

CHAPTER 7 Analyzing and Identifying Jobs

After you have read this chapter, you should be able to:

- Discuss why job analysis is changing as organizations change.
- Compare task-based job analysis with the competency approach of job analysis.
- Develop an organization chart using job families.
- Identify how job analysis information is used in four other HR activities.
- Explain how job analysis has both legal and behavioral aspects.
- List and explain four job analysis methods.
- Identify the five steps in conducting a job analysis.
- Write a job description and the job specifications for it.

Decline of Secretaries, Growth of Administrative Coordinators

The changing nature of jobs is seen in many organizations and industries, especially those facing major changes due to external forces, such as financial services and telecommunications. But even in more stable industries, one of the most traditional jobs appears to be changing—that known in many organizations as secretary and/or administrative assistant.

Statistics from the U.S. government illustrate clearly that secretarial jobs are declining. For example, in 1983, secretary was the most common job for women, composing 8.7% of the jobs held by women in the civilian workforce. By the late 1990s, only 5.3% of the women working in the civilian labor force were secretaries, making it the fourth most common job for women. The three most common jobs for women had become sales, teaching, and food preparation. Further, the number of secretaries in the late '90s-3.2 million-was a decrease of 700,000 from 1983. This statistic is even more significant when considering the rapid growth in jobs and organizations that has occurred in the United States since 1983.

The traditional secretarial job has several common tasks associated with it. A look at typical secretarial tasks and duties, along with how they are done today, illustrates how the secretary job has changed.

Typing correspondence: Instead of giving handwritten correspondence to secretaries, many managers compose and transmit their own memos, letters, and reports via e-mail.

Scheduling: With the advent of computer scheduling systems, a growing number of organizations have all individuals' schedules on network sys-

tems, and meetings can be scheduled electronically.

Voice mail: The explosive growth of voice mail means that the message-taking function of secretaries has declined. For employees who are away from their desks frequently, messages can be retrieved while traveling or upon returning to the desk without human interface.

Copying and filing: Rather than employing secretaries as generalists who perform a variety of tasks, firms have created office services centers. These centers include specialized high-speed equipment for mass copy-

Interestingly, the company's productivity initially dipped some, but then returned to the same levels. One side effect was that managers started prioritizing their activities more and letting nonessential tasks drift, because those "make-work" tasks could no longer be delegated to secretaries. Some of the former secretaries lost their jobs, while some others transferred to different jobs in the firm where they could use their capabilities differently.

While most organizations do not take such an extreme approach, many organizations have examined the work

Many organizations have examined the work process and tasks performed by secretaries and decided that fewer secretaries are needed.

ing. Specialized technicians complete much of the copying, report building, and other production activities.

Some firms have eliminated most of the secretarial jobs. As an extreme example, the Chairman of a U.S. investment firm with 600 employees eliminated 85 secretarial jobs. All managers and executives now handle their own correspondence using e-mail and software, make and return their phone calls, and maintain their own schedules. For employees who were "technology deficient," the firm offered training classes. Some executives had to learn to type; others needed classes on sending and receiving e-mail messages and faxes, designing documents, learning presentation software, and using the company's voice mail system.

processes and tasks performed by secretaries and decided that fewer secretaries are needed. The office support functions that must be performed have transformed the traditional secretarial job into that of the *administrative coordinator* or *executive assistant*. The differences between these jobs in terms of responsibility, authority, and organizational input are considerable. These coordinative jobs are often performed for more than one boss.

Yet, it is important to remember that in many organizations there is still considerable need for clerical and administrative support. Secretaries still compose about 17% of all office support staff. But even in these jobs, it likely will be important for organizations to continue analyzing and tracking the changing nature of secretarial jobs.¹

66 Many organizations are today well along the path toward being "de-jobbed." **99**

WILLIAM BRIDGES

A primary focus of HR management is on the jobs and work performed by individuals in the organization. Because organizations are changing and jobs must fit so many different situations, managers and employees alike are finding that designing and analyzing jobs requires greater attention than in the past. As the opening discussion indicates, such changes are affecting secretarial jobs, as well as others.

Much current interest in analyzing jobs results from the importance assigned to the activity by federal and state courts. The legal defensibility of an employer's recruiting and selection procedures, performance appraisal system, employee disciplinary actions, and pay practices rests in part on the foundation of job analysis. In a number of court cases, employers have lost because their HR processes and practices were not viewed by judges or juries as sufficiently job related. Fundamentally, it is important to document that HR activities and the decisions resulting from them are clearly job-related and relatively consistent over time.

Additionally, analyzing and understanding the work done in the organization must be based on facts and data, not just personal perceptions of managers, supervisors, and employees. It has become evident in many organizations that analyzing both the way work is done and what employees do in their jobs is vital to maintaining organizational competitiveness.

Nature of Job Analysis

The most basic building block of HR management, **job analysis**, is a systematic way to gather and analyze information about the content and human requirement of jobs, and the context in which jobs are performed. Job analysis usually involves collecting information on the characteristics of a job that differentiate it from other jobs. Information that can be helpful in making the distinction includes the following:

- Work activities and behaviors
- Interactions with others
- Performance standards
- Financial and budgeting impact
- Machines and equipment used
- Working conditions
- Supervision given and received
- Knowledge, skills, and abilities needed

Job

Job analysis

A systematic way to gather

about the content and the

and analyze information

human requirements of

jobs, and the context in which jobs are performed.

A grouping of similar positions having common tasks, duties, and responsibilities.

Position

A job performed by one person.

What Is a Job?

Although the terms *job* and *position* are often used interchangeably, there is a slight difference in emphasis. A **job** is a grouping of common tasks, duties, and responsibilities. A **position** is a job performed by one person. Thus, if there are two persons operating word processing equipment, there are two positions (one for each person) but just one job (word processing operator).

Differentiating between Job Analysis and Job Design

It is useful to clarify the differences between job design and job analysis. Job design is broader in nature and has as its primary thrust meshing the productivity

needs of the organization with the needs of the individuals performing the various jobs. Increasingly, a key aim for job design is to provide individuals meaningful work that fits effectively into the flow of the organization. It is concerned with changing, simplifying, enlarging, enriching, or otherwise making jobs such that the efforts of each worker fit together better with other jobs.

Job analysis has a much narrower focus in that it is a formal system for gathering data about what people are doing in their jobs. The information generated by job analysis may be useful in redesigning jobs, but its primary purpose is to get a clear understanding of what is done on a job and what capabilities are needed to do a job as it has been designed. Documents that capture the elements identified during a job analysis are job descriptions and job specifications.

Job Analysis and the Changing Nature of Jobs

Increasingly, commentators and writers are discussing the idea that the nature of jobs and work is changing so much that the concept of a "job" may be obsolete for many people. For instance, in some high-technology industries employees work in cross-functional project teams and shift from project to project. The focus in these industries is less on performing specific tasks and duties and more on fulfilling responsibilities and attaining results. For example, a project team of eight employees developing software to allow various credit cards to be used with ATMs worldwide will work on many different tasks, some individually and some with other team members. When that project is finished those employees will move to other projects, possibly with other employers. Such shifts may happen several times per year. Therefore, the basis for recruiting, selecting, and compensating these individuals is their competence and skills, not what they do.² Even the job of managers changes in such situations, for they must serve their project teams as facilitators, gatherers of resources, and removers of roadblocks.

