

CHAPTER -5

ANALYSIS AND INTERPRETATION OF COLLECTED DATA

5.1 INTRODUCTION

5.2 METHODS OF DATA COLLECTION

5.3 PROCESSING ON DATA

5.4 ANALYSIS OF COLLECTED DATA

5.5 INTERPRETATION OF COLLECTED DATA

5.1 INTRODUCTION

While analyzing collected data researcher had undertaken both direct and indirect method of data collection. While undertaken this study researcher consider that Human Resource management as a central subsystem in an organization. As a central sub system, human Resource management interacts closely and continuously with all other sub system of an organization. The quality of an output in all subsystems depends largely upon the policies, program and practices of the Human Resource Subsystem.

Management is primarily dealing with Human being and human problems are present everywhere. Management is the development of people and not the direction of things. In the modern era of automation and computerization, machine in useless without competent people to run it. Human resource management becomes very significant in the recent decades. Since personnel function is a part of every manger's job, the personnel department is set up to

provide advice and assistance to line manger in performing their personnel function.

Universal luggage manufacturing Company ltd., Satara is a matrix organization. Every employee has two immediate. One of them is functional head and the other is the project head. A personnel officer is accountable to the personnel manager and to the project manager. The main advantage of matrix structure is that better balance between cost & performance can be maintained proportionate. Matrix organizations are very flexible & can be responded quickly to project needs & customer desires.

“Due to diversity & elasticity of human resources manager job, people call him by various names e.g. third force in industry, ‘ go between ‘ among workers & management, shock absorber etc. he is also known by his service status as the policeman, the liaison man, the catering man the welfare man, the productivity man, etc.”¹

Industrial revolution consisted mainly of the development of machinery, linking of power to machines & established of factory system & mass production. It was characterized by rapid technological change & improve specialization as a result the place of

work shifted from residence to the factory & the employer lost personal touch with his employees.

Scientific management has a great influence on management particularly on employer employee relations. Industrial psychologist stressed matching of employee skills with Human & social factors extrudes greater inference of employee make & productivity than willing condition.

As a result of changes in internal & external environment of industry & trade organizational personals get affected deeply. The internal environment consists of organizational objectives, policies formal structure & human resource system. In many Indian companies organizational hierarchy is lengthened to accommodate the professional aspirations of staff. The level of education has increased leading to significant changes in employee values emphasis has shifted from authority to participation and quantity to the quality of life. Independence & democracy increases the expectation of Working class. Job performance has become dependent on dexterity in handling machinery rather than on craft skills. All this overcoming

changes and development rate need for updated industrial trading at all levels of employment.

As a leader one needs to make the co a learning organization in the environment and work culture to attract and retain star performers. Leadership excellence redefines how business are conducted how people are motivated and has success is achieved through learning. You need to connect the learning to the organization vision and mission within today's competitive situation you need to innovate and experiment with new business models and solutions. Creating new standard in processes, system and practices for your co. while keeping the day to day business on track.

Building an innovation and strong learning culture in the organization is no longer a single function of management and senior leaders. The innovation in learning must also cut across the wide range of challenges and people reacting quickly but responsibly when new opportunities arises.

The mute question in the most co., is what does it take to build and embed the capabilities you need? How you can leverage on the

talent and achieve success. The answer to this generally is to find the right people create a learning culture and look at the long term analysis.

The ability to generate new learning ideas and processes is not confined to a few creative leaders. New is it like magic. It requires a focus and discipline at all levels of management.



5.2 Methods of Data Collection

Collection of data is the first step of statistical methods. Since the whole edifice of statistical standard is on the foundation of the collected data, maximum care shall be taken at this stage. The results obtained can never be better than the data on which they are based.

The data collected are in the form of figures spread irregularly or in the form of answers. These figures can not tell us much unless they are properly arranged, the 2nd stage in the statistical investigation is to classify the data and put them in the form of tables. It's necessary to analyze the data further in order to arrive at some definite results. The characteristic properties of the problem are revealed only when quantities like measures of central tendency, measuring of variations etc. are calculated. These single figures tell us much about the problem.

This is the last stage in the process and therefore is perhaps the most difficult part requiring a high degree of skill and experience. The results of the 3rd stage are in the form of numbers and need to be transformed into statements. Interpretations are to some extent problems

but could never be taken as absolutely certain. The probability of the result depends upon every stage from the beginning to the end.

