

Lesson: 9

Job Analysis

Contents:

- **Definition**
- **6 Steps in Job Analysis**
- **Job description Vs Job specification**
- **Elements of Job Analysis**
- **Types of info. gathered**
- **Method of collecting Job Analysis Data**
- **Impact of Behavioral on Job Analysis**

Dear students,

In this lesson we will be discussing the nature and use of Job Analysis. Let us first try to understand what is job analysis.

You must understand that Job analysis provides the basis for determining what types of information should be obtained from the applicant, from previous employers, and from other sources. Even though many companies are laying off substantial portions of their workforces, employee selection is a vital part of HRM. Personnel selection is important in the building of a productive workforce. Determining the qualifications of job candidates requires that as much information as possible be obtained from the candidates and other sources. It is important for you to understand that the information that is collected should be relevant to the job and sufficiently reliable and valid. HR practitioners should have an understanding of job requirements to permit an analysis of application forms, employment tests, interviews, and reference checks of individual candidates.

Following definitions will help you to understand the concept of job analysis better:

- A defined data collection and analysis procedure through which information about job tasks and job requirements are obtained.

- Job analysis is the procedure for determining the duties and skill requirements of a job and the kind of person who should be hired for it.
- Organizations consist of positions that have to be staffed. Job analysis is the procedure through which you determine the duties of these positions and the characteristics of the people who should be hired for them .The analysis produces information on job requirements, which is then used for developing job descriptions (what the job entails) and job specifications (what kind of people to hire for the job).

Now let us go through the 6 Steps In Job Analysis

| | |
|--|----------|
| Develop Job Description / Job Specification | 6 |
| Review information with incumbents | 5 |
| Collect data to analyse job | 4 |
| Select representative positions to analyse | 3 |
| Review background information | 2 |
| Identify how information will be used | 1 |

Go through the following six steps in doing a job analysis. They will make the concept clear to you.

Step 1

Identify the use to which the information will be put, since this will determine the types of data you collect and how you collect them. Some data collection techniques like interviewing the employee and asking what the job entails and what his responsibilities are - are good for writing job

descriptions and selecting employees for the job.

Step 2

Review relevant background information such as organization charts, process charts, and job descriptions. *Organization charts* show how the job in question relates to other jobs and where it fits in the overall organization. The chart should identify the title of each position and, by means of its interconnecting lines, show who reports to whom and with whom the job incumbent is expected to communicate.

Step 3

Select representative positions to be analyzed. This is done when many similar jobs are to be analyzed and it is too time-consuming to analyze, say, the jobs of all assembly workers.

Step 4

Next actually analyze the job by collecting data on job activities, required employee behaviors, working conditions, and human traits and abilities needed to perform the job. For this, you would use one or more of the job analysis techniques explained in this lesson.

Step 5

Review the information with job incumbents. The job analysis information should be verified with the worker performing the job and with his or her immediate supervisor. This will help to confirm that the information is factually correct and complete. This "review" step can also help gain the employee's acceptance of the job analysis data and conclusions by giving that person a chance to review and modify your description of his or her job activities.

Step 6

Develop a job description and job specification. A job description and a job specification are usually two concrete products of the job analysis. The *job description* is a written statement that describes the activities and responsibilities of the job, as well as important features of the job such as working conditions and safety hazards. The *job specification* summarizes the personal qualities, skills, and background required for getting the job done; it may be either a separate document or on the same document as the job description.

It is very important to understand why is Job Analysis required:

- ~~What is Job Analysis – job analysis is obtaining information about jobs.~~
- Why is Job Analysis important - Without sufficient knowledge of what employees do, organizations cannot develop other human resource practices and procedures.

Job analysis is a systematic procedure for studying jobs to determine their various elements and requirements. The job analysis for a particular position typically consists of two parts.

- *A job description* is a list of the elements that make up a particular job.
- *A job specification* is a list of the qualifications required to perform particular job.