However, in many industries that use lower-skilled workers, traditional jobs continue to exist. Studying these jobs and their work consequences is relatively easy because of the repetitiveness of the work and the limited number of tasks each worker performs.

Clearly, studying the two different types of jobs—the lower-skilled ones and highly technical ones—requires different approaches. Many of the typical processes associated with identifying job descriptions are still relevant with the lower-skilled, task-based jobs. However, for fast-moving organizations in high-technology industries, a job description is becoming an obsolete concept. Employees in these "virtual jobs" must be able to function without job descriptions and without the traditional parameters that are still useful with less changeable jobs.³

Work Analysis

Work analysis studies the workflow, activities, context, and output of a job. This analysis can be conducted on a department, business process, or individual level. At one level, the industrial engineering approach of time and motion studies is useful in work analysis. At another level the linkage of what is done in one department may be looked at in relation to work activities performed

Work analysis

Studying the workflow, activities, context, and output of a job.

in another area. For instance, in an electric utility if a customer calls with a service outage problem, it is typical for a customer service representative to take the information and enter it into a database. Then in the operations department, a dispatcher may access the database to schedule a line technician to repair the problem. The customer would be called back and notified about the timing of the repair. The line technician also must receive instructions from a supervisor, who gets the information on workload and locations from the dispatcher.

A work analysis identified that there were too many steps involving too many different jobs in this process. Therefore, the utility implemented a new customer information system and combined the dispatching function with customer service. The redesign permitted the customer service representatives to access workload information and schedule the line technicians as part of the initial consumer phone calls, except in unusual situations. The redesign of jobs required redefining the jobs, tasks, duties, and responsibilities of several jobs. To implement the new jobs required training the customer service representatives in dispatching and moving dispatchers into the customer service department and training them in all facets of customer service. The result was a more responsive workflow, more efficient scheduling of line technicians, and broadening of the jobs of the customer service representatives.

This example illustrates that analyzing work activities and processes may require looking at what capabilities individuals need as well as what they do. That certainly would be true as office support jobs, such as the secretarial job, are examined. Increasingly, it is being recognized that jobs can be analyzed on the basis of both tasks and competencies.

Task

A distinct, identifiable work activity composed of motions.

Duty

A larger work segment composed of several tasks that are performed by an individual.

Job responsibilities

Obligations to perform certain tasks and duties.

Task-Based Job Analysis

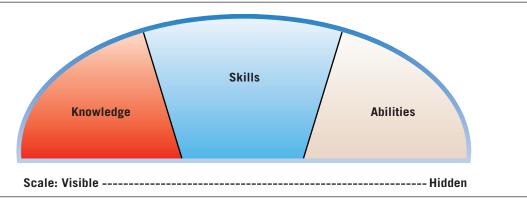
Analyzing jobs based upon what is done on the job focuses on the tasks, duties, and responsibilities performed in a job. A **task** is a distinct, identifiable work activity composed of motions, whereas a **duty** is a larger work segment composed of several tasks that are performed by an individual. Because both tasks and duties describe activities, it is not always easy or necessary to distinguish between the two. For example, if one of the employment supervisor's duties is to interview applicants, one task associated with that duty would be asking questions. **Job responsibilities** are obligations to perform certain tasks and duties.

For jobs that remain task-based, many standard phases of the job analysis process can continue. As indicated in the phases of traditional job analysis that are outlined later in the chapter, extensive effort is made to clarify what specifically is done on a job. Development of job descriptions identifies what is done and lists job functions.

Competency Approach to Job Analysis

There is a growing interest in focusing on the competencies that individuals need in order to perform jobs, rather than on the tasks, duties, and responsibilities composing a job. This shift emphasizes that it is the capabilities that people have that truly influence organizational performance. As E.E. Lawler suggests, instead of thinking of individuals having jobs that are relatively stable and can be written up into typical job descriptions, it may be more relevant to focus on the competen-

FIGURE 7-1 Conceptual Model of Competencies



cies used. 4 **Competencies** are basic characteristics that can be linked to enhanced performance by individuals or teams of individuals. The groupings of competencies, as Figure 7–1 indicates, may include knowledge, skills, and abilities.

VISIBLE AND HIDDEN COMPETENCIES Figure 7–1 illustrates that there are both hidden and visible competencies. Knowledge, being more visible, is recognized by many employers in matching individuals to jobs. With skills, although some are evident such as skill in constructing financial spreadsheets, others such as negotiating skills, may be less identifiable. But it is the "hidden" competencies of abilities, which may be more valuable, that can enhance performance. For example, the abilities to conceptualize strategic relationships and to resolve interpersonal conflicts are more difficult to identify and assess.

A growing number of organizations are using some facets of competency analysis. A survey of over 200 organizations sponsored by the American Compensation Association (ACA) asked about the major reasons that firms have used the competency approach. The three primary reasons given were (1) communicating valued behaviors throughout the organization; (2) raising the competency levels of the organization; and (3) emphasizing the capabilities of people to enhance organizational competitive advantage.⁵

Many earlier efforts to use competencies have been *job-based*, meaning that competencies are identified in the context of specific jobs. In this way the competency approach is a logical extension of traditional job analysis activities. However, some organizations are taking the competency approach to another level by focusing on *role-based* competencies. This shift has been accentuated by the growing use of work teams, whereby individuals move among tasks and jobs. Some of the roles might be leader, supporter, tactician, technical expert, administrator, or others. Through competency analysis, the competencies needed for individuals playing different roles in work teams can be identified. Then selection criteria, development activities, and other HR efforts must be revised to focus on the different sets of competencies needed for the various roles.

COMPETENCY ANALYSIS METHODOLOGY Unlike the traditional approach to analyzing jobs, which identifies the tasks, duties, knowledge, and skills associated with a job, the competency approach considers how the knowledge and skills are used. The competency approach also attempts to identify the hidden factors that are often critical to superior performance. For instance, many supervisors talk

Competencies

Basic characteristics that can be linked to enhanced performance by individuals or teams. about employees' attitudes, but they have difficulty identifying what they mean by *attitude*. The competency approach uses some methodologies to help supervisors identify examples of what they mean by attitude and how those factors affect performance.

Several methodologies are available and being used to determine competencies, with *behavioral event interviews* being commonly found. This process involves the following steps:⁶

- 1. A team of senior managers identifies future performance results areas critical to the business and strategic plans of the organization. These concepts may be broader than those used in the past.
- Panel groups are assembled, composed of individuals knowledgeable about the jobs in the company. This group can include both high- and low-performing employees, supervisors, managers, trainers, and others.
- 3. A facilitator from HR or an outside consultant interviews the panel members to get specific examples of job behaviors and actual occurrences on the jobs. During the interview the individuals are also asked about their thoughts and feelings during each of the described events.
- 4. Using the behavioral events, the facilitator develops detailed descriptions of each of the competencies. This descriptive phase provides clarity and specifics so that employees, supervisors, managers, and others in the organization have a clearer understanding of the competencies associated with jobs.
- 5. The competencies are rated and levels needed to meet them are identified. Then the competencies are specified for each of the jobs.
- Finally, standards of performance are identified and tied to the jobs. Appropriate selection screening, training, and compensation processes focusing on competencies must be developed and implemented.

