

UNIT 5 JOB ANALYSIS, DESIGN AND EVALUATION

Objectives

After studying this chapter, you will be able to understand:

- the nature, process and methods of job analysis;
- concept and uses of job design; and
- need of job evaluation

Structure

- 5.1 Introduction
- 5.2 Concept of Job Analysis
- 5.3 Objectives of Job Analysis
- 5.4 Importance of Job Analysis
- 5.5 Aspects of job to be analysed
- 5.6 Methods of Job Analysis
- 5.7 Techniques to obtain data for Job Analysis
- 5.8 Job Description and Job Specification
- 5.9 Job Design
- 5.10 Job Evaluation
- 5.11 Summary
- 5.12 Self Assessment Questions
- 5.13 Further Readings and References

5.1 INTRODUCTION

Job analysis is a systematic process of gathering information about work, jobs and relationships between jobs. Corporate restructuring process, quality improvement programmes, human resource planning, job design, recruitment strategies, training programmes, and succession planning are among the other HR activities that are based on job analysis.

Job analysis provides some basic information about the various jobs and skills required to perform the job effectively so that it creates and sustains organisational capability. Job descriptions and job specifications are needed to attract and select qualified employees and evaluate compensation systems and particular compensation decisions.

Apart from job analysis, this unit will focus on the concepts of job design and job evaluation.

5.2 CONCEPT OF JOB ANALYSIS

Job analysis is the fundamental process that forms the basis of all human resource activities. The importance of job analysis has been well-established for years, dating back to at least the First World War. The United States government's Uniform Guidelines on Employee Selection Procedures (1978) and the American Psychological Association's Principles for the Validation and use of Personnel Selection Procedures stipulate that job analysis is essential to the validation of any and all major human resources activities.

In its simplest terms, a job analysis is a systematic process for gathering, documenting and analyzing data about the work required for a job. The data collected in a job analysis, and reflected through a job description, includes a description of the context and principal duties of the job, and information about the skills, responsibilities, mental models and techniques for job analysis. These include the Position Analysis Questionnaire, which focuses on generalized human behaviors and interviews, task inventories, functional job analysis and the job element method.

A job analysis provides an objective picture of the job, not the person performing the job, and as such, provides fundamental information to support all subsequent and related HR activities, such as recruitment, training, development, performance management and succession planning. Job analysis serves two critical functions with respect to these processes. Job analysis helps ensure that decisions made with respect to HR processes are good decisions i.e., fair and accurate (e.g., selection of the right person for the job, appropriate decisions about training, performance management, development, etc.) and it helps ensure the defensibility of decisions made to employee (resulting in good HR management) and to the courts (resulting in saving of costs, time and reputation).

The unit of study in job analysis may be position or a job. A "position" is the most basic structural entity in the organization, representing the collection of duties assigned to a single person. One or more similar positions, each of which is interchangeable with the others in terms of work activities, makes up a "job." In fact, a "job" has been defined (Henderson, 1979) as "work consisting of responsibilities and duties that are sufficiently alike to justify being covered by a single job analysis." It has also been defined as "a collection of position similar enough to one another in terms of their work behaviors to share a common job title" (Harvey, 1991). The linkage positions in an organization provides a roadmap and tool for translating the organization's mission, values and business priorities into results.

Why is there a need to talk in terms of positions or jobs? It is because it is necessary to identify the results individual will be accountable for when they are hired, how their work fits in or relates to other work performed in the organization, how their work should be compensated for in relation to that of others, on what basis recruitment and training should be carried out, and so on.

5.3 OBJECTIVES OF JOB ANALYSIS

The purpose of job analysis is to establish and document the 'job-relatedness' of employment procedures such as training, selection, compensation and performance appraisal.

Other important uses that job analysis can be put to are:

- indicate training needs
- put together work groups or teams
- provide information to conduct salary surveys
- provide a basis for determining a selection plan
- provide a basis for putting together recruitment
- describe the physical needs of various positions to determine the validity of discrimination complaints
- as input for organisational analysis
- as input for strategic planning
- as input for any human relations needs assessment
- as basis for coordinating safety concerns

5.4 IMPORTANCE OF JOB ANALYSIS

According to scientific management, the key to productivity is a precise understanding of the tasks that constitute a job. If the motions of workers are to become standardized and machine-like, then it is necessary to be certain about what is to be accomplished, as well as what abilities and materials are necessary to do the job. For many years, job analysis was considered the backbone of the scientific clipboards and stopwatches, was the method used to determine the most efficient way to perform specific jobs.

As the popularity of scientific management declined after World War II, however, so did the popularity of job analysis. With the new emphasis on human relations as the key to productivity job analysis was used primarily to set salary scales. But in the modern times workers and employers began to take renewed interest in this area because of concerns about two issues: unfair discrimination and comparable worth.