Job Description Vs. Job Specification

- **Job Description** - written narrative describing activities performed on a job; includes information about equipment used and working conditions under which job is performed.
- **Job Specification** - outlines specific skills, knowledge, abilities, physical and personal characteristics necessary to perform a job - What about physical and personal characteristics? Strength, patience, intestinal fortitude, risk-taker.

It is essential for you to understand that Job Analysis helps to find information about the following:

Work activities. Information is usually collected on the actual work activities performed, such as cleaning, selling, teaching, or painting. Such a list may also indicate how, why, and when the worker performs each activity.

Human behaviors. Information on human behaviors like sensing, communicating, decision-making, and writing may also be collected. Included here would be information regarding human job demands such as lifting weights, walking long distances, and so on.

Machines, tools, equipment, and work aids used. Included here would be information regarding products made, materials processed, knowledge dealt with or applied (such as finance or law), and services rendered (such as counseling or repairing)

Performance standards. Information is also collected regarding performance standards (in terms of quantity, quality, or speed for each job duty, for instance) by which an employee in this job will be evaluated.

Job context. Included here is information about such matters as physical working conditions, work schedule, and the organizational and social context-for instance, in terms of the number of people with whom the employee would normally have to interact. Also included here might be information regarding incentives for doing the job.

Human requirements. Finally, information is usually compiled regarding human requirements of the job, such as job-related knowledge or skills (education, training, work experience) and required personal attributes (aptitudes, physical characteristics, personality, interests).

Types Of Information Gathered

Work Activities

- Work activities performed
- How, why, when activity is performed

Human Behaviours

- Communicating, decision making, and
- Other physical job demands, e.g., lifting

Tools, equipment, etc used

- Products made
- Knowledge dealt with / applied
- Services rendered

Performance standards

- Quantity, quality, speed
- Used to evaluate employee performance

Job Context

- Physical work conditions
- Work group
- Incentives for doing job

Human Requirements

- Job-related knowledge, skills
- Personal attributes, e.g. personality, aptitudes

Let us now have a look at the areas in which Job Analysis Information is used

❑ Recruitment and Selection

Job analysis provides information about what the job entails and what human characteristics are required to carry out these activities. Such job description and job specification information is used to decide what sort of people to recruit and hire.

❑ Compensation

Job analysis information is also essential for estimating the value of and appropriate compensation for each job. This is so because compensation, (such as salary and bonus) usually depends on the job's required skill and education level, safety hazards, degree of responsibility and so on-all factors that are assessed through job analysis. Job analysis provides the information determining the relative worth of each job so that each job can be classified.

❑ Ensure Complete Assignment of Duties

The job analysis is also useful for ensuring that all the duties that have to be done are in fact assigned to particular positions. For example, in analyzing the current job of your company's production manager, you may find she reports herself as being responsible for two dozen or so specific duties including planning weekly production schedules, purchasing raw materials, and supervising the daily activities of each of her first-line supervisors. }v fissing, however, is any reference to managing raw material or finished goods in-

ventories. On further investigation you find that none of the other manufacturing people is responsible for inventory management either. Your job analysis (based not just on what employees report as their duties, but on your knowledge of what