Examples of the competencies used in organizations vary widely. In one survey of 10 companies, the following were most common.⁷

- Customer focus
- Team orientation
- Technical expertise
- Results orientation

- Leadership
- Innovation
- Adaptability

HR Activities and Competency Analysis

The competency approach focuses on linking business strategies to individual performance efforts. It also encourages employees to develop competencies that may be used in diverse work situations, rather than being boxed into a job. Development of employees focuses on enhancing their competencies, rather than preparing them for moving to jobs. In this way they can develop capabilities useful throughout the organization as it changes and evolves. The competency approach affects HR activities, particularly those following.⁸

- Selection and placement: Once the competencies needed in jobs have been identified, selection and placement activities must be revised to focus on assessing the competencies of individuals.
- HR development: Training and development efforts must be revised to stress a
 full range of competencies, rather than being narrowly focused on job skills
 and knowledge. The hidden competencies are more behaviorally based and
 require more varied approaches than have been common in many training

- efforts. Also, in assessing training needs and evaluating the meeting of those needs, the focus must be on abilities, not just knowledge and skills. Career development also must focus on competency growth and opportunities both within and outside the organization.
- Compensation and performance management: Shifting from a task-based pay system to a competency-based pay system requires significant efforts. Assessing performance by measuring results and competencies, especially if work teams are used, is a daunting challenge—especially if the organization is highly structured. Rewarding individuals for demonstrating competencies, particularly those that are less evident and more behavioral, leads to significantly different compensation structures. The ACA survey mentioned earlier found that competency-based compensation is the least common use of competency approaches in organizations. More on competency-based pay programs appears in Chapter 13.

The difficulties with competency analysis are centered around the major shift in focus from tasks and duties to competencies. Shifting to competencies may lead to broadening jobs to allow more flexibility, greater cross-training, introduction and use of work teams, revising individually focused performance management and pay systems, and changing training efforts to focus on competency development. Yet, this shift to broaden jobs and competencies may not be compatible with the typical formal structures and job-focused activities in many organizations.

Ultimately, it may be that job analysis will shift in order to address the changing nature of broader and looser jobs in some areas, while continuing to be relevant in those areas where jobs remain task-based. Because the task-based approach is much more common, the remainder of this chapter concentrates on the traditional job analysis process.

Organizational Components and Job Analysis

Effective HR management demands that job analysis be the foundation for a number of other HR activities.¹¹ The process of analyzing jobs in organizations requires planning of several factors. As Figure 7–2 indicates, some of the considerations are how it is to be done, who provides data, and who conducts and uses the data so that job descriptions and job specifications can be prepared and reviewed. Once those decisions are made, then several results are linked to a wide range of HR activities. The most fundamental use of job analysis is to provide the information necessary to develop job descriptions and specifications.

Job Analysis Responsibilities

Most methods of job analysis require that a knowledgeable person describe what goes on in the job or make a series of judgments about specific activities required to do the job. Such information can be provided by the employee doing the job, the supervisor, and/or a trained job analyst. Each source is useful, but each has drawbacks. The supervisor seems to be the best source of information on what *should be* done, but employees often know more about what actually *is* done. However, both may lack the knowledge needed to complete a job

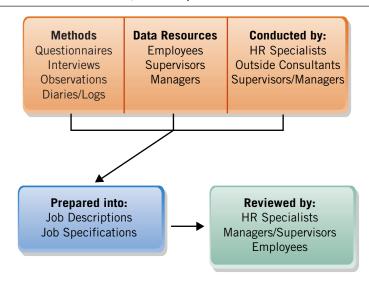


FIGURE 7-2 Decisions in the Job Analysis Process

analysis and draw the appropriate conclusions from it. Thus, job analysis requires a high degree of coordination and cooperation between the HR unit and operating managers.

The responsibility for job analysis depends on who can best perform various aspects of the process. Figure 7–3 shows a typical division of responsibilities in organizations that have an HR unit. In small organizations, managers have to perform all the work activities identified in Figure 7–3. In larger companies, the HR unit supervises the process to maintain its integrity and writes the job descriptions and specifications for uniformity. The managers review the efforts of the HR unit to ensure accuracy and completeness. They also may request reanalysis when jobs change significantly.

FIGURE 7-3 Typical Job Analysis Responsibilities

HR Unit	Managers
 Prepares and coordinates job analysis procedures Writes job descriptions and specifications for review by managers Revises and periodically reviews job descriptions and specifications Reviews managerial input to ensure accuracy May seek assistance from outside experts for difficult or unusual analyses 	 Complete or assist in completing job analysis information Review and maintain accuracy of job descriptions/job specifications May request new job analysis as jobs change Identify performance standards based on job analysis information

Job Descriptions and Job Specifications

In most cases, the job description and job specifications are combined into one document that contains several different sections. An overview of each section follows next.

JOB DESCRIPTIONS A **job description** indicates the tasks, duties, and responsibilities of a job. It identifies what is done, why it is done, where it is done, and briefly, how it is done.

Performance standards should flow directly from a job description, telling what the job accomplishes and how performance is measured in key areas of the job description. The reason for including the performance standards is clear. If employees know what is expected and how performance is to be measured, they have a much better chance of performing satisfactorily. Figure 7–4 shows a job description duty statement and some performance standards used for a customer response representative in a telecommunications firm.

Unfortunately, performance standards often are omitted from job descriptions. Even if performance standards have been identified and matched to job descriptions, they may not be known by employees if the job descriptions are not provided to employees but used only as tools by the HR department and managers. Such an approach limits the value of job descriptions.

JOB SPECIFICATIONS While the job description describes activities to be done, it is **job specifications** that list the knowledge, skills, and abilities an individual needs to perform a job satisfactorily. Knowledge, skills, and abilities (KSAs) include education, experience, work skill requirements, personal abilities, and mental and physical requirements. Job specifications for a data entry operator might include a required educational level, a certain number of months of experience, a typing ability of 60 words per minute, a high degree of visual concentration, and ability to work under time pressure. It is important to note that accurate job specifications identify what KSAs a person needs to do the job, not necessarily what qualifications the current employee possesses.

Developing Job Families and Organization Charts

Once all jobs in the organization have been identified, it is often helpful for communicating with employees to group the jobs into job families and display them on an organization chart. There are various ways of identifying and grouping job families.

JOB FAMILIES A **job family** is a grouping of jobs having similar characteristics. In identifying job families, significant emphasis is placed on measuring the similarity of jobs. For instance, at one insurance company the HR director decided that jobs requiring specialized technical knowledge, skills, and abilities related to information systems (IS) should be viewed as a separate job family, regardless of the geographic locations of those jobs. Due to the nature of information systems jobs, attracting and retaining IS professionals was difficult, and special compensation programs were needed to match the compensation packages given by competing employers.

ORGANIZATION CHARTS In many organizations, organization charts are developed. An **organization chart** depicts the relationships among jobs in an organization. Organization charts have traditionally been hierarchical, showing

Job description

Identification of the tasks, duties, and responsibilities of a job.

Performance standards

Indicators of what the job accomplishes and how performance is measured.

Job specifications

List the knowledge, skills, and abilities (KSAs) an individual needs to do the job satisfactorily.

Job family

A grouping of jobs having similar characteristics.