There are two areas where unfair discrimination in hiring can occur: in the standards set for being hired; and in the procedures used to assess the applicant's ability to meet those standards. Job analysis addresses the question of what tasks, taken together actually constitute a job. Without this information, standards for hiring may appear to be arbitrary – or worse, designed to exclude certain individual or groups from the workplace.

More recently, the issue of comparable worth has also contributed to a new interest in job analysis. Comparable worth refers to equal pay for individuals who hold different jobs but perform work that is comparable in terms of

knowledge required or level of responsibility. The major issue of the comparable worth controversy is that women who are employed in jobs that are comparable to those held by men are paid, on the average, about 65 percent of what a man would earn. In order to determine the comparability of job tasks so that salaries can also be compared, a proper job analysis is necessary. Comparable work is an issue of considerable interest to many people.

5.5 ASPECTS OF A JOB TO BE ANALYSED

Job analysis should collect information on the following areas:

- *Duties and tasks:* Information on performance of specific tasks and duties includes frequency, duration, effort, skill, complexity, equipment, standards, etc.
- *Environment:* Environment has a significant impact on physical requirements to be able to perform job that may include unpleasant conditions like extreme temperatures; some may also pose a definite risk to the personnel.
- *Tools and equipment:* These items are mentioned job analysis which are required to perform certain tasks and duties such as protective clothing
- *Relationships:* Supervision given and received, relationships with internal or external people, etc. have to be specified in job analysis
- *Requirements:* The knowledge, skills and abilities (KSA) required to perform the job must be clearly defined. While an incumbent may have higher KSA than those required for the job, a job analysis typically only states the minimum requirements to perform the job.

5.6 METHODS OF JOB ANALYSIS

Job analysis is the procedure for identifying those duties or behaviors that define a job. Aside from verifying the fairness of selection procedures, job analysis is the foundation of virtually every other area of industrial psychology, including performance appraisal, training and human factors. Additionally, job analysis is the basis of job evaluation, the procedure for setting salary scales. Figure 1 suggests some of the many uses of job analysis.

Information about jobs can be collected in a number of ways. McCormick (1976) lists the following as potential sources: observation, individual interview, group interview, technical conference, questionnaire, diary, critical incidents, equipment design information, recording of job activities, or employee records. Possible agents to do the collecting are professional job analysis, supervisors, job incumbents, or even a camera in the work-place.

In spite of both its importance and the availability of data, however, the area of job analysis has not been studied in details. One reason for the lack of research is the nature of the data: Although qualitative information about jobs, collected through observations, is plentiful, translating this data into a quantitative form amenable to statistical analysis is often difficult.

Over time, different approaches to dealing with data of job description have been developed. Some method designed to study jobs include functional job analysis (Fine, 1974), critical incidents (Flanagan, 1954), job elements (Primoff, 1975) the Position Analysis Questionnaire (McCormick, Jeanneret, & Mecham, 1972), and the physical abilities requirement approach (Fleishman, 1975).

