

JOB ANALYSIS

- ❖ **Job Analysis** is the procedure through which you determine the duties of the positions to be staffed and the characteristics of people who should be hired for them. The analysis produces information on job requirements; this information is then used for developing job descriptions and job specifications (i.e. job's human requirements, or what kind of people to hire for the job).
- ❖ A supervisor or Human Resource (HR) specialist normally aims to collect one or more of the following types of information via the job analysis.
 - Work activities: information about actual work activities performed
 - Human behavior: information about human behavior like sensing, communicating, deciding, etc...
 - Machines, tools, equipment, and work aids used: information about performance standards (in terms of quantity or quality levels for each job duty). These standards will be the basis on which the employee will be evaluated.
 - Job context: information about physical working conditions, work schedules, and the organizational and social context (e.g. information regarding incentives, etc...)
 - Human requirements: job-related knowledge or skills, and required personal attributes.

Uses of Job Analysis Information

Job analysis information is the basis for several interrelated Human Resource Management activities, as follows:

- **Recruitment and Selection**: Job analysis provides information about what the job entails and what human characteristics are required to carry out these activities. This description and job specification information is then used to decide what sort of people to recruit and hire.

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Gary DESSLER. Human Resource Management. Prentice Hall, 8TH Edition, ISBN:0-13-014124-0

- Compensation: Job analysis information is also essential for estimating the value of and appropriate compensation for each job. Compensation usually depends on such things as the job's required skill and education level, safety hazards, and degree of responsibility. Job analysis provides the information for determining the relative worth of each job so that each job can be accurately classified.
- 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.
- 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 the training that are required.
- Ensure Complete Assignment of Duties: Job analysis can also help discover unassigned duties.

Job analysis is a crucial step in validating all major personnel activities. Employers must be able to show that their screening tools and appraisals are actually related to performance on the job in question. Doing this, of course, requires knowing what the job entails, which in turn requires a competent job analysis.

Steps in Job Analysis:

Step1: Identify the use to which the information will be put, since this will determine the data you collect and how you collect them. Some data collection techniques like interviewing the employee and asking what the job entails are good for writing job descriptions and selecting employees for the job. Other job analysis techniques (like the position analysis questionnaire described later) do not provide qualitative job descriptions. Instead, they provide numerical ratings for each job; these can be used to compare jobs to one another for compensation purposes.

Step2: Review relevant background information such as organization charts, process charts, and job descriptions. The chart should identify the title of each position and, by means of interconnecting lines, who reports to whom and with whom the job incumbent is expected to communicate.

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Step3: Select representative positions to be analyzed. This is done when many similar jobs are to be analyzed, and it is too time consuming, for instance, to analyze the jobs of all assembly workers.

Step4: Analyze the job, by collecting data on job activities, required employee behaviors, working conditions, and human traits and abilities needed to perform the job.

Step5: 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 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.

Step6: Develop a job description and job specification. 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 and hazards.

The *job specification* summarizes the personal qualities, traits, skills, and background required for getting the job done.

Methods of Collecting Job Analysis Information

There are various ways to collect information on the duties, responsibilities, and activities of the job, and we will discuss the most important ones in this section. In practice, you could use any one of them or combine the techniques that best fit your purpose. Thus, an interview might be appropriate for creating a job description, whereas the position analysis questionnaire is more appropriate for determining the worth of a job for compensation purposes.

Conducting the job analysis usually involves a joint effort by an HR specialist, the worker, and the worker's supervisor. The HR specialist (perhaps an HR manager, job analyst, or consultant) might observe and analyze the job and then develop a job description and job specification. The source of these Lecture Notes is the following text book:
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specification: The supervisor and worker will get involved, perhaps by filling out questionnaires listing the subordinate's activities. The supervisor and worker may then review and verify the job analyst's conclusions regarding the job's activities and duties.

The Interview

Three types of interviews are used to collect job analysis data

1. individual interviews with each employee,
2. group interviews with groups of employees having the same job, and
3. supervisor interviews with one or more supervisors who are thoroughly knowledgeable about the job being analyzed.

