Chapter-2

Research Methodology

Research is a common parlance which refers to search for knowledge. Research is scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation.

The Advanced Lerner’s Dictionary of Current English lays down the meaning of research as ‘a careful investigation or inquiry specially through search for new facts in and branch of knowledge.’

Redman and Mory define research as a ‘Systematized effort to gain new knowledge.’ some people consider research as a movement from the known to unknown. It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain full and fuller, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research.

It is the pursuit of truth with the help of study, observation and experiment. Thus research refers to the systematic method consisting of intimating the problem, formulating hypothesis, collecting the facts or data.

Research means a careful search or inquiry or an endeavor to discover facts by study or by investigation. Research methodology has
become unavoidable, when there is a problem, one search for the causes of that problem and the way in which the problem can be solved.

Research is defined as the scientific and systematic search for information on a specific topic. Research comprises of defining and redefining of problem, formulating hypothesis and suggestion solutions, organizing and evaluating data, carefully testing the conclusions to determine whether they fit the formulating hypothesis."

D. Slesinger and M. Stephenson in the Encyclopedia of commerce and management define research as “The manipulation of things, concepts or symbol for the purpose of generalizing to extend, correct of verify knowledge., whether that knowledge aids in construction of theory or in the practice of an art.³

In research process, the first and foremost step happens to be that of selecting and properly defining a research problem. A researcher must find the problem and formulate it so that becomes susceptible to research. Like a medical doctor, a research must examine all the symptoms presented to him or observed by him concerning a problem before he can diagnose correctly.

The research problem undertaken for study must be carefully selected. The task is a difficult one, although it may not appear to be so. Nevertheless, every researcher must find out his own. Salvation for research problem cannot be borrowed. Problems must spring from the researcher’s mind like a plant springing from its own seed. If our eyes
need glasses, it is not the optician alone who decides about the number of the lens we require. We have to see ourselves and enable him to prescribe for us the right number by cooperating with him. Thus a research guide can at the most help a research choose a subject. However, the following point may be observed by a research in selecting a research problem or a subject for research.

(i) Subject which is overdone should not be normally chosen for it will be a difficult task to throw any new light in such a case.

(ii) Controversial subject should not become the choice of an average researcher.

(iii) Too narrow or too vague problems should be avoided.

The purpose of research is to discover answers to question through application of scientific procedures.

**Research Design:**

A objectives of customer satisfaction to revise the performance of the employees over a given period of time to judge the gap between the actual and the desired performance, to help the management in exercising organizational control, Helps to strengthen the relationship and communication between superior subordinates and management employees.

To diagnose the strengths and weaknesses of the individuals so as to identify the training and development needs of the future to provide
feedback to the customer satisfaction regarding their past performance. Provide information to assist in the other personal decisions in the HDFC Bank. **Provide clarity of the expectations and responsibilities of the functions to be performed by the HDFC Bank. To judge the effectiveness of the other human resource functions of the HDFC Bank such as recruitment, selection, training and development.**

To reduce the grievances of the HDFC Bank customer satisfaction should be informed and the standards should be clearly explained to. This will help them. The standards should also be communicated to the appraisers or the evaluators and if required, the standards can be modified at this stage itself according to the relevant feedback from the customer satisfaction and the evaluators.

**Scope of work**- There are around 300 Respondents served by the HDFC Bank these days. They are all scattered over the research involved talking to them and also provides them a structured questionnaire whose responses would help the researcher to test the hypotheses and draw conclusion from the analysis of data. Resorting to convenience sampling based on the logistical ease, 300 respondents were chosen.

As far as the HDFC Bank are concerned, many of them were questioned on several days to know a lot about their life style, antecedents, additional works they perform, the span of their association with the HDFC Bank, their work ethics, extent of satisfaction that they derive from their work etc. By and large, there was enough scope of work for the researcher to assess the scenario of the HDFC Bank.
Rationale of Research

The purpose of conducting the research can be summarized as follows:

(a) To analyze the factors behind in HDFC Bank survival for more than a century specialty in this digital age. There must be something special in their style of functioning that is based on elementary methods of operation. Learning their method of operation will be helpful.

(b) We can also learn what the HDFC Bank has done to keep up with the times. The HDFC Bank provide value added services and educational system.

(c) In this era of higher studies when every HDFC Bank is struggling for maintaining a very high standard of accuracy, how semi literate people are attaining such amazingly high degree of accuracy with amazing degree of consistency is definitely a matter of great curiosity.

HDFC Bank is increasingly finding that they must rely on effective supply chains to successfully compete in the global market. At present there is a necessity of organizing entire business processes throughout a value chain of HDFC Bank that are linked to each other for movement of factory from the point of origin source to the point of destination/consumption."
During the past decades, globalization, outsourcing and information technology have enabled HDFC Bank to successfully operate solid collaborative supply networks in which each specialized business partner focuses on only a few key strategic activities. This inter-organizational is supply network can be acknowledged as a new form of HDFC Bank.

In the new millennium, changes in the HDFC Bank environment have contributed to the development of personal management networks. First, is an outcome of globalization and proliferation of multinational companies, joint ventures, strategic alliances and business partnerships.