Organization chart

A depiction of the relationships among jobs in an organization

FIGURE 7-4 Sample Job Duty Statements and Performance Standards

Job Title: Customer Response Representative **Supervisor:** Customer Response Supervisor

Duty	Performance Standards
Discusses nonpayment of bills with customers and notifies them of nonpayment disconnecting of service.	 Flags accounts within two days that are not to be disconnected according to discussions with Local Manager. Mails notices to cable television customers so they will be received at least five days prior to disconnection date. Determines which accounts require credit deposit, based on prior payment history. Calmly discusses the nonpayment status of the account, along with options for reconnection with customers. Disconnects and reconnects long distance calling cards for nonpayments with 100% accuracy.
Receives and records trouble reports from customers on mechanized trouble-reporting system for telephone or proper form for cable television. Dispatches reports to appropriate personnel.	 Completes all required trouble information on the trouble-reporting system accurately with no more than five errors annually. Dispatches trouble ticket information to voice mail with 100% accuracy. Tests line if needed or as requested by technician for telephone troubles.

the reporting relationships for authority and responsibilities. In most organizations, the charts can help clarify who reports to whom. In developing typical organization charts, such as the one shown in Figure 7–5, there are some general considerations:

- 1. *Focus of chart:* Label the chart to identify the scope of the chart, whether for a department, division, region, or the company as a whole.
- 2. *Simplicity:* Keep the chart as simple as possible, emphasizing primary lines of authority.
- 3. *Titles:* Use job titles, describing the job level and function, in each box on the chart. For example, the title of Director may not be sufficient. Where possible, indicate the area of responsibility, such as Director of Administration. Broader titles, such as General Manager or Secretary, need no further clarification.
- 4. *Incumbents*: Do not develop organization charts around existing people in the organization. First identify the functions, and then add names of incumbents to the charts.
- 5. *Jobs*: Depict the jobs in organizational units as rectangular boxes.
- 6. *Levels:* Use vertical placement to depict the relative position of jobs at different levels in the organization. Use horizontal placement to show jobs having similar levels of authority in the organization.
- 7. *Authority:* Show direct lines of authority with solid lines, drawn vertically and horizontally as appropriate. For indirect or functional authority, use dotted lines.

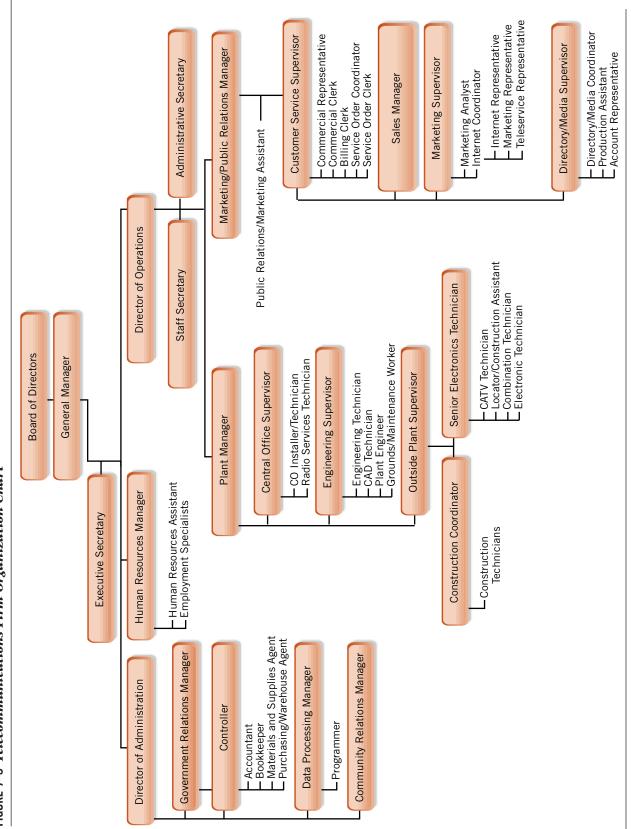


FIGURE 7-5 Telecommunications Firm Organization Chart

In dynamic organizations the charts can become very complicated because dual reporting relationships may exist. For instance, a design engineer may report to a project manager on a project while also reporting to the chief design engineer for technical review and supervision. This type of organization, often called a *matrix organization*, has grown in usage in recent years, particularly in professional practice and high-technology industries.

Job Analysis and HR Activities

The completion of job descriptions and job specifications, based on job analysis, is at the heart of many other HR activities, as Figure 7–6 indicates. But even if legal requirements did not force employers to do job analysis, effective HR management would demand it.

HR Planning

HR planning requires auditing of current jobs, as noted in Chapter 2. Current job descriptions provide the basic details necessary for this internal assessment, including such items as the jobs available, current number of jobs and positions, and reporting relationships of the jobs. By identifying the functions currently being performed and calculating the time being spent to perform them, managers and HR specialists can redesign jobs to eliminate unnecessary tasks and combine responsibilities where desirable.

When reviewing the information provided by both employees and supervisors, a team composed of the HR Manager, the Director of Administration, and an outside consultant noted that several duties associated with maintaining customer service records were divided among three employees. This often led to delays in recording customer payments and scheduling repair services.

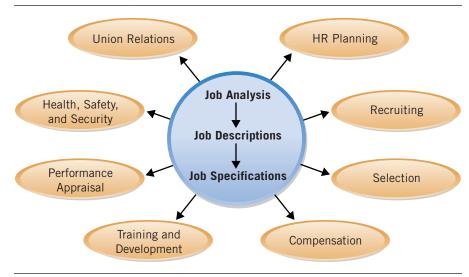


FIGURE 7-6 Job Analysis and Other HR Activities

The team regrouped the various customer service duties so that two of the employees performed complete but different functions. Filing activities were concentrated with the third employee, who also served as backup for the other two.

Recruiting and Selection

Equal employment opportunity guidelines clearly require a sound and comprehensive job analysis to validate recruiting and selection criteria. Without a systematic investigation of a job, an employer may be using requirements that are not specifically job related. For example, if a medical clinic requires a high school diploma for a medical records clerk job, the firm must be able to justify how such an educational requirement matches up to the tasks, duties, and responsibilities of that job. It must be able to show that the knowledge, skills, and abilities needed by the medical records clerk could be obtained only through formal education.

Organizations use job analysis to identify job specifications in order to plan how and where to obtain employees for anticipated job openings, whether recruited internally or externally. For example, a job analysis for a small manufacturer of electric equipment showed that the Accountant II job, which traditionally had required a college-trained person, really could be handled by someone with high school training in bookkeeping and several years of experience. As a result, the company could select from within and promote a current accounting clerk. In addition to saving on recruiting costs, promotion can have a positive impact on employee commitment and career-planning efforts.

Compensation

Job analysis information is essential when determining compensation. As part of identifying appropriate compensation, job analysis information is used to determine job content for *internal* comparisons of responsibilities and *external* comparisons with the compensation paid by competing employers. Information from job analysis can be used to give more weight, and therefore more pay, to jobs involving more difficult tasks, duties, and responsibilities. Employees' perceptions of fairness and equity are linked not only to how the extrinsic rewards they receive compare with those given to others both inside and outside the organization but also to those rewards they expect for themselves.

Job analysis also can aid in the management of various employee benefits programs. For instance, a job analysis can be used to determine what functions can be performed by workers who have been on workers' compensation disability leave.