The group interview is used when a large number of employees are performing similar or identical work, it can be a quick and inexpensive way to learn about the job. As a rule, the worker's immediate supervisor would attend the group session; if not, you should interview the supervisor separately to get that person's perspective on the job's duties and responsibilities.

Whichever interview you use, the interviewee should fully understand the reason for the interview, since there's a tendency for such interviews to be viewed rightly or wrongly as "efficiency evaluations". When they are, interviewees may not be willing to describe the jobs accurately.

Typical Questions

- What is the job being performed?
- What are the major duties of your position? What exactly do you do?
- What physical locations do you work in?
- What are the education, experience, skill, and (where applicable) certification and licensing requirements?
- What activities do you participate in?
- What are the basic accountabilities or performance standards that typify your work?

- What are your responsibilities? What are the environmental and working conditions involved?
- What are the job's physical demands? The emotional and mental demands?
- What are the health and safety conditions?
- Are you exposed to any hazards or unusual working conditions?

Most fruitful interviews follow a structured or checklist format. It includes a series of detailed questions regarding such matters as the general purpose of the job; supervisory responsibilities; job duties; and education, experience, and skills required. A list like this can also be used by a job analyst who collects information by personally observing the work being done or by administering it as a questionnaire.

Interview Guidelines

1. The job analyst and supervisor should work together. Identify the workers who know the most about the job, as well as those might be expected to be the most objective in describing their duties and responsibilities.
2. Establish rapport quickly with the interviewee by knowing the person's name, speaking in easily understood language; state briefly the purpose of the interview, and explaining how the person came to be chosen for the interview.
3. Follow a structured guide or checklist, one that lists questions and provides space for answers. This ensures that you'll identify crucial questions ahead of time and that all interviewers cover all the required questions. However, make sure to also give the worker some leeway in answering questions and provide some open-ended questions like "was there anything we didn't cover with our questions?"
4. When duties are not performed in a regular manner -for instance when the worker doesn't perform the same job over and over again many times a day- you should ask the worker to list his or her duties in order of *importance* and *frequency* of occurrence. This will ensure that crucial activities that occur infrequently –like a nurse's occasional emergency room duties- aren't overlooked.
5. After completing the interviews, review and verify the data. This is normally done by reviewing the information with the worker's immediate supervisor and with the interviewee.

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Questionnaires

Having employees fill out questionnaires to describe their job-related duties and responsibilities is another good way to obtain job analysis information. The main thing to decide here is how structured the questionnaire should be and what questions to include. Some questionnaires are very structured checklists. Each employee is presented with an inventory of perhaps hundreds of specific duties or tasks. He or she is asked to indicate whether he or she performs each task and, if so, how much time is normally spent on each. At the other extreme, the questionnaire can be open ended and simply ask the employee to “describe the major duties of your job”. In practice, the best questionnaire often falls between these two extremes. A typical job analysis questionnaire might have several open-ended questions (such as “state your main duties”) as well as structured questions (concerning, for instance, previous experience required).

Whether structured or unstructured, questionnaires have both pros and cons. A questionnaire is a quick and efficient way to obtain information from a large number of employees; it is less costly than interviewing hundreds of workers. However, developing the questionnaire and testing it (perhaps by making sure the workers understand the questions) can be expensive and time consuming.

Observation

Direct observation is especially useful when jobs consist mainly of observable physical activity. On the other hand, observation is usually not appropriate when the job entails a lot of un-measurable mental activity (lawyer, design engineer). Nor is it useful if the employee engages in important activities that might occur only occasionally,

Direct observation and interviewing are often used together. One approach is to observe the worker on the job during a complete work cycle. (The cycle is the time it takes to complete the job; it could be a minute for assembly line worker or an hour, a day, or longer for complex jobs.) Here you take notes of all the job activities you observe. Then, after accumulating as much information as possible, you interview the workers. The person is asked to clarify points not understood and explain what other activities he or she performs

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that you did not observe. You can also observe and interview simultaneously while the worker performs his or her job.