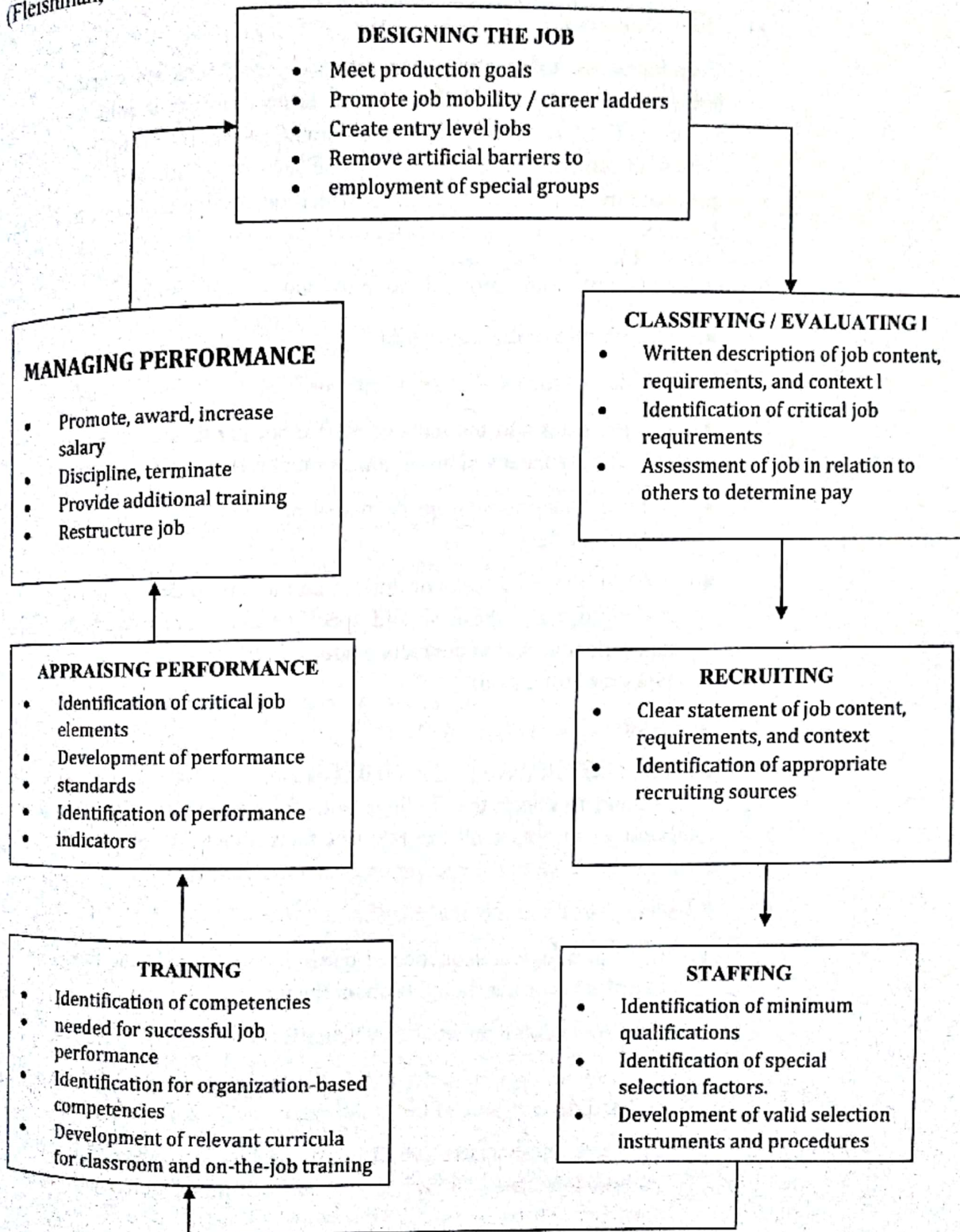


Figure 1. Human Resource Management Cycle: Application of Job Analysis Data.

Source: Bemis, S.E. Belenky, A.H, Soder, D.A. (1983).

5.7 TECHNIQUES TO OBTAIN DATA FOR JOB ANALYSIS

Information about jobs can be collected by means of questionnaire and/or interviews.

a) Questionnaires

Questionnaires, to be completed by job-holders and approved by job-holder's superiors, are useful when a large number of jobs are to be covered. They can also save interviewing time by recording purely factual information and by helping the analyst to structure his or her questions in advance to cover areas which need to be explored in greater depth.

Questionnaire should provide the following basic information:

- The job title of the job-holder.
- The title of the job-holder's superior.
- The job titles and numbers of staff reporting to the job-holder (best recorded by means of an organization chart).
- A brief description (one or two sentences) of the overall role or purpose of the job.
- A list of the main tasks or duties that the job-holder has to carry out. As appropriate, these should specify the resources controlled, the equipment used, the contacts made and the frequency with which the tasks are carried out.

b) Interview

To obtain the full flavour of a job it is usually necessary to interview job-holders and to check the findings with their superiors. The aim of the interview is to obtain all the relevant facts about the job, covering the areas listed above in the section on questionnaires.

To achieve this aim job analysts should:

- 1) work to a logical sequence of questions which help the interviewee to order his or her thoughts about the job;
- 2) pin people down on what they actually do;
- 3) ensure that the job-holder is not allowed to get away with vague or inflated descriptions of his or her work; and
- 4) obtain a clear statement from the job-holder about his or her authority to make decisions and the amount of guidance received from his or her superior.

5.8 JOB DESCRIPTION AND JOB SPECIFICATION

Job analysis is the examination of a job, its component parts and the circumstances in which it is performed. It leads to a **job description** which sets out the purpose, scope, duties and responsibilities of a job. From the job analysis and job description, a **job specification** may be derived, which is a statement of the skills, knowledge and other personal attributes required to carry out the job. Some of the uses are:

- 1) **Recruitment and selection:** where it is provided a basis for a specification of what the company is looking for.
- 2) **Training:** where by means of skills and task analysis it produces training specifications which set out training needs and are used to prepare training programmes.
- 3) **Job evaluation:** where by means of whole job or factor comparison, job descriptions can be compared and decisions made on the relative position of a job in the hierarchy.
- 4) **Performance appraisal:** where the job description resulting from job analysis is used to decide on the objectives and standards the job holder should reach against which his or her performance will be measured.
- 5) **Organization Planning:** as part of the process of activity

5.9 JOB DESIGN

Job design has emerged as an important area of work analysis. It is based on growing conceptual and empirical base and has commanded research attention and is being widely applied to actual practice of management.