Training and Development

By defining what activities comprise a job, a job analysis helps the supervisor explain that job to a new employee. ¹² Information from job descriptions and job specifications can also help in career planning by showing employees what is expected in jobs that they may choose in the future. Job specification information can point out areas in which employees might need to develop in order to further their careers. Employee development efforts by organizations depend on the job descriptions and job specifications generated from job analyses.

Performance Appraisal

With performance standards to compare what an employee is supposed to be doing with what the person actually has done, a supervisor can determine the employee's performance level. The performance appraisal process should then tie to the job description and performance standards. Developing clear, realistic performance standards can also reduce communication problems in performance appraisal feedback among managers, supervisors, and employees.

Safety and Health

Job analysis information is useful in identifying possible job hazards and working conditions associated with jobs. From the information gathered, managers and HR specialists can work together to identify the health and safety equipment needed, specify work methods, and train workers.¹³

Union Relations

Where workers are represented by a labor union, job analysis is used in several ways. First, job analysis information may be needed to determine if the job should be covered by the union agreements. Specifically, management may be able to exclude a supervisory job and its incumbents from the bargaining unit. Second, it is common in unionized environments for job descriptions to be very specific about what tasks are and are not covered in a job. Finally, well-written and specific job descriptions can reduce the number of grievances filed by workers. In one manufacturing plant, a worker refused to sweep up his work area and was disciplined. He filed a grievance and won, because cleaning his work area was not mentioned in the job description.

Legal Aspects of Job Analysis

Permeating the discussion of equal employment laws, regulations, and court cases in preceding chapters is the concept that legal compliance must focus on the jobs that individuals perform. The 1978 Uniform Selection Guidelines make it clear that HR requirements must be tied to specific job-related factors if employers are to defend their actions as a business necessity.

Job Analysis and the Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) has increased the emphasis on job analysis, job descriptions, and job specifications. HR managers and their organizations must identify job activities and then document the steps taken to identify job responsibilities. One result of the ADA is increased emphasis by employers on conducting job analysis, as well as developing and maintaining current and accurate job descriptions. Also, many employers have had to revise their job specifications to reflect the prerequisite KSAs, rather than the "puffed up" ones favored by some managers and employees. It is clear that the ADA has had a major impact on job analysis and the activities derived from it.

FIGURE 7-7 De	etermining I	Essential	and M	[arginal]	Functions
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Considerations	Essential Functions	Marginal Functions
Percentage of time spent	Significant time spent: often 20% of time or more	Generally less than 10% of time
Frequency	Performed regularly: daily, weekly, monthly	Performed infrequently or when substituting in part of another job
Importance	Task has consequences to other parts of job and other jobs.	Task is unrelated to job and has little consequence if not performed.

The ADA requires that organizations identify the *essential functions* of jobs. Specifically, the ADA indicates that **essential job functions** are the fundamental job duties of the employment position that an individual with the disability holds or desires. The term "essential functions" does not include the marginal functions of the positions. ¹⁵ **Marginal functions** are those duties that are part of a job but are incidental or ancillary to the purpose and nature of a job.

Figure 7–7 shows three major considerations regarding essential functions and marginal functions. Job analysts, HR staff members, and operating managers must evaluate and make decisions when the information on the three considerations is not clear.

An important part of job analysis is to obtain information about what duties are being performed and what percentage of time is devoted to each duty. As the ADA suggests, it is generally true that the percentage of time spent on a duty indicates its relative importance. How often the duties are performed also becomes important. If duties are performed daily, weekly, and/or monthly, they are more likely to be seen as essential. However, if a task is only performed infrequently or when helping another worker on a totally unrelated job, its essentiality may be more questionable.

Another consideration is the ease or difficulty involved in assigning a duty to be performed by someone else, or in a different job. For instance, assume an assembler of electronic components places the completed parts in a bin next to the work area. At the end of each day, the bin of completed parts must be carried to another room for use in final assembly of a product. Carrying the bin to the other room probably would be defined as a marginal task, because assigning someone else to carry it would not likely create major workflow problems with other jobs and workers.

Another aspect of job analysis is to identify the physical demands and environmental condition of jobs. It is important to identify the skills and capabilities used on a job. For example, it is essential for a customer service representative to be able to hear well enough to take customer orders. However, hearing may be less essential for a heavy equipment operator in a quarry.

Reasonable Accommodations

Having identified the essential job functions through a job analysis, an employer must be prepared to make reasonable accommodations. ¹⁶ Again, the *core* job duties and KSAs must be considered. One manufacturing company with multiple

Essential job functions

The fundamental job duties of the employment position that an individual with the disability holds or desires.

Marginal functions

Functions that are part of a job but are incidental or ancillary to the purpose and nature of a job.



BNA

Defining Essential Functions 1805.70.40.10

Review this description of factors to consider when defining the essential functions of jobs and identify those factors for a job you have held. buildings identified that participation in design planning meetings was an essential job function. To accommodate a physically disabled employee, the firm purchased a motorized cart for the employee and required that all design team meetings be held in first-floor, accessible conference rooms. Generally, the costs of making reasonable accommodation are not great. According to one study, most employers spend \$500 or less in making accommodations.¹⁷

Job Analysis and Wage/Hour Regulations

Typically, a job analysis identifies the percentage of time spent on each duty in a job. This information helps determine whether someone should be classified as exempt or nonexempt under the wage/hour laws.

As will be noted in Chapter 13, the federal Fair Labor Standards Act (FLSA) and most state wage/hour laws indicate that the percentage of time employees spend on routine, manual, or clerical duties affects whether they must be paid overtime for hours over 40 per week. To be exempt from overtime, the employees must perform their *primary duties* as executive, administrative, or professional employees. *Primary* has been interpreted to mean occupying at least 50% of the time. Additionally, the exemption regulations state that no more than 20% (40% in retail settings) of the time can be spent on manual, routine, or clerical duties.

Other legal-compliance efforts, such as those involving workplace safety and health, can also be aided through the data provided by job analysis. In summary, it is extremely difficult for an employer to have a legal staffing system without performing job analysis. Truly, job analysis is the most basic HR activity.

Behavioral Aspects of Job Analysis

A detailed examination of jobs, while necessary, can be a demanding and threatening experience for both managers and employees, in part because job analysis can identify the difference between what currently *is* being performed in a job and what *should* be done. Job analysis involves determining what the "core" job is. This determination may require discussion with managers about the design of the job. Often the content of a job may reflect the desires and skills of the incumbent employee. For example, in one firm a woman promoted to office manager continued to spend considerable time opening and sorting the mail because she had done that duty in her old job. Yet she needed to be supervising the work of the eight clerical employees more and should have been delegating the mail duties to one of the clerks. Her manager indicated that opening and sorting mail was not one of the top five tasks of her new job, and the job description was written to reflect this. The manager also met with the employee to discuss what it meant to be a supervisor and what duties should receive more emphasis.

Job "Inflation"

Employees and managers also have some tendency to inflate the importance and significance of their jobs. Because job analysis information is used for compensation purposes, both managers and employees hope that "puffing up" their jobs will result in higher pay levels.

Titles of jobs often get inflated also, and some HR specialists believe that it is becoming worse. Some firms give fancy titles in place of pay raises, while others do it to keep well-paid employees from leaving for "status" reasons. Some industries, such as banking and entertainment, are known for having more title inflation than others. For instance, banking and financial institutions use officer designations to enhance status. In one small Midwestern bank, an employee who had three years' experience as a teller was "promoted" with no pay increase to Second Vice-President and Senior Customer Service Coordinator. She basically became the lead teller when her supervisor was out of the bank and now could sign a few customer-account forms.

