ-A and SVEQ-B and Interview schedules were used in collecting the data from the customers, branch managers, officers and clerks and top executives of banks. These data pertain to the opinion, views, contribution and expectation of the various groups towards enhancing customer satisfaction level and vis-à-vis achieving the various business parameters and fulfilling the targets and objectives of top management and other stake holders of banks.

(vi) Analysis and interpretation:

The data so collected were properly tabulated and analyzed. The purpose of analysis is to find out precisely the growing expectation level of customers and the contribution made by top management, branch managers, officers, clerks in meeting the expectation level of customers.
(vii) Statistical treatment:
In the present study for the data processing, sampling techniques used are mean, standard deviation, Duncan mean test and chi-square test etc. For analyzing these sampling techniques, statistical software are used such as SPSS, Minitab, power point and MS-Excel; for the various calculations and graphs in the study.

(viii) Limitation:
There is no research work without limitation. The limitation for this study is it being based on the responses obtained from only selective customers, branch managers, officer, clerks and executives of banks and therefore cannot be considered as a full representative study.

(ix) Primary and secondary data
The data for the present study have been drawn from both primary and secondary sources. Primary data has been obtained from customers and staff members of various bank branches in Uttarakhand state and also from senior executives of banks through structured questionnaires and interview schedules. Secondary data include published and unpublished document from various journals, periodicals, books, newspapers, circulars and other documents of different banks, RBI and Government of India publications, internet sites etc. Some manual reports are also taken into consideration while presenting this research.

TOOLS FOR STUDY
For completion of this objective, the researcher developed the following tools:-
CONSTRUCTION OF TOOLS

To conduct any research, data must be gathered with the main objective of testing the hypotheses. Many tools have been developed to aid in the acquisition of data. These tools employ distinctive ways of describing and quantifying the data. Each is particularly appropriate for certain sources of data, yielding information of the kind and in the form that can be most effectively used.

Data collection methods can be categorized by the degree of their directness. Interviews and questionnaires are ordinarily quite direct. Questionnaires contain a group of sequence of questions designed to elicit information upon the subject or sequence of subjects from informants. Through this data-gathering instrument, respondents answer questions or respond to statements in writing. Since a questionnaire is a paper-pencil tool for data collection, therefore, it suffers from
all the disadvantages that paper-pencil tool of data collection suffers from. In spite of these defects; a questionnaire is a most widely used research instrument.

It has various strengths such as:

- Irrespective of the respondents; the questionnaire format presents all questions in the same sequence and without any interpolation or extrapolation. Therefore, the sequence of presentation of question is most objective in the questionnaire.

- It allows for wider coverage of sample at much less expenditure compared to other research tools.

- It enables respondents to make anonymous responses if they wish to and thereby it obtains relatively more candid and objective responses.

However, a researcher, using questionnaire as a data gathering instrument, must take necessary precautions to minimize the effects of the following weaknesses:

- It has the highest rate of mortality. As a result, respondents who are most interested in the issue, positively or negatively, on which the questionnaire is based on its critic would most readily respond to the questionnaire. The less committed or critical respondents usually take time to respond. This affects the validity of a questionnaire

- A questionnaire as a research tool is more suited to educate and more aware respondents. The less educated and illiterate are not able to express themselves
The questionnaire, because of lack of human touch, doesn't allow for development of rapport and confidence between the respondents and the researchers.

While using a questionnaire, the researcher usually assumes that the respondents by and large share interest in the research problem and they have equal enthusiasm in its resolution. The truth may be quite different.

A questionnaire assumes a certain level of maturity and objectivity in its respondents.

The manner in which words are used in questionnaire may allow for a different interpretation or misinterpretation. These can't be detected at data gathering stage. Therefore, the reliability of questionnaire based data is often cross-checked through research interview.

The interview is a face-to-face interpersonal role situation in which one person, the interviewer, asks a person being interviewed, the respondent, questions designed to obtain answers pertinent to the research problem. There are two broad types of interview; structured and unstructured or standardized and unstandardized.