Participant Diary/Logs

Another approach is to ask workers to keep a diary/log or list of what they do during the day. For every activity, he or she engages in, the employee records the activity (along with the time) in a log. This can produce a very complete picture of the job, especially when subsequent interviews with the worker and his or her supervisor are done. The employee might try to exaggerate some activities and underplay others. However, the detailed, chronological nature of the log tends to mediate against this

Interviews, questionnaires, observations, and diary/logs are the most popular methods for gathering job analysis data. They all provide realistic information about what job incumbents actually do. They can thus be used for developing job descriptions and job specifications.

Quantitative Job Analysis Techniques

When your aim is to assign a quantitative value to each job so the jobs can be compared for pay purposes, a quantitative job analysis approach may be best. The Position Analysis Questionnaire, the Department of Labor Approach, and Functional Job Analysis are three popular quantitative methods.

Writing Job Descriptions

A job description is a written statement of what the jobholder actually does, how he or she does it, and under what conditions the job is performed. This information is in turn used to write a job specification that lists the knowledge, abilities, and skills needed to perform the job satisfactorily.

There is no standard format you must use in writing a job description, but most descriptions contain sections on:

1. Job identification
2. Job summary

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3. Responsibilities and duties
4. Authority of incumbent
5. Standards of performance
6. Working conditions
7. Job specifications

Job Description Guidelines

Here are some final guidelines for writing up your job descriptions:

Be clear. The job description should portray the work of the position so well that the duties are clear without reference to other job descriptions.

Indicate scope of authority. In defining the position, be sure to indicate the scope and nature of the work by using phrases such as `for the department` or `as requested by the manager.` Include all-important relationships.

Be specific. Select the most specific words to show (1) the kind of work, (2) the degree of complexity, (3) the degree of skill required, (4) the extent to which problems are standardized, (5) the extent of the worker's responsibility for each phase of the work, and (6) the degree and type of accountability. Use action words, such as analyze, gather, assemble, plan, devise, infer, deliver, maintain, supervise, and recommend. Positions at the lower levels of organization generally have the most details duties or tasks, while higher-level positions deal with broader aspects.

Be brief. Short, accurate statements usually accomplish the purpose best.

Recheck. Finally, to check whether the description fulfills the basic requirements, ask yourself, `Will a new employee understand the job if he or she reads the job description?`

Writing Job Specifications

The job specification takes the job description and answers the question, `What human traits and experience are required to do this job well?` It shows what kind of person to recruit and for what qualities that person should be tested. The job specification may be a separate section on the job description or a separate document entirely.

Writing job specifications for trained employees is relatively straightforward. For example you want to fill a position for a trained bookkeeper (or trained counselor or programmer). In cases like these, your job specifications might focus mostly on traits like length of previous

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service, quality of relevant training, and previous job performance. Thus, it is usually not too difficult to determine the human requirements for placing already trained people on a job.

But the problems are more complex when you're filling jobs with untrained people. Here you must specify qualities such as physical traits, personality, interests, or sensory skills that imply some potential for performing the job or for having the ability to be trained for the job.

For example, suppose the job requires detailed manipulation in a circuit board assembly line. Here you might want to ensure the person scores high on a test of finger dexterity. Your goal, in other words, is to identify those personal traits-those human requirements-that validly predict which candidate would do well on the job and which would not. Identifying these human requirements for a job is accomplished either through a subjective, judgmental approach or through statistical analysis.

JOB EVALUATION

It is a systematic comparison done in order to determine the worth of one job relative to another.

Purpose: Job Evaluation is aimed at determining a job's relative worth. It is a formal and systematic comparison of jobs to determine the worth of one job relative to another and eventually results in a wage or salary hierarchy. The basic procedure is to compare the content of jobs in relation to one another, for example, in terms of their effort, responsibility, and skills. Suppose you know (based on your salary survey and compensation policies) how to price key benchmark jobs, and can use job evaluation to determine the relative worth of all other jobs in your firm relative to these key jobs. Then you are well on your way to being able to equitably price all the jobs in your organization.