Managerial Straitjacket

Through the information developed in a job analysis, the job description is supposed to capture the nature of a job. However, if it fails—if some portions of the job are mistakenly left out of the description—some employees may use that to limit managerial flexibility. The resulting attitude, "It's not in my job description," puts a straitjacket on a manager. In some organizations with unionized workforces, very restrictive job descriptions exist.

Because of such difficulties, the final statement in many job descriptions is a *miscellaneous clause*, which consists of a phrase similar to "Performs other duties as needed upon request by immediate supervisor." This statement covers unusual situations that may occur in an employee's job. However, duties covered by this phrase cannot be considered essential functions under the Americans with Disabilities Act (ADA). Also, it may be important to develop flexible work role definitions, particularly in manufacturing operations.¹⁹

Current Incumbent Emphasis

As suggested earlier, it is important that a job analysis and the resulting job description and job specifications should not describe just what the person currently doing the job does and what his or her qualifications are. The person may have unique capabilities and the ability to expand the scope of the job to assume more responsibilities. The company would have difficulty finding someone exactly like that individual if he or she left. Consequently, it is useful to focus on the *core* jobs and *necessary* KSAs by determining what the jobs would be if the current incumbents quit or were no longer available to do the jobs.

Employee Anxieties

One fear that employees may have concerns the *purposes* of a detailed investigation of their job. Management should explain why the job analysis is being done, because some employees may be concerned that someone must feel they have done something wrong if such a detailed look is being taken. The attitude behind such a fear might be, "As long as no one knows precisely what I am supposed to be doing, I am safe."

Also, some employees may fear that an analysis of their jobs will put a "strait-jacket" on them, limiting their creativity and flexibility by formalizing their duties. However, it does not necessarily follow that analyzing a job will limit job scope or depth. In fact, having a well-written, well-communicated job description can assist employees by clarifying what their roles are and what is expected of them.²⁰ Perhaps the most effective way to handle anxieties is to involve the employees in the revision process.



LOGGING ON . . .

Job Analysis

This site is a list server or discussion site for individuals who wish to subscribe. Those in the service receive messages on job analysis, and individuals can post questions and issues.

http://home.nav.soft.com/ hrmbasics/jobs.htm

Job Analysis Methods

Job analysis information can be gathered in a variety of ways. One consideration is who is to conduct the job analysis. Most frequently, a member of the HR staff coordinates this effort. Depending on which of the methods discussed next is used, others who often participate are managers, supervisors, and employees doing the jobs. For more complex analyses, industrial engineers may conduct time and motion studies.

Another consideration is the method to be used. Common methods are observations, interviews, questionnaires, and specialized methods of analysis. Combinations of these approaches frequently are used, depending on the situation and the organization.²¹ Each of these methods is discussed in some detail next.

Observation

When the observation method is used, a manager, job analyst, or industrial engineer observes the individual performing the job and takes notes to describe the tasks and duties performed. Observation may be continuous or based on intermittent sampling.

Use of the observation method is limited because many jobs do not have complete and easily observed job duties or complete job cycles. Thus, observation may be more useful for repetitive jobs and in conjunction with other methods. Managers or job analysts using other methods may watch parts of a job being performed to gain a general familiarity with the job and the conditions under which it is performed. Multiple observations on several occasions also will help them use some of the other job analysis methods more effectively.

WORK SAMPLING As a type of observation, work sampling does not require attention to each detailed action throughout an entire work cycle. Instead, a manager can determine the content and pace of a typical workday through statistical sampling of certain actions rather than through continuous observation and timing of all actions. Work sampling is particularly useful for routine and repetitive jobs.

EMPLOYEE DIARY/LOG Another method requires that employees "observe" their own performances by keeping a diary/log of their job duties, noting how frequently they are performed and the time required for each duty. Although this approach sometimes generates useful information, it may be burdensome for employees to compile an accurate log. Also, employees sometimes perceive this approach as creating needless documentation that detracts from the performance of their work.

Interviewing

The interview method of gathering information requires that a manager or HR specialist visit each job site and talk with the employees performing each job. A standardized interview form is used most often to record the information. Frequently, both the employee and the employee's supervisor must be interviewed to obtain a complete understanding of the job. In some situations, such as team-directed jobs, group interviews also can be used, typically involving experienced job incumbents and/or supervisors. It usually requires the presence of a repre-

sentative from the HR department as a mediator. For certain difficult-to-define jobs, group interviews are probably most appropriate.

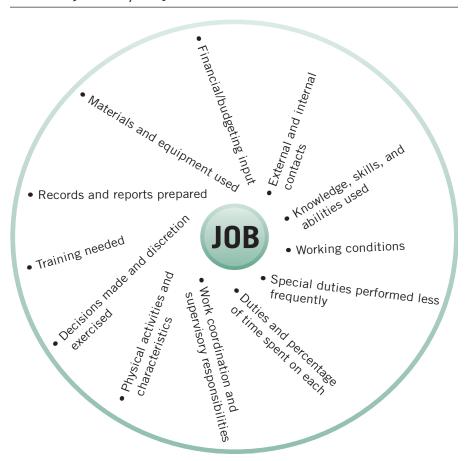
The interview method can be quite time consuming, especially if the interviewer talks with two or three employees doing each job. Professional and managerial jobs often are more complicated to analyze and usually require longer interviews. For these reasons, combining the interview with one of the other methods is suggested.

Questionnaires

The questionnaire is a widely used method of gathering data on jobs. A survey instrument is developed and given to employees and managers to complete. The typical job questionnaire often covers the areas shown in Figure 7–8.

The major advantage of the questionnaire method is that information on a large number of jobs can be collected inexpensively in a relatively short period of time. However, the questionnaire method assumes that employees can accurately analyze and communicate information about their jobs. Employees may vary in their perceptions of the jobs, and even in their literacy. For these reasons, the

FIGURE 7-8 Job Analysis Questionnaire



questionnaire method is usually combined with interviews and observations to clarify and verify the questionnaire information.

One type of questionnaire sometimes used is a *checklist*. Differing from the open-ended questionnaire, the checklist offers a simplified way for employees to give information. An obvious difficulty with the checklist is constructing it, which can be a complicated and detailed process.

Job Analysis and the U.S. Department of Labor

A variety of resources related to job analysis are available from the U.S. Department of Labor (DOL). The resources have been developed and used over many years by various entities with the DOL, primarily the Employment and Training Administration.

FUNCTIONAL JOB ANALYSIS (FJA) This method is a comprehensive approach to job analysis. FJA considers: (1) goals of the organization, (2) what workers do to achieve those goals in their jobs, (3) level and orientation of what workers do, (4) performance standards, and (5) training content. A functional definition of what is done in a job can be generated by examining the three components of *data*, *people*, and *things*.²² The levels of these components are used to identify and compare important elements of jobs given in the *Dictionary of Occupational Titles* (*DOT*), a standardized data source provided by the federal government.

DICTIONARY OF OCCUPATIONAL TITLES (DOT) Functional job analysis, as captured in the *DOT*, is a valuable source of job information, regardless of the job analysis method used. The *DOT* describes a wide range of jobs, samples of which are shown in Figure 7–9. A manager or HR specialist confronted with preparing a large number of job descriptions can use the *DOT* as a starting point. The job description from the *DOT* can then be modified to fit the particular organizational situation.