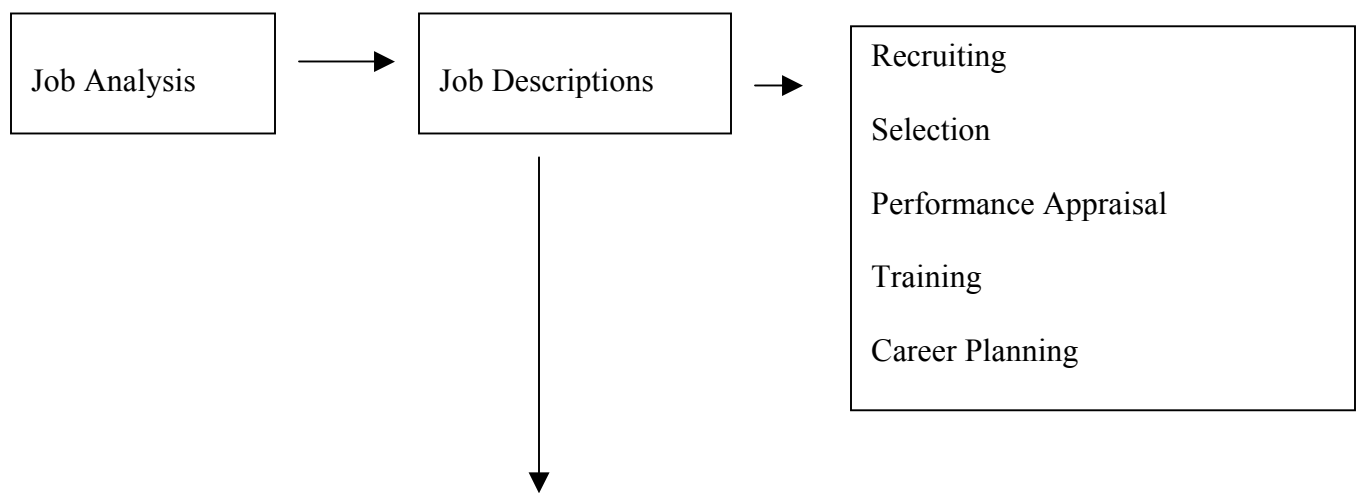
❑ Training

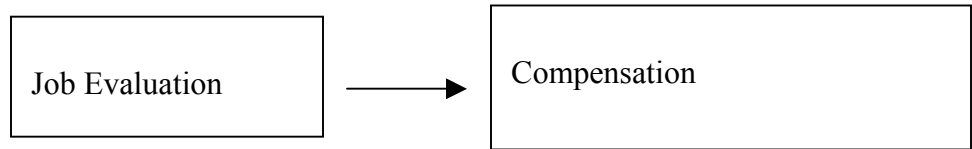
Job analysis information is also used for designing training and development programs because the analysis and resulting job description show the skills-and therefore training-that are required.

❑ Performance Appraisal

A performance appraisal compares each employee's actual performance with his or her performance standards. It is often through job analysis that experts determine the standards to be achieved and the specific activities to be performed.

JOB ANALYSIS = Process of defining jobs in terms of tasks, behaviors and personal requirements.





Methods of Collecting Job Analysis Data

You should know that a variety of methods are used to collect information about jobs. None of them, however, is perfect. In actual practice, therefore, a combination of several methods is used for obtaining job analysis data. These are discussed below.

- 1) **Job performance:** In this method the job analyst actually performs the job in question. The analyst, thus, receives first hand experience of contextual factors on the job including physical hazards, social demands, emotional pressures and mental requirements. This method is useful for jobs that can be easily learned. It is not suitable for jobs that are hazardous (e.g., fire fighters) or for jobs that require extensive training (e.g., doctors, pharmacists).
- 2) **Personal observation:** The analyst observes the worker(s) doing the job. The tasks performed, the pace at which activities are done, the working conditions, etc., are observed during a complete work cycle. During observation, certain **precautions** should be taken
 - The analyst must observe average workers during average conditions.
 - The analyst should observe without getting directly involved in the job.
 - The analyst must make note of the specific job needs and not the behaviours specific to particular workers.
 - The analyst must make sure that he obtains a proper sample for generalisation.

This method allows for a deep understanding of job duties. It is appropriate for manual, short period job activities. On the negative side, the methods fail to take note of the mental aspects of jobs.