In the standardized interview, the questions, their sequence, and their wordings are fixed. An interviewer may be allowed some liberty in asking questions, but relatively little. This liberty is specified in advance. Standardized interviews use interview schedules that have been carefully prepared to obtain information pertinent to the research problem. Unstandardized interviews use interview
schedules that have been carefully prepared to obtain information pertinent to the research problem. Unstandardized interviews are more flexible and open. Although the research purposes govern the questions asked; their content, their sequence and their wording are entirely in the hands of the interviewer. Ordinarily no schedule is used here.

For the present study, researcher made use of both questionnaires and interview schedule so as to minimize the limitations of both the instruments. Interviews and questionnaires have both strengths and weaknesses of being direct in nature. It has strength because a great deal of information needed in social scientific research can be obtained from respondents by direct questions. Though the questions may have to be carefully handled, respondents can and usually will give much information directly. There is information, however, of a more difficult nature that respondents may be unwilling, reluctant or unable to give readily and directly. In such cases, direct questions may yield data that are invalid. Yet, properly handled, even personal or controversial material can be successfully obtained with the help of interviews and questionnaires. Since, the researcher has made use of self constructed questionnaires; he has taken necessary precautions as mentioned below so as to improve the validity of the instruments:

i. In order to check whether the responses have been reliable enough for correct analysis, put similar questions at different places.

ii. Questions not in proper sequence affect the response and interest of the respondent as well as the accuracy of the responses.
Therefore, following principles were followed for proper sequencing:

- Questions at the beginning must be interesting and also at the end.
- Factual questions may be asked in the beginning.
- Questions must be grouped into logically coherent sections.
- Related sections should come together.
- Each section should cover a specific topic.
- There should not be sudden jump from one section to another; rather there should be a smooth transition. A respondent should not feel that transition is disjointed.

Similarly, researcher tried to develop interview schedules in a coherent manner in respect of the open ended questions of both the tools and also in respect of top management.

**DEVELOPMENT OF TOOLS IN THE PRESENT STUDY**

The researcher wanted to assess the opinion and views of customers and also staff members of various cadres regarding the expectation and delivery of customer service at branch level of various bank branches of Uttaranchal state.

**(a) Developing customer's views and expectation questionnaire (SVEQ-B)**

The researcher followed a vigorous procedure to construct CVEQ-A, **which** could help him in identifying the views and expectations of customers regarding various products and services and also on staff members of banks.
Before developing CVEQ-A, the researcher analyzed the various areas in which the customers directly or indirectly attached in banking. This tool determines the extent of customers’ satisfaction regarding various products and services and also on staff members of banks.

This tool has been divided broadly into two parts (i.e. closed ended questions and open ended questions):

Closed ended Questions:-

i. General data on the individual customer such as name and address (optional), age, sex, qualification, occupation, residential status, family income, annual turnover in the business, marital status, occupation of spouse, period of banking habits, name(s) of the banks associated with and different types of banking products and services availed.

ii. Views, experience, expectations regarding various products and services offered by banks; broadly on three areas; such as deposits, loans and services.

iii. Opinion on computerization, ATM, ABB, customers’ meeting, complaint box facility, number of banking holidays available etc.

iv. Views on infrastructural facilities such as location of branch, convenience, availability of amenities such as customer’s waiting places, drinking water, toilets etc.
v. Views on the efficiency and performance of three categories of staff (branch managers, officers and clerks) and overall opinion on customer service of the branch

Open ended questions:

i. Suggestions for improvement of product(s) and service(s).

ii. Suggestions (other than the above) for improving customers’ satisfaction level.

This tool contains 56 questions of which 54 are closed ended questions and two are open-ended questions. The latter two questions were administered by the researcher as “interview schedule” and the responses of the respondents were recorded by him.