Several job analysis methods are built on the questionnaire approach. Some of these methods are described next.

POSITION ANALYSIS QUESTIONNAIRE (PAQ) The PAQ is a specialized questionnaire method incorporating checklists. Each job is analyzed on 27 dimensions composed of 187 "elements." The PAQ comprises six divisions, with each division containing numerous job elements. The divisions include:²³

- *Information input:* Where and how does the worker get information to do the job?
- *Mental process:* What levels of reasoning are necessary on the job?
- Work output: What physical activities are performed?
- Relationships with others: What relationships are required to perform the job?
- Job context: What working conditions and social contexts are involved?
- *Other:* What else is relevant to the job?

The PAQ focuses on "worker-oriented" elements that describe behaviors necessary to do the job, rather than on "job-oriented" elements that describe the technical aspects of the work. Although its complexity may deter many potential



LOGGING ON . . .Using the **DOT**

This web site provides an alphabetical listing of the *DOT* index, classification searches, and the capability of searching the complete *DOT*.

http://theodora.com/ dot_index.html#MENU

FIGURE 7-9 Sample Job Titles from the Dictionary of Occupational Titles

Parts of Occupational Definition

There are seven parts to an occupational definition identified by the U. S. Department of Labor that present data about a job in a systematic fashion. The parts are listed here as they appear in every definition:

- 1. The Occupational Code Number
- **2.** The Occupational Title
- 3. The Industry Designation
- **4.** Alternate Titles (if any)

- **5.** The Body of the Definition
 - (a) Lead Statement
 - (b) Task Element Statements
 - (c) "May" Items
- **6.** Undefined Related Titles (if any)
- **7.** Definition Trailer



Develops and conducts training programs for employees of industrial, commercial, service, or government establishment: Confers with management to gain knowledge of work situation requiring training for employees to better understand changes in policies, procedures, regulations, and technologies. Formulates teaching outline and determines instructional methods, utilizing knowledge of specified training needs and effectiveness of such methods as individual training, group instruction, lectures, demonstrations, conferences, meetings, and workshops. Selects or develops teaching aids, such as training handbooks, demonstration models, multimedia visual aids, computer tutorials, and reference works. Conducts training sessions covering specified areas such as those concerned with new employee orientation, on-the-job training, use of computers and software, apprenticeship programs, sales techniques, health and safety practices, public relations, refresher training, promotional development, upgrading, retraining displaced workers, and leadership development. Tests trainees to measure progress and to evaluate effectiveness of training. May | 5c | |

030.162-022 SYSTEMS PROGRAMMER (profess. & kin.)

Coordinates installation of computer operating system software and tests, maintains, and modifies software, using computer terminal: Reads loading and running instructions for system software, such as task scheduling, memory management, computer file system, or controlling computer input and output, and loads tape into tape drive or transfers software to magnetic disk. Initiates test of system program and observes readout on monitor of computer system to detect errors or work stoppage. Enters code changes into computer system to correct errors. Analyzes performance indicators, such as system's response time, number of transactions per second, and number of programs being processed at once, to ensure that system is operating efficiently. Changes system software so that system performance will meet objectives. Reviews computer system capabilities, workflow, and scheduling limitations to determine if requested changes to operating system are possible. Writes description of steps taken to modify system and procedures required to implement new software. Assists users having problems with use of system software. May train users, COMPUTER OPERATOR (clerical) 213.362-010, and COMPUTER PROGRAMMER (profess. & kin.) 030.162-010 to use system software. May visit vendors to observe demonstration of systems software. May prepare workflow charts and diagrams to modify system software. May administer and monitor computer program that controls user access to system. May review productivity reports and problem records to evaluate performance of computer system.

SOURCE: U.S. Department of Labor, Employment and Training Administration, *Dictionary of Occupational Titles*, 4th ed., revised (Washington, D.C.: Government Printing Office, 1991).

users, the PAQ is easily quantified and can be used to conduct validity studies on selection tests. It is also useful in helping to ensure internal pay fairness because it considers the varying demands of different jobs.²⁴

MANAGERIAL JOB ANALYSIS Because managerial jobs are different in character from jobs with clearly observable routines and procedures, some specialized methods have evolved for their analysis. One of the most well known and widely used methods was developed at Control Data Corporation and is labeled the Management Position Description Questionnaire (MPDQ). Composed of a listing of over 200 statements, the MPDQ examines a variety of managerial dimensions, including decision making and supervising.²⁵

Computerized Job Analysis

As computer technology has expanded, researchers have developed computerized job analysis systems. They all have several common characteristics, including the way they are administered. First, analysts compose task statements that relate to all jobs. They are then distributed as questionnaires that list the task statements. Next, employee responses on computer-scannable documents are fed into computer-based scoring and reporting services capable of recording, analyzing, and reporting thousands of pieces of information about any job.

An important feature of computerized job analysis sources is the specificity of data that can be gathered. All of this specific data is compiled into a job analysis database.

A computerized job analysis system often can reduce the time and effort involved in writing job descriptions. These systems have banks of job duty statements that relate to each of the task and scope statements of the questionnaires.

As is evident, the melding of computer technology with job analysis methodology allows firms to develop more accurate and comprehensive job descriptions, linked to compensation programs, and performance appraisal systems. These processes can also provide better data for legal defensibility than was once available.

Combination Methods

There are indeed a number of different ways to obtain and analyze information about a job. No specific job analysis method has received the stamp of approval from the various courts in all situations. Therefore, in dealing with issues that may end up in court, care must be taken by HR specialists and those doing the job analysis to document all of the steps taken. Each of the methods has strengths and weaknesses, and a combination of methods generally is preferred over one method alone.

Stages in the Job Analysis Process

The process of job analysis must be conducted in a logical manner, following appropriate management and professional psychometric practices. Therefore, a multistage process usually is followed, regardless of the job analysis methods



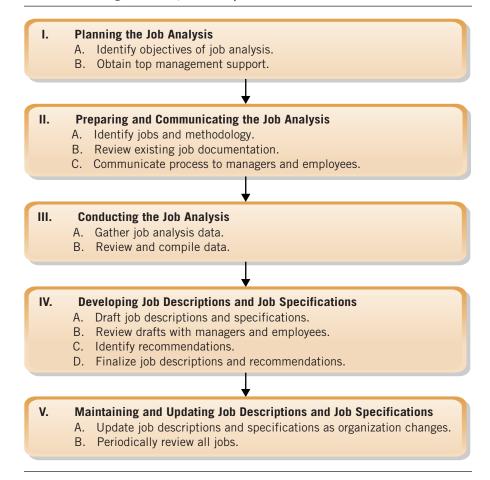
LOGGING ON . . .

OMF Integrated Job and
Competency Analysis

This site describes the OMF System of jobs and competency analysis that uses comprehensive data collection means.

http:///www.claytonwallis.com/cxomf.htm

FIGURE 7-10 Stages in the Job Analysis Process



used. The stages for a typical job analysis are outlined here, but they may vary with the methods used and the number of jobs included. Figure 7–10 illustrates the basic stages of the process.