3) ***Critical incidents:*** The critical incident technique (CIT) is a qualitative approach to job analysis used to obtain specific, behaviorally focused descriptions of work or other activities. Here the job holders are asked to describe several incidents based on their past experience. The incidents so collected are analysed and classified according to the job areas they describe. The job requirements will become clear once the analyst draws the line between effective and ineffective behaviours of workers on the job. For example, if a shoe salesman comments on the size of a customer's feet and the customer leaves the store in a huff, the behaviour of the salesman may be judged as ineffective in terms of the result it produced. The critical incidents are recorded after the events have already taken place - both routine and non-routine. The process of collecting a fairly good number of incidents is a lengthy one. Since, incidents of behaviour can be quite dissimilar, the process of classifying data into usable job descriptions can be difficult. The analysts overseeing the work must have analytical skills and ability to translate the content of descriptions into meaningful statements.

4) ***Interview:*** The interview method consists of asking questions to both incumbents and supervisors in either an individual or a group setting. The reason behind the use of this method is that jobholders are most familiar with the job and can supplement the information obtained through observation. Workers know the specific duties of the job and supervisors are aware of the job's relationship to the rest of the organisation.

Due diligence must be exercised while using the interview method. The interviewer must be trained in proper interviewing techniques. It is advisable to use a standard format so as to focus the interview to the purpose of analyst.

Guidelines for Conducting Job Analysis Interviews

- Put the worker at ease; establish rapport.
- Make the purpose of the interview clear.
- Encourage the worker to talk through empathy.
- Help the worker to think and talk according to the logical

sequence of the duties performed. .

- Ask the worker only one question at a time.
- Phrase questions carefully so that the answers will be more than just "yes" or "no".
- Avoid asking leading questions.
- Secure specified and complete information pertaining to the work performed and the worker's traits
- Conduct the interview in plain, easy language.
- Consider the relationship of the present job to other jobs in the department.
- Control the time and subject matter of the interview.
- Be patient and considerate to the worker.
- Summarise the information obtained before closing the interview.
- Close the interview promptly.

Although the interview method provides opportunities to elicit information sometimes not available through other methods, it has limitations. First, it is time consuming and hence costly. Second, the value of data is primarily dependent on the interviewer's skills and may be faulty if they put ambiguous questions to workers. Last, interviewees may be suspicious about the motives and may distort the information they provide. If seen as an opportunity to improve their positions such as to increase their wages, workers may exaggerate their job duties to add greater weightage to their positions.

- 5) ***Questionnaire method:*** The questionnaire is a widely used method of analysing jobs and work. Here the jobholders are given a properly designed questionnaire aimed at eliciting relevant job-related information. After completion, the questionnaires are handed over to supervisors. The supervisors can seek further clarifications on various items by talking to the jobholders directly. After everything is finalised, the data is given to the job analyst.

The success of the method depends on various factors. The structured questionnaire must cover all job related tasks and behaviours. Each task or behaviour should be described in terms of features such as importance, difficulty, frequency, and relationship to overall performance. The jobholders should be asked to properly rate the various job factors and communicate the same on paper. The ratings thus collected are then put to close examination with a view to find out the actual job requirements.

Questionnaire method is highly economical as it covers a large number of job holder" at a time. The collected data can be quantified and processed through a computer. The participants can complete the items leisurely. Designing questionnaires however is not an easy task. Proper care must be taken to see that the respondents do not misinterpret the questions. Further, it is difficult to motivate the participants to complete the questionnaires truthfully and to return them.

Let us now have a look at some of the standard questionnaires that are being widely used. They are discussed below for your better understanding:

1. The Position Analysis Questionnaire (PAQ)

The PAQ is a standardised questionnaire (developed at Purdue University) developed to quantitatively sample work-oriented job elements. It contains 194 items divided into six major divisions. The PAQ permits management to scientifically and quantitatively group interrelated job elements into job dimensions. These are explained below:

Employees Activities in PAQ

1. Information Input: Where and how does the employee get the information he/she uses in performing his/her job.

Examples:

Use of written materials.
Near-visual differentiation.

2. Mental Process: What reasoning, decision making, planning and information-processing activities are involved in performing in the job?

Examples:

Levels of reasoning in problem solving.
Coding/decoding

1. Physical activities: What physical activities does the employee perform and what tools or devices does he/she use?

Examples:

Use of Keyboard devices.
Assembling/ disassembling.