General data on the individual customer (such as name, address, age, sex, qualification, occupation, residential status, family income, annual turnover in the business, marital status, occupation of spouse, period of banking habits, name(s) of the banks associated with and different types of banking products and services availed) contains 12 questions. Views, experience, expectations regarding various products and services offered by banks; broadly on three areas; such as deposits, advances and services contains 25 questions. Opinion on computerization, single window, ATM, ABB, customers’ meeting, complaint box facility, number of banking holidays etc contain 11 questions. Views on infrastructural facilities such as location of branch, convenience, availability of amenities such as customer’s waiting places, drinking water, toilets etc. contains 4 questions. Views
on the efficiency and performance of three categories of staff (branch managers, officers and clerks) and overall opinion on customer service of the branch contain 2 questions.

Originally there were 70 questions, 15 questions under first category, 26 questions under second category, 14 questions in third category, under fourth category 6 questions and under fifth category 5 questions. There were four questions as open ended questions. These 70 questions were reduced to 56 questions after ascertaining the opinion of pedagogues and subject specialists.

**SCORING OF CVEQ-A**

The customers were expected to tick one out of three or four alternatives under each question. The alternatives under different questions were different.

**Establishing validity of CVEQ-A**

According to Gronlund and Linn (1990), validity refers to the extent to which the evaluation results serve the particular uses for which they are intended. It interprets the results rather than the instrument and its presence is a matter of degree that is always specific to some particular use.

Three basic types of validity identified by American Psychological Association (Standards for Educational and Psychological Tests, 1974) and are now commonly used in Educational and Psychological measurement are: content validity, criterion-related validity and construct validity.

Content validity may be defined as the extent to which a test measures a
representative sample of the subject-matter content and the behavioral changes under consideration. Content validation means the attribution of meaning through expert judgement about the importance of the questions to be asked. Content validity rests on the quality of judgement, hence on the qualifications of the judges (Kenneth O. Doylem Jr, 1983). According to Koul, L., (1997) this form of validity is based upon judgement of several subject experts and test specialists, careful analysis of instructional objectives, and the actual subject matter studies. This analysis is rational as well as judgmental.

The content validity of these questions was established by showing them to the test experts and the pedagogues. The experts examined and analyzed the content of each statement and gave their opinion regarding the correctness and completeness of each of the test items. Their suggestions were taken into account to improve the test items. Hence the content validity of this tool was established.

VALIDATION OF TEST ITEMS

Validation of test items has been established through experts and through pilot studies. Different techniques of the evaluation of test items have been shown in Table-6.1 below.
**TABLE-6.1: Validation of test items**

<table>
<thead>
<tr>
<th>Through Experts</th>
<th>Through Pilot Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Experts</td>
<td>Pedagoues</td>
</tr>
<tr>
<td>Small Group Testing</td>
<td></td>
</tr>
</tbody>
</table>

**VALIDATION THROUGH EXPERTS**

Initially 70 test items were incorporated in the tool. In order to ascertain the content validity of these items, they were shown to the pedagogues and the test specialists. They thoroughly went through these test items and suggested deletion of 14 items and modification in 10 items. They also gave suggestion for the proper sequencing of the test items. They also examined the relevance of test items in terms of time allocation. Their suggestions were duly incorporated to
make these test items valid and in this way content validity or face validity of these items was established.

VALIDATION THROUGH PILOT STUDY

Validity of the extent of customers’ perception was established by this method also. This stage involved a small sample of five customers who were not included in the sample. They were asked to read the instructions carefully and respond accordingly. It was assured that the information sought would be kept confidential and that it was meant for research purpose only. Each respondent was asked to answer all the items given in the tool by ticking mark in the column with which they agree. After the respondents had finished answering all the test items, the data was computed in the following manner.