Information collected for statistical study is called data and the person who investigate the problem and collected the data is called an investigator or researcher. Any data that researcher collect himself are termed as “primary data”. Since the primary data are original and hence one has to make are of information collected by someone else. Data taken from figure collected by others as termed as “secondary data”.

Primary data can be called as raw material and secondary data can be called finished product. There are two methods for collecting data. The figure can be called from I) the entire popular or ii) a sample of the popular these methods are called I) Census technique and ii) Sample technique. The popular or the universe means the entire body of items about which the information is sought. In census tech every member of the population is contacted and information is collected. And to collect information from a sample is called sampling technique. However the choice of method depends upon the fact on such as the object, the scope the time and the funds.

Methods of Primary Data collection

1) Direct personnel observation or Interview.

In this method the investigator observes the member of the population on interviews them and collects the necessary information from them.

2) Indirect Investigation

In this method the investigator approaches witness and collect data from them. If this also does not prove adequate, the persons may also be interviewed in addition.

3) Questionnaire Method

In this method the required information is collect in question answer form.

4) Through Local Correspondents

In some problems, information is required to be collected at regular intervals. Every time new information is received, it is to be incorporated in the existing data and thus, the data is kept upto date.

Whether forecast is made on the basis of such information. The agencies supplying information regularly are called correspondents.

This method is neither expensive nor time consuming.

5) Collection of Secondary Data

1. Government Publication

All the above bodies, central, state or local called data on various social and economic problems and publish them for the benefit of the public. All the Government Reports, Memorandum of Association etc are the main source of secondary data.

2. Publications of Foreign Government and Institutional Bodies

the institutional bodies like the UNO and its organizations FHO, WHO, World Bank etc. and the foreign Government publishes data which can be used for the study of various problems.

3. Publications of private Organization

Private bodies such as various Trade Unions, chamber of Commerce, Banks, Co-operative bodies collect data for their own problems and use. But these data can be used as secondary data to study wider problems.

4. Journals, Magazines etc.

Various journals, magazines, weekly etc are devoted to social and economic problems. They have their staff to collect data. These data is therefore, fairly reliable and used as a source of secondary data.

5) Publications of Educational and Research Institutes

Research institutes, universities and other educational institutes are always engaged in some sort of social, economic and educational research. Since the data is collected by qualified persons, hence data can be used by others as secondary data.

5.3 Processing on Collected Data(Data sorting, Classification etc.)

The first step in analysis of data is to classify them. Classification means the arranging data in different groups according to similarities.

Objectives of Classification and Tabulation

1. It condenses and simplifies complexities.
2. It enables comparison.
3. It reveals patterns.
4. It gives prominence to important figures.
5. It enables to analyze data further.
6. It helps us in drafting the report.

Principles of Classification and Tabulation

1. **Simplicity**-It is better to show a little and have it understood than to show all and have nothing understood.
2. **Give Comprehensive Title**-The table should have a comprehensive and explanatory title. A title should be short, but if it is unavoidably lengthy, then a shorter one, together with a sub title may be preferred.

- 3. Source-**All figures come from source. State the source the bottom of the table.
- 4. Units-**Units of measurement should be given preferably the title.
- 5.** Give clear heading to columns and rows.
- 6.** Avoid double counting.
- 7.** Show totals and sub totals.
- 8.** Show percentages and ratios if necessary.
- 9.** Encircle special figure.
- 10.** Choose suitable size.

5.4 ANALYSIS OF DATA

While analyzing collected data researcher have undertaken following statistical analysis methods data is analyzed and interpreted through statistical tools for e.g. tabulation of data, graphical representation of data, diagrams, averages, central measure dispense etc.

Training program are undertaken with the help of external training institutes which are well known and having expertise services in related field. After completing any training program every employee have to submit monitoring report after one month of completion of training. This form is known as training evaluation form. This enables personnel managers to keep follow up after completion of training program. This also facilitates him to check out action plan of employee who have completed training program. Personnel executives also undertake review program after completion of every three months. Summary of training program arranged in Universal Luggage Manufacturing Pvt. LTD., Satara in the year 2003 as follows-

Sr.	Training Program Implemented	Training Method	No. of Participants
1	Time Management	On The Job	28
2	English Speaking	On The Job	24
3	Personality Development & Supervisory Skills	On The Job	156
4	Japanese Management System	On The Job	40
5	Store & Inventory Management	Off The Job	7
6	Hydraulic Molding Machine Operations	Off The Job	5