Compensable Factors: There are two basic approaches you could use for comparing several jobs. First, you could take a more intuitive approach. You might decide that one job is 'more important' than another and not dig any deeper into why in terms of specific job-related factors.

As an alternative, you could compare the jobs by focusing on certain basic factors they have in common. In compensation management, these basic factors are called **compensable factors**. They are the factors that determine your definition of job content, establish how the jobs compare to each other, and set the compensation paid for each job.

Some employers develop their own compensable factors. However, most use factors that have been popularized by packaged job evaluation systems or by federal legislation. For example, the Equal Pay Act focuses on four compensable factors-skills, effort, responsibility, and working conditions. As another example, the job evaluation method popularized by the Hay consulting firm focuses on three compensable factors: know-how, problem solving, and accountability.

The compensable factors you focus on depend on the job and the method of job evaluation to be used. For example, you might choose to include the compensable factor of decision making for a manager's job, which might be inappropriate for the job of assembler.

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Identifying compensable factors plays a central role in job evaluation. In job evaluation, each job is usually compared with all comparable jobs using the same compensable factors. An employer thus evaluates the same elemental components for each job and is then better able to compare them-for example, in terms of the degree of skills, effort, responsibility, and working conditions present in each.

Planning and Preparation for the Job Evaluation

Job evaluation is mostly a judgmental process, one demanding close cooperation between supervisors, personnel specialists, and the employees and their union representatives.

The main steps are:

- 1- Identifying the need for Job Evaluation (e.g. dissatisfaction reflected in high turnover, work stoppages, or arguments may result from the inequities of paying employees different rates for similar jobs).
- 2- Getting cooperation: Employees may fear from reducing their wage rates after a systematic evaluation of their jobs. We can tell the employees that as a result of the impending Job Evaluation program, wage rate decisions will no longer be made just by management perception, that Job Evaluation will provide a mechanism for considering the complaints they have been expressing, and that no present employee's rate will be adversely affected as a result of the Job Evaluation.
- 3- Choosing an evaluation committee (Carries out the actual Job Evaluation). There are two reasons for doing so. First, the committee should bring to bear the points of view of several people who are familiar with the jobs in question, each of whom may have a different perspective regarding the nature of the jobs. Second, if the committee is composed at least partly of employees, the committee approach can help ensure greater acceptance of the Job Evaluation results by employees.

The composition of the committee can be important. The group usually consists of about five members, most of whom are employees. While management has the right to serve on such committees, its presence can be viewed with suspicion by employees and 'it is probably best not to have managerial representatives involved in committee evaluation of non managerial jobs. However, a Human Resource (HR) specialist can provide expert assistance in the Job Evaluation. One option is to have this person serve in a nonvoting

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capacity. Union representation is possible. In most cases, though, the union's position is that it is accepting Job Evaluation only as an initial decision technique and is reserving the right to appeal the actual job pricing decisions through grievances or bargaining channels. Once appointed, each committee member should receive a manual explaining the job evaluation process, and special instructions that explain how to conduct a job evaluation.

The evaluation committee performs three main functions. First, it usually identifies 10 or 15 key benchmark jobs. These will be the first jobs to be evaluated and will serve as the anchors or benchmarks against which the relative importance or value of all other jobs can be compared. Next, the committee may select compensable factors (although the human resource department will usually choose these as part of the process of determining the specific Job Evaluation technique to be used). Finally, the committee turns to its most important function-actually evaluating the worth of each job. For this, the committee will probably use one of the following Job Evaluation methods:

- 1- The Ranking Method,
- 2- The Job Classification method,
- 3- The Point Method,
- 4- The Factor Comparison Method.