The test was split into 2 reasonably equivalent halves. Scores on the odd numbered items were then correlated with the scores on the even numbered items. Statistically, the validity of CVEQ-A was established on the basis of the index of reliability. According to Garrett, H.E., (1996), the index of reliability is sometimes taken as a measure of validity. The correlation coefficient gives the relationship between the obtained scores and their theoretical true counterparts. The reliability coefficient of the test is 0.96, hence by formula, validity worked out is $= 0.98$. This means that the tool measures true ability to the extent expressed by 0.98.
ESTABLISHING RELIABILITY

Reliability is the second test characteristic that must be established because of the indirect and incomplete nature of measurement whereas validity is a way of describing what test measures. Reliability is description of the accuracy or consistency of the measurement. Reliability refers to the consistency with which a test assesses what it purports to assess. According to Best & Kahn (2003), "A test is reliable to the extent that it measures whatever it is measuring consistently; errors of measurement have been reduced to a minimum. Reliable tests are stable in whatever they measure and yield comparable score upon repeated administration."

According to Freeman (1965), the term reliability has two closely related but somewhat different connotations. First it refers to the extent to which a test is internally consistent, that is, consistency of results, obtained through out the test when administered once. In other words, how accurately is the test measuring at a particular time? Secondly reliability refers to the extent to which a measuring device yields consistent results upon testing and retesting.

Stability of items i.e. internal consistency of the CVEQ-A was established through the split half method. One of the main advantages of the split half technique is the fact that all data for computing reliability are obtained upon one occasion; so that variations brought about by differences between the two testing situations are eliminated.

Split test reliability coefficients are obtained from two half test scores derived
from a simple test. The data was split into two reasonably equivalent halves. These independent halves i.e. scores on the odd-even numbered items were then used as a source of the independent scores. Scores on the odd numbered items were then correlated with the scores on the even numbered items. Using the spearman-Brown formula i.e. it determines the full-length test reliability.

The full-length reliability coefficient of CVEQ-A according to Spearman Brown Prophecy formula was worked out to be 0.96.

Ebel (1966) suggests that most test specialists are satisfied when their test yields reliability coefficient in the vicinity of 0.90. Similarly, according to Garrett, H.E., (1996), most of the authors of intelligence test and education achievement test lay emphasis on the reliability coefficient of their tests to meet at least 0.90 criteria to be taken as a ‘satisfactory reliability coefficient’. Reliability coefficient of the present tool is 0.96, therefore, the CVEQ-A may be considered as a reliable tool for measuring customers’ views and expectations from bank.

CVEQ-A is given in Annexure-11.

(b) Developing staff members' views and expectation questionnaire (SVEQ-B)

SVEQ-B was developed to find out the extent of staff members' opinion and views regarding various products and services available and top management's direction as well as involvement of branch staff to effectively market banking products and services. This questionnaire contains 25 questions. These 25 questions contain 21 closed ended questions and 4 open ended questions.

Closed ended questions may be grouped into five parts.
(i) General data on the staff such as name and age (optional), category of staff (branch manager, officer, clerk), categorization and classification of the branch, period of service in the bank and popular banking products available in the branch.

(ii) Customers' preferences on bank and schemes, effect of computerization, marketing of products and services, top management's concern and strategies for improving customer satisfaction level.

(iii) Linkage between customer service and business parameters of the branch and overall customers' satisfaction level in the branch.

(iv) Qualitative and motivational aspect of staff.

(v) Staffs meet customers' meet and compliance level of a few numbers of Goipuria committee recommendations.

General data on the staff (first category as above) contains 6 questions. Customer's preference on various banking schemes etc., (second category as above) contains 5 questions. Linkage between customer service and business parameters of the branch etc., (third category as above) contains 2 questions. Qualitative and motivational aspect of staff (fourth category above) contains 1 question. Staff-meet and customer-meet etc. (fifth category above) contains 7 questions.

The items under these categories were reduced from 8, 6, 3, 3 and 11 respectively. This modification was made after discussing with experts. The validity and reliability of this tool were established by following the same method which was...
followed in case of CVEQ-A. Its validity is 0.95 and reliability is 0.93. SVEQ-B is given in Annexure-12.

(c) Developing interview schedule for top management of banks

Top management of banks are also another important factor that contributes towards their achievement in highest level of customer satisfaction vis-à-vis different business parameters with ultimate objective of increasing the bottomline and also the share holders’ value; amidst stiff competition among themselves and also with other private sector banks and foreign banks.