Job design concern and approaches are considered to have begun with the scientific management movement. Pioneering scientific managers like Taylor and Gilbreth examined jobs with techniques such as time and motion analysis. Their goal was to maximize human efficiency on the job. Taylor suggested that task design might be the most important single element in scientific management.

Job designing evolved into what is popularly known as job engineering. The industrial engineering approach is basically concerned with products, process, tool design, plant layout, operating procedures, work measurement, standards, and human-machine interactions. It has also been closely associated with sophisticated computer applications involving Computer Assisted Design (CAD). These computer systems had a positive impact by reducing task and workflow uncertainty. Top management could readily perceive the immediate cost savings from job engineering, but certain behavioural aspects like quality absenteeism, and turnover were generally ignored.

In the 1950s, different methods were being adopted by practicing managers. For example, IBM job rotation and job enlargement programmes were introduced. Job enlargement programmes essentially loaded the jobs horizontally, and expanded the number of operations performed by the worker and made the job less specialized.

Job rotation programmes reduced boredom by switching people around to various jobs. Although boredom at work is still a significant problem in the last several years, attention has shifted to new demanding challenges facing employees on the job. For example, because of downsizing of organizations and increasingly advanced technology, jobs have suddenly become much more demanding and employees must differently adapt to unpredictable changes. For example, in manufacturing assembly line methods are being replaced by flexible, customized production and computer-integrated manufacturing. This new manufacturing approach requires workers to deal with an ever-increasing line of product and sophisticated technology.

In this context, job design takes on special importance in today's human resource management. It is essential to design jobs so that stress can be reduced, motivation can be enhanced, and satisfaction of employees and their performance can be improved so that organizations can effectively compete in the global market place.

Job Rotation

An alternative to boredom in work place is job rotation. Job rotation implies moving of employees from one job to another without any fundamental change in the nature of the job. The employee may be performing different jobs that are of similar nature. The advantages of job rotation may be reduced boredom, broadening of employees' knowledge and skills, and making them competent in several jobs rather than only one. However, caution needs to be exercised while shifting people frequently from one job to another, as it may cause interruption or the employee may feel alienated in a new job. Another factor is job rotation does not provide the employee any challenge on the job and, hence, those employees who are seeking challenge may feel frustrated.

Job Enlargement

Job enlargement involves adding more tasks to a job. It is a horizontal expansion and increases jobs scope and gives a variety of tasks to the jobholder. It is essentially adding more tasks to a single job. It definitely reduces boredom and monotony by providing the employee more variety of tasks in the job. Thus, it helps to increase interest in work and efficiency. In one study it was found that by expanding the scope of job, workers got more satisfaction, committed less errors, and customer service improved. However, research has provided contrary evidence also in that enlargement sometimes may not motivate an individual in the desired direction.

Job Enrichment

Job Enrichment

Another approach to designing jobs in job enrichment. In the earlier two methods, human capabilities are not being utilized to a maximum and employees are feeling frustrated. Job enrichment involves a vertical expansion of a job by adding more responsibilities and freedom to it. According to Herzberg, job enrichment is the type of expansion of a job that gives employees more challenge, more responsibility, more opportunity to grow and contribute his or her ideas to the organization's success. In other words, job enrichment increases job depth that refers to the degree of control employees have over their work.

Job enrichment basically provides autonomy while retaining accountability. It generates feeling of personal responsibility and achievement. Job enrichment certainly improves the quality of work output, employee motivation, and satisfaction.

Every organization follows specific procedures for job designing. Each procedure may be different for different jobs. Certain aspects may be kept in mind while following the job enrichment procedure.

- Increasing the responsibilities of the employees by adding a variety of tasks
- Allowing employees to set their own standards of performance.
- Providing autonomy for the employee to execute the job
- Encouraging the employees to innovate new techniques and review results
- Empowering the individual to make critical decisions in problem situations while on the job.

5.10 JOB EVALUATION

Job evaluation basically specifies the relative value of each job in an organization. It basically serves the purpose of compensation procedures. Job evaluation is a useful tool for making decisions about the compensation to be attached with a particular position. There are several systematic methods involved in the job evaluation process. These methods are discussed later in the course. What is clear is job evaluation is facilitated because of the data generated from job analysis.

5.11 SUMMARY

To sum up, this unit provided a clear understanding of the process of job analysis and the methods involved in it. All the methods discussed have some advantages and disadvantages. Keeping these in view, an efficient Job Analyst uses the required job analysis technique. Also, the concept of job design and its associated techniques have been discussed so as to improve your ability to design jobs more effectively.