2. **Relationships with other people:** What relationships with other people are required in performing the job?

Examples:

Instructing, Contacts with public, customers.

3. **Job context:** In what physical and social context is the work performed?

Examples:

High temperature.
Interpersonal conflict situations.

4. **Other Job characteristics:** What activities, conditions, or characteristics other than those described above are relevant to the job?

Examples:

Specified work pace.
Amount of job structure.

The activities shown above represent requirements that are applicable to all types of jobs. This type of quantitative questionnaire allows many different jobs to be compared with each other.

2. Management Position Description Questionnaire (MPDQ)

MPQD is a standardised instrument designed specifically for use in analyzing managerial jobs. The 274-item questionnaire contains 15 sections. It would take 21\2hrs to complete the questionnaire. In most cases the respondents are asked to state how important each item is to the position.

Management Position Description Factors

1. Product, marketing and financial strategy planning.
2. Coordination of other organisational units and personnel.

3. Internal business control.
4. Products and services responsibility.
5. Public and customer relations.
6. Advanced consulting.
7. Autonomy of actions.
8. Approval of financial commitments.
9. Staff service.
10. Supervision.
11. Complexity and stress.
12. Advanced financial responsibility.
13. Broad personnel responsibility.

Functional Job Analysis (FJA)

FJA is a worker-oriented job analysis approach that attempts to describe the whole person on the job. It tries to examine the fundamental components of "data, people and things". There are five steps to be followed:

- The first involves the identification of the organisation goals for the FJA analysis. This analysis describes what should be, as well as, what is.
- The second step is the identification and description of tasks, where tasks are defined as actions. The task actions may be physical (operating an electrical typewriter), mental (analysing data) or interpersonal (consulting another person).
The task statements developed in *FJA* must conform to a specific written format.
- The third step deals with analysis of tasks. Each task is analysed using 7 scales. These include three worker function scales (data, people, things), a worker instruction scale (degree of supervision imposed) and three scales of reasoning, mathematics and language.
- In the fourth step the analyst develops performance standards to assess the results of a worker's tasks.
- The final step deals with the development of training content needed by the jobholder.

Which Method to Follow?

Experts agree that the choice of job analysis method depends upon the purposes to be served by the data. There is no one best way to conduct

a job analysis. Wherever possible, multiple methods of job analysis must be followed. A quantitative approach like Position Analysis Questionnaire (PAQ) should be supported by a qualitative approach like Critical Incident Technique (CIT).

Impact of Behavioural Factors on Job Analysis

While carrying out the job analysis, managers must take note of certain strong behavioural responses from the employees. Employees may not always like the idea of someone taking a hard look at their jobs. Let's examine the reasons behind such negative responses more closely.

- a. ***Employee fears:*** Most employee's fear that job analysis efforts may put them in a 'Straight Jacket', limiting their initiative and inability. Another reason for the negative attitude is the feeling that "as long as someone does not know precisely what I am supposed to be doing, then I am safe". A searching examination of jobs may uncover employee faults, which might have escaped the employer's attention so far.
- b. ***Resistance to change:*** When jobs change in tune with changes in technology, there is an urgent need to revise job descriptions and job specifications -to make them more meaningful. This would have a significant impact on the safe and secure job worlds, employees used to live comfortably. Employees resist such changes because when jobs are redefined, they may have to handle difficult tasks and shoulder painful responsibilities. To ward off such threats, managers must involve employees in the revision process, stating the reasons for incorporating latest changes clearly.
- c. ***Overemphasis on current employees:*** Job analysis efforts should not place heavy emphasis on what the employees are currently doing. Some employees may be gifted with unique capabilities and given a chance they may expand the scope of the job and assume more responsibilities. The company may have difficulty in finding someone like that person if he or she were to leave the company. Therefore, "the job description and job specifications should not be merely a description of what the person currently filling the job does".
- d. ***Management' Straight Jacket:*** Job analysis efforts may put managers in a 'straight jacket', limiting their freedom to adapt to changing needs from time to time. To avoid this, they may even refuse to appropriately describe what an employee is supposed to do in the company - creating, of course, further confusion in the minds of employees.