This category (top management) contribute a lot towards ensuring a dedicated and motivated team of staff members at branch level to enable the latter put their best to render excellent customer service. This (interview schedule) was developed to supplement the information gathered from other questionnaires.

The researcher developed the interview schedule, which was modified by different experts. Initially, the researcher developed an unstructured interview schedule with broad and open-ended questions, which were rather more direct questions. After conducting few interviews, researcher realized that he was not able to get genuine responses as the respondents were hesitant and reluctant to reveal the actual working of the various categories. Researcher realized that straightaway asking about the actual situation (the respondents were facing in the banks) was not fruitful. Rather firstly knowing their perception of an ideal situation and relating it with the actual situation was desirable.
Based on this realization, researcher finally developed an improved open-ended and structured interview schedule, which contains items such as:

- Aptitude of staff members regarding various products and services
- Product innovation and improvement
- Marketing of products and services
- Computerization
- Customers' awareness of bank's products and services
- Customers' grievances handling system
- Proper and adequate placement of staff at branches, motivation and incentives
- Role of other administrative offices/controlling offices (between head office and branches)
- Proactive role of trade unions (union and association)

Simultaneously, researcher enquired about the actual situation they were experiencing in their respective branches.

For the said purpose, researcher made use of a standardized open-ended and structured interview schedule which required that the exact wording and sequencing of questions should be determined in advance; all interviewees were asked the same basic questions in the same order; and questions were framed in a completely open-ended and structured form.

This type of interview instrumentation has both strengths and weaknesses. The strengths are that the respondents answer the same questions, thus increasing
comparability of responses; data are complete for each person on the topics addressed in the interview reduces interviewer effects and bias, permits evaluation users to see and review the instrumentation used in the evaluation facilitates organization and analysis of data.

However, it suffers from certain weaknesses also such as there is little flexibility in relating the interview to particular individuals and circumstances; standardized wording of questions may constrain and limit naturalness and relevance of questions and answers.

As regards the limitations of this instrumentation, researcher tried his best to maintain the naturalness and relevance of questions and answers by posing questions in a sequence, the situation demanded, and sometimes, posing the questions relevant in a particular situation but may not be forming part of the interview schedule developed by the researcher. This interview schedule is given in Annexure-13.

Validity and reliability of interview schedule for the top management of banks

In the words of Patton (1990), "the purpose of interviewing is to find out what is in or on someone else's mind. The purpose of open-ended interviewing is not to put things in someone's mind (for example, the interviewer's preconceived categories for organizing the world) but to access the perspective of the person being interviewed". The researcher tried to achieve the purpose of interviewing as stated by Patton (1990) by establishing the validity and reliability of a self-
constructed interview schedule. The content validity of the interview schedule was established by carefully designing its structure so that it can be assured that the significant information is elicited. Regarding the validity of interview schedule, researcher took the help of experts in selecting the essential questions and got a final approval from them. Reliability of the interview schedules was established by restating a question in slightly different form at a later time in the interview.

(d) Developing interview schedule for customers and staff

The foregoing section explains how different questionnaires were developed for measuring the views, opinion, expectations and experiences of customers and staff members of the three categories (branch managers, officers and clerks) of branches. Each of the two sets of questionnaires contained a few number of open ended questions. These open ended questions were administered by the researcher as ‘interview schedule’ and the responses of the respondents were recorded by him.

This interview schedule was developed to seek customers’ and staff members’ opinion about the customer service determinants. These tools were already tested (as explained earlier in this chapter). Questions of these schedules are structured in nature. The customers and staff members helped in identifying the customer service determinants that directly or indirectly help the bank in improving their customer satisfaction level.
CONCLUSIONS

This chapter thus describes the design and procedure of the study. Various tools namely CVEQ-A, SVEQ-B, interview schedules have been described in this chapter. An attempt has also been made in establishing the validity and reliability of each tool. This chapter also describes the procedure of undertaking the present study. The details given in this chapter set a ground in collecting the data. The next chapter includes the details of data collection.