Ranking Method of Job Evaluation: It ranks each job relative to all other jobs, usually based on some overall factor like 'Job difficulty.' There are several steps in the job ranking method:

- 1- Obtain job information: Job analysis is the first step. Job descriptions for each job are prepared and are usually the basis on which the rankings are made. This method usually ranks jobs according to 'the whole job,' rather than a number of compensable factors. Therefore, job specifications-which list the job's demands in terms of problem solving, decision making, and skills, for instance-are not quite as necessary with this method as they are for other job evaluation methods.
- 2- Select raters and jobs to be rated. It is often not practical to make a single ranking of all jobs in an organization. The more usual procedure is to rank jobs by department

or in 'clusters' (such as factory workers or clerical workers). This eliminates the need to compare directly, say, factory jobs and clerical jobs.

- 3- Select compensable factors. In the ranking method, it is common to use just one factor (such as job difficulty) and to rank jobs on the basis of the whole job. Regardless of the number of factors you choose, it's advisable to explain the definition of the factor(s) to the evaluators carefully so that they evaluate the jobs consistently.
- 4- Rank jobs. Next the jobs are ranked. The simplest way is to give each rater a set of index cards, each of which contains a brief description of a job. These cards are then ranked from lowest to highest. Some managers use an 'alternation ranking method' for ranking the procedure more accurate. Here you take the cards, first choosing the highest and the lowest, then the next highest and next lowest, and so forth until all the cards have been ranked. Because it is usually easier to choose extremes, this approach facilitates the ranking procedure.

This is the simplest job evaluation method. It usually takes less time to accomplish than other methods. It is more appropriate for small organizations that can't afford the time or expense of developing a more elaborate system.

Job Classification (Or Grading) Evaluation Method: It is a widely used method in which jobs are categorized into groups. The groups are called classes if they contain similar jobs, or grades if they contain jobs that are similar in difficulty but otherwise different.

There are several ways to categorize jobs. One is to draw up class descriptions and place jobs into classes based on their correspondence to these descriptions. Another is to draw up a set of classifying rules for each class (for instance, how much independent judgment, skill, physical effort, and so on, does the class of jobs require?). Then the jobs are categorized according to these rules.

The usual procedure is to choose compensable factors and then develop class or grade descriptions that describe each class in terms of amount or level of the compensable factor(s) in jobs. The federal classification system in the United States, for example, employs the following compensable factors: (1) difficulty and variety of work, (2)

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supervision received and exercised, (3) judgment exercised, (4) originality required, (5) nature and purpose of interpersonal work relationships, (6) responsibility, (7) experience, and (8) knowledge required. Based on these compensable factors, a **grade definition** is written. Then the evaluation committee reviews all job descriptions and slots each job into its appropriate class or grade.

The job classification method has several advantages. The main one is that most employers usually end up classifying jobs anyway, regardless of the job evaluation method they use. They do this to avoid having to work with and price an unmanageable number of jobs; with the job classification method, all jobs are already grouped into classes. The disadvantages are that it is difficult to write the class or grade descriptions, and considerable judgment is required to apply them.

Point Method of Job Evaluation: It is a more quantitative technique. It involves identifying (1) several compensable factors, each having several degrees, as well as (2) the degree to which each of these factors is present in the job. Thus, assume that there are five degrees of responsibility an employer's job could contain. And further assume a different number of points is assigned to each degree of each factor. Then, once the evaluation committee determines the degree to which each compensable factor is present in the job. The corresponding points for each factor can be added to arrive at a total point value for the job. The result is thus a quantitative point rating each job. The point method is the most widely used job evaluation method.

Factor Comparison Job Evaluation Method: It is also a quantitative technique and entails deciding which jobs have more of the chosen compensable factors. The method is actually a refinement of the ranking method. With the ranking method, you generally look at each job as an entity and rank the jobs on some overall factor like job difficulty. With the factor comparison method, you rank each job several times-once for each compensable factor you choose. For example, jobs might first be ranked in terms of the compensable factor "skill." Then they are ranked according to their "mental requirements," and so forth. These rankings are combined for each job into an overall numerical rating for the job. This also is a widely used method.

Computerized Job Evaluations: (e.g.) Computer aided job evaluation (CAJE)

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