Let us now summarise what we discussed under Job Analysis. We started with defining job analysis. Then we came down to the six steps that are covered in the process of job analysis. Later on we threw some light on the type of information that is covered and the areas where this information is used. We then spoke about the various methods that are available for Job analysis and noticed that there is no one best method to collect data. All the methods have their pros and cons. This sums up the topic.

Important Terms:

Task - meaningful, discrete, unit of work activity generally performed on job by one worker within some limited time period; represents composite of methods, procedures, and techniques

Duty - area of work that includes several distinct tasks - e.g., preparing operating room for surgery, monitoring patient

Position - set of tasks and duties performed by single individual, Chief surgical nurse

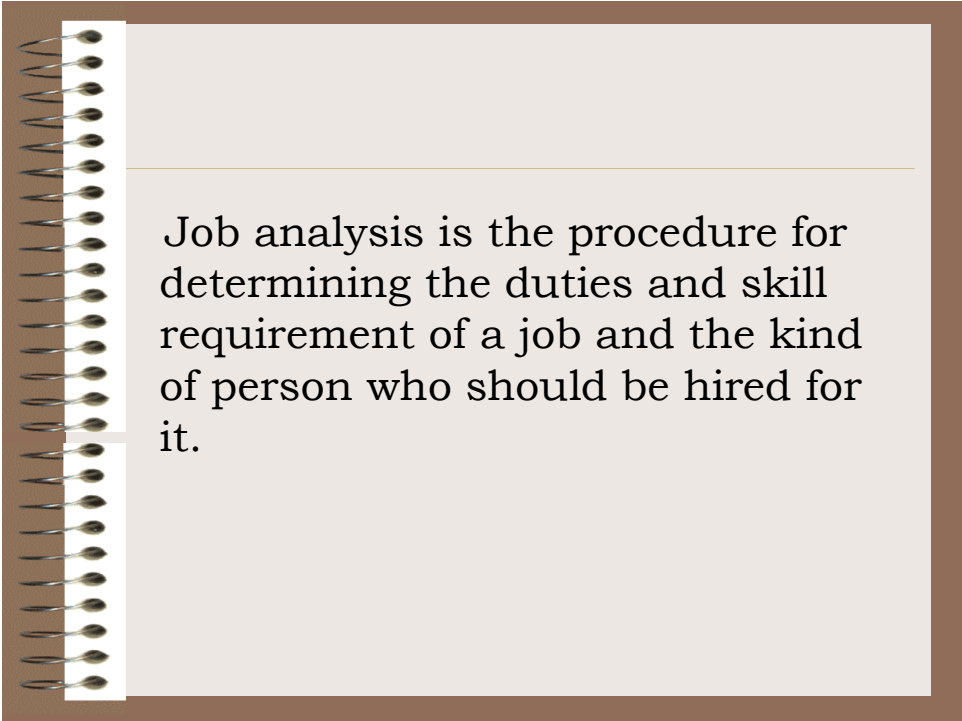
Job - group of positions that is identical with respect to their major significant tasks; sufficiently alike to be covered by single analysis - surgical nurse

Occupation - general class of jobs - nurses

Career - sequence of jobs held by individual throughout lifetime



Job Analysis



Job analysis is the procedure for determining the duties and skill requirement of a job and the kind of person who should be hired for it.

6 Steps in Job Analysis

- **Develop Job Description / Job Specification**
- **Review information with incumbents**
- **Collect data to analyse job**
- **Collect data to analyse job**
- **Select representative positions to analyse**
- **Review background information**

Types of Information Gathered

- **Work Activities**
- **Human Behaviours**
- **Tools, equipment, etc used**
- **Performance standards**
- **Job Context**
- **Human Requirements**