Second, technological changes is particularly the dramatic fall in information communication costs, which are a significant component of transaction costs, have led to changes in coordination among the members of the personal management network. HDFC Bank operation is the objective of study because of the following reasons:

(i) HDFC Bank developed their home-grown version of personal appraisal long before the term came into existence personal management is playing a very crucial role in educational competitive advantage and hence it makes sense to conduct a research on their personal management.

(ii) Their attitude of competitive collaboration is equally unusual, particularly in India. The operation process is competitive at the customers end but united at the delivery end, ensuring their
survival since a century and more. Is their business model worth replicating in the digital age is the big question.

In the light of the above, it has been thought to be appropriate to conduct a research on the efficacy of proper personal appraisal management with special reference to HDFC Bank and in the process come out with valuable findings, which when applied to the business environment, can contribute substantially towards strategic advantage in the face of stiff global competition.⁶

The Changes in the business environment is in the new millennium. They have contributed to the development of the efficient personal management networks. Besides these measures, the reputed companies across the world have realized that efficient personal management networking is one of the major critical success factors.⁷

Information Technological changes, particularly the dramatic fall in the information communication costs, have led to changes in coordination among the members of the personal management network. There has been proliferation of collaboration, coordination and cooperation amongst the companies so much so that in recent times the competition in the market is not amongst companies but amongst the personal appraisal.”⁸

Method of Data Collection- The task of data the task of data collection begins after a research problem has been defined and research design/plan chalked out. While deciding about the method of data collection to be
used for the study, the researcher should keep in mind two types of data viz. primary and secondary. The primary data are those which are collected afresh and for the first time and thus happen to be original in character.

The secondary data, on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process. The researcher would have to decide which sort of data he would using thus collection for his study and accordingly he will have to select one or the other method of data collection.  

The method of collecting primary and secondary data differ since primary data are to be originally collected, while in case of secondary data the nature of data, collection work is merely that of compilation. We describe the different methods of data collection, with the pros and cons of each method.

**Collected secondary data-**

- Conducted HDFC Bank interview.
- On the basis of the above, formed my opinion about the reasons contributing towards their performance and formulated hypothesis.
- Decided on the sample size and sample segments.
- Designed a questionnaire, distributed the same and collected the responses from samples primary data collection.
- Segregated the data obtained from the responses to the questionnaire.
• Analyzed and interpreted the data on the basis of the result of testing of hypothesis.
• Drew the conclusion on the basis of the findings.

**Performance management Practice**

Some important Issues

• Performance Practice Management.
• Total Quality Management and Performance Management and Succession Planning.
• Linking Compensation to Performance
• Appraisal as a Motivating Mechanism
• Micromanagement and Performance HDFC Bank Management.
• Performance management And Organizational Performance
• Employee Training Need Assessment
• Performance management practice in Government HDFC Bank
• Arguments Against Performance management Practice
• Managing without Performance management Practice
• Performance Management Outsourcing.
• Advantage of Performance HDFC Bank Management Out-sourcing
• Performance management Practice for different levels of employees
• Parameter to Appraise Performance in BPO sector
• Current global trends in Performance management.
Sampling technique:

Sampling involves selection of a subset of individuals from within a population that can provide an idea about the characteristics of the whole population.

Main advantages of sampling are –

(a) faster collection of data

(b) lower cost

(c) maintaining homogeneity of data and fair degree of accuracy

Process

The sampling process comprises several stages:

- Defining the population of concern
- Specifying a set of items possible to measure
- Specifying a method for selecting items
- Sample size determination
- Implementation of sampling plan
- Data collection

A population can be defined as including all people or items with the characteristic one wish to understand. Because there is very rarely enough time or money to gather information from everyone or everything
in a population, the goal becomes finding a representative sample of that population.

A **probability sampling** is one in which every unit in the population has a chance of being selected in the sample, and this probability can be accurately determined. When every element in the population has the same probability of selection, this is known as an 'equal probability of selection' (EPS) design. Such designs are also referred to as 'self-weighting' because all sampled units are given the same weight.

- Probability sampling includes:
  - Random Sampling
  - Systematic Sampling
  - Stratified Sampling
  - Cluster or Multistage Sampling

It is a method where some elements of the population have no chance of selection or where the probability of selection can't be accurately determined. **It involves the selection of elements based on assumptions regarding the population of interest that becomes the criteria for selection.**

Hence, because the selection of elements is nonrandom, non probability sampling does not allow the estimation of sampling errors.
Non probability sampling methods include accidental sampling, quota sampling and purposive sampling.

Sometimes the researchers do not have the time or finances to select a completely randomized sampling otherwise known as the collection of data from a subset of the population. Under the circumstances, they have to rely on a type of data collection known as convenience sampling. This type of sampling has a few drawbacks, but still remains a popular way to gather statistical data for many different areas of study.

Convenience sampling refers to the non probability process by which a researcher gathers statistical data from the population. This form of selection is done based on the ease of gaining the statistical data.