It of the employees is not satisfied with Training policies of the company. Declaration can not be taught and such other is the critical statement received from senior engineers. They complain that dedication can not be taught merely by lectures. They demand organization should look at the things with people participate and highest decision making body should not indulge in any act that will have adverse effect on the morale of the employees. They all have

mentioned that training program contribute to career progression. Some engineers feel that more training hours should be devoted to practical demonstrations. One executors engineer has commented that the impact of the training on the performance of the organization is very positive and it fulfills the objectives with a better quality of production, lesser cost and more beneficial to employees and to the employer. Employee get benefited because of increase in output as a result of training. Some of the employees also desire that the courses should be held more frequently. In the view of their demand the training division may review the existing training curriculum and also course material. Some employees express dissatisfaction over the manner in which training is conducted and insist that the related practical field.

In helping the Universal Luggage Manufacturing Pvt. LTD., Satara with some constructive suggestions, in bringing about improvements in the existing training system, detailed discussions were held with instructional staff who have used the opportunity to air their career related grievances. The technicians who assist maintenance engineer in repair and maintenance of machinery and

influence the production, their views are also considered vital for assessment of impact of training. Scrutiny of questionnaire filled and interaction with this cadre personnel have given some important inputs to implement. The technician work under guidance of maintenance engineers, accordingly, their recruitment rule are different and qualification and experience recruitment are not stringent.

Most of the technicians are satisfied with the training courses and appreciated the existing training system. The observation of officials and their suggestions are considered valuable. The official have stated that in order to make training more meaningful the training should be more practical oriented.

Engineering department essentially recommend for further training program. They demand that such program should be arranged at least for once in a year. And the training should be undertaken on updating of production technology and quality improvement to make the company competent in an international market also. Other official staff suggest that the management should maintain training calendar

for each financial year to involve each level of staff in training
program directly and keep them, upgrade with market dynamism.

5.5 INTERPRETATION OF COLLECTED DATA

Statistical data is bulky and not understandable to human mind. But if it is interpreted in graphical or tabulated form it is easier to understand and to grasp it. If they are plotted, the graph immediately reveals in a pictorial manner, the patterns hidden in heap of numbers. Tabulation does the same job but a graph does it better. A histogram or a distribution polygon or a distribution curve describes a huge data completely, accurately, attractively and in a condensed form.

Since graph is a picture it can be understood practically by every body. In this respect, it is superior to tabulation which needs calculation of number, for comparison and understanding the characteristics of data. That is hwy businessman prefer graphs to any other method off representation of data. Graphical representation facilitates comparison, they help to predict helps in analysis, they are more appealing.

Thus we can see that the graphs helps in the same way as those of the tabulation does, but in a much more effective, attractive and impressive manner.

Graphs represented by the researcher are based on the following principals-

1. The correct impression must be created.
2. The graph must be given a clear and comprehensive title.
3. The independent variable should analysis be taken along the horizontal axis.
4. The vertical scale should always start from o.
5. Axes should be clearly labeled.
6. Curves must be distinct.
7. The graph must not be overcrowded.
8. The source of the figures must be stated.
9. Convenient scale should be chosen.

Types of graphs used by researcher to represent collected data.

1. Frequency Curve.
2. Ogive Curves/ Cumulative Frequency Curves

Sampling Techniques

If the data is collected from every member the method of collection is called Census Method and if he data is collected from

a selected few, it is called sampling method. Researcher has undertaken the sampling method. While studying the problem.

Sampling method is less time consuming, more reliable, details of information can be studied regoursly in this menthol, more of that in most of the situations Sampling I the only possible method. While undertaking Sampling method, researcher has followed following principals-

1. Principle of regularity.
2. Principle of interaction of large numbers.

Modern business, industry and offices have enormously grown in size. They employ a large number of workers, machines, handle huge raw material and have to control a big cash flow. Because of the size of these factors management of a business house is not one man's job. It needs the scientific approach of operations research team. The methods and techniques of organizational research can be used 1) to maintain necessary stock (inventory control) 2) to supply raw material in proper order and in proper quantities (sequencing problem) 3) To set up supply lines (routing problem) 4) to distribute various

resources (allocation problems) etc. of the various techniques develop in organizational Research we shall acquaint ourselves with only one viz., Linear Programming.

5.6 References

1. S.P. Robbins; "Personnel Administration, P. 277