Rather than gathering a more accurate data from the population, the researcher simply gathers data from people nearby. Often, researchers are realistically unable to accurately receive a random sampling of the population. In those cases convenience sampling allows researcher to gather data even in the face of difficulty. Research projects would never be completed

In a simple random sample (SRS) of a given size, all such subsets of the frame are given an equal probability. Each element of the frame thus has an equal probability of selection: the frame is not subdivided or partitioned.
Furthermore, any given pair of elements has the same chance of selection as any other such pair. This minimizes bias and simplifies analysis of results. In particular, the variance between individual results within the sample is a good indicator of variance in the overall population, which makes it relatively easy to estimate the accuracy of results.

Systematic sampling relies on arranging the target population according to some ordering scheme and then selecting elements at regular intervals through that ordered list.

Systematic sampling involves a random start and then proceeds with the selection of every element from then onwards. In this case, \( k = \frac{\text{population size}}{\text{sample size}} \). It is important that the starting point is not automatically the first in the list, but is instead randomly chosen from within the first to the \( k \)th element in the list.

**Stratified sampling**

Where the population embraces a number of distinct categories, the frame can be organized by these categories into separate "strata." Each stratum is then sampled as an independent sub-population, out of which individual elements can be randomly selected. There are several potential benefits to stratified sampling.
1- Dividing the population into distinct, independent strata can enable researchers to draw inferences about specific subgroups that may be lost in a more generalized random sample.

2- Utilizing a stratified sampling method can lead to more efficient statistical estimates (provided that strata are selected based upon relevance to the criterion in question, instead of availability of the samples).

   Even if a stratified sampling approach does not lead to increased statistical efficiency, such a tactic will not result in less efficiency than would simple random sampling, provided that each stratum is proportional to the group's size in the population.

3- It is sometimes the case that data are more readily available for individual, pre-existing strata within a population than for the overall population; in such cases, using a stratified sampling approach may be more convenient than aggregating data across groups (though this may potentially be at odds with the previously noted importance of utilizing criterion-relevant strata).

   Finally, since each stratum is treated as an independent population, different sampling approaches can be applied to different strata, potentially enabling researchers to use the approach best suited (or most cost-effective) for each identified subgroup within the population.
A stratified sampling approach is most effective when three conditions are met

1. Variability within strata are minimized

2. Variability between strata are maximized

Sometimes it is more cost-effective to select respondents in groups ('clusters'). Sampling is often clustered by geography, or by time periods. (Nearly all samples are in some sense 'clustered' in time - although this is rarely taken into account in the analysis.) For instance, if surveying households within a city, we might choose to select 100 city blocks and then interview every household within the selected blocks.

Clustering can reduce travel and administrative costs. In the example above, an interviewer can make a single trip to visit several households in one block, rather than having to drive to a different block for each household.

**Quota sampling**-

In **quota sampling**, the population is first segmented into mutually exclusive sub-groups, just as in stratified sampling. Then judgment is used to select the subjects or units from each segment based on a specified proportion.

It is this second step which makes the technique one of non-probability sampling. In quota sampling the selection of the sample is non-random. Interviewers might be tempted to interview those who look
most helpful. The problem is that these samples may be biased because not everyone gets a chance of selection. This random element is its greatest weakness and quota versus probability has been a matter of controversy for many years.

**Tools for data collection**

Data collection is a term used to describe a process of preparing and collecting data. The purpose of data collection is to obtain information, to keep on record, to make decisions about important issues, to pass information on to others. Primarily, data is collected to provide information regarding a specific topic.

- Data are collected from primary source
- Method of data collection is survey and questionnaire.
- In editing work,

Data collection is usually takes place early on in an improvement project. It is often formalized through a data collection Plan which often contains the following activity.

1. Pre collection activity Agree about goals/target data, definitions, methods
2. Collection-data collection
3. Presentation of findings-usually involves some form of sorting analysis and/or presentation.
The Prior to any data collection, is one of the most crucial steps in the process. It is often discovered too late that the value of their interview information is discounted as a consequence of poor sampling of both questions and information gathered from informants. It is after pre-collection activity fully completed, data collection in the field, whether by interviewing or other methods. It can be carried out in a structured, systematic and scientific way.

Technological of Statistical Analysis-

The Analysis of data is a process of inspecting, cleaning, transforming, and modeling data. It is the goal of highlighting useful information, suggesting conclusions, and supporting decision making. It is data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and management domains.

Predictive analytics- focuses on application of statistical or structural models for predictive forecasting or classification, while text analytics applies statistical, linguistic, and structural techniques to extract and classify information from textual sources, a species of unstructured data. All are varieties of data analysis.

The data integration is a precursor to data analysis, closely linked to data visualization and data dissemination. The term data analysis is sometimes used as a synonym for data modeling.
References


2- Ibid. p.47

3- Miller, D. Handbook of research Design and social Measurement, CA, Sagre: 1991, p.69


6- Ibid., 128

7- Sharma, K.R. Research Methodology, p.148

8- Trivedi, R.N. Research Methodology, p.178


10 S.R. Myneni, Legal Research and Methodology, p.197