Planning the Job Analysis

It is crucial that the job analysis process be planned before beginning the gathering of data from managers and employees. Probably the most important consideration is to identify the objectives of the job analysis. Maybe it is just to update job descriptions. Or, it may include as an outcome revising the compensation programs in the organization. Another objective could be to redesign the jobs in a department or division of the organization. Also, it could be to change the structure in parts of the organization to align it better with business strategies.

Whatever the purpose identified, it is vital to obtain top management support. The backing of senior managers is needed as issues arise regarding changes in jobs

or the organizational structure. Support from even the highest levels of management helps when managerial and employee anxieties and resistance arise.

Preparing and Introducing the Job Analysis

Preparation begins by identifying the jobs under review. For example, are the jobs to be analyzed hourly jobs, clerical jobs, all jobs in one division, or all jobs in the entire organization? In this phase, those who will be involved in conducting the job analysis and the methods to be used are identified. Also specified is how current incumbents and managers will participate in the process and how many employees' jobs will be considered.

Another task in the identification phase is to review existing documentation. Existing job descriptions, organization charts, previous job analysis information, and other industry-related resources all may be useful to review. Having details from this review may save time and effort later in the process.

A crucial step is to communicate and explain the process to managers, affected employees, and other concerned people, such as union stewards. Explanations should address the natural concerns and anxieties people have when someone puts their jobs under close scrutiny. Items to be covered often include the purpose of the job analysis, the steps involved, the time schedule, how managers and employees will participate, who is doing the analysis, and whom to contact as questions arise. When employees are represented by a union, it is essential that union representatives be included in reviewing the job descriptions and specifications to lessen the possibility of future conflicts.

Conducting the Job Analysis

With the preparation completed, the job analysis can be conducted. The methods selected will determine the time line for the project. Sufficient time should be allotted for obtaining the information from employees and managers. If questionnaires are used, it is often helpful to have employees return them to supervisors or managers for review before giving them back to those conducting the job analysis. The questionnaire should be accompanied by a letter explaining the process and instructions for completing and returning the job analysis questionnaires.

Once data from job analysis has been compiled, it should be sorted by job, the job family, and organizational unit. This step allows for comparison of data from similar jobs throughout the organization. The data also should be reviewed for completeness, and follow-up may be needed in the form of additional interviews or questions to be answered by managers and employees.

Developing Job Descriptions and Job Specifications

At this stage the job analysts will prepare draft job descriptions and job specifications. Later in this chapter is a section discussing details on how to write job descriptions and job specifications. Our purpose here is to emphasize that the drafts should be relatively complete and identify areas where additional clarifications are needed.

Generally, organizations have found that having managers and employees write job descriptions is not recommended for several reasons. First, there is no consistency in format and details, both of which are important given the legal

consequences of job descriptions. Second, managers and employees vary in their writing skills. Also, they may write the job descriptions and job specifications to reflect what they do and what their personal qualifications are, not what the job requires.²⁶

Once the drafts are completed, they should be reviewed by managers. Whether employees review the drafts or wait to receive the final job descriptions is often determined by the managerial style of the supervisors/managers and the culture of the organization regarding employee participation and communication.

When finished, job descriptions are distributed by the HR department to managers, supervisors, and employees. It is important that each supervisor or manager review the completed description with individual employees so that there is understanding and agreement on the content that will be linked to performance appraisals, as well as to all other HR activities.

Maintaining and Updating Job Descriptions and Job Specifications

Once job descriptions and specifications have been completed and reviewed by all appropriate individuals, a system must be developed for keeping them current. Otherwise, the entire process, beginning with job analysis, may have to be repeated in several years. Because organizations are dynamic and evolving entities, rarely do all jobs stay the same for years.

Someone in the HR department usually has responsibility for ensuring that job descriptions and specifications stay current. Employees performing the jobs and their managers play a crucial role because, as those closest to the jobs, they know when changes occur. One effective way to ensure that appropriate reviews occur is to use job descriptions and job specifications in other HR activities. For example, each time a vacancy occurs, the job description and specifications should be reviewed and revised as appropriate *before* recruiting and selection efforts begin. Similarly, in some organizations, managers review the job description during each performance appraisal interview. This review enables the job holder and the supervisor to discuss whether the job description still describes the actual job adequately or whether it needs to be revised. In addition, a comprehensive and systematic review may be done during HR planning efforts. For many organizations, a complete review is made once every three years, or as technology shifts occur, and more frequently when major organizational changes are made.

Job Descriptions and Job Specifications

The output from analysis of a job is used to develop a job description and job specifications. Together, they summarize job analysis information in a readable format and provide the basis for defensible job-related actions. They also serve the individual employees by providing documentation from management that identifies their jobs.

Job Description Components

A typical job description, such as the one in Figure 7–11, contains several major parts. Overviews of the most common components are presented next.



LOGGING ON . . . Rice University Human Resources

This web site provides guidelines for writing job descriptions, including the essential elements and their importance to organizations.

http://www.ruf.rice.edu/ ~humres/Training/ HowToHire/

FIGURE 7-11 Sample Job Description and Specifications

JOB TITLE: Compensation Administrator	JOB CODE:
INCUMBENT:	GRADE:
SUPERVISOR'S TITLE: Vice President of Human Resources	FLSA STATUS: Exempt
	EEOC CLASS: O/M

General Summary: Responsible for the design and administration of all cash compensation programs, ensures proper consideration of the relationship of compensation to performance of each employee, and provides consultation on compensation administration to managers and supervisors.

Essential Duties and Responsibilities:

- 1. Prepares and maintains all job descriptions for all jobs and periodically reviews and updates all job descriptions. Responds to questions from employees and supervisors regarding job descriptions (25%).
- 2. Ensures that Company compensation rates are in accordance with the Company philosophy. Maintains current information applicable to pay structure movements taking place in comparable organizations; obtains or conducts pay surveys as necessary and presents recommendations on pay structures on an annual basis. (20%)
- 3. Develops and administers the performance appraisal program and assists in the development of supervisory training programs. Monitors the use of the performance appraisal instruments to ensure the integrity of the system and its proper use. (20%)
- 4. Directs the job evaluation process by coordinating committee activities, and reevaluates jobs periodically through the committee process. Resolves disputes over proper evaluation of jobs. Conducts initial evaluation of new jobs prior to hiring and assigns jobs to pay ranges. (15%)
- 5. Researches and provides recommendations on executive compensation issues. Assists in the development and oversees the administration of all annual bonus payments for senior managers and executives. (15%)
- 6. Coordinates the development of an integrated Human Resource information system. Assists in identifying needs and interfaces with the Management Information Systems Department to achieve departmental goals for information needs. (5%)
- 7. Performs related duties as assigned or as the situation dictates.

Required Knowledge, Skills, and Abilities:

- 1. Knowledge of compensation and HR management practices and approaches.
- 2. Knowledge of effective job analysis methods and of survey development and interpretation practices and principles.
- 3. Knowledge of performance management program design and administration.
- 4. Knowledge of federal and state wage and hour regulations.
- 5. Skill in writing job descriptions, memorandums, letters, and proposals.
- 6. Skill in making presentations to groups and in explaining compensation policies and practices to employees and supervisors.
- 7. Ability to plan and prioritize work.
- 8. Ability to use spreadsheets, presentation graphics, word processing, and database computer software.

continued

FIGURE 7-11 concluded

Education and Experience:

This position requires the equivalent of a college degree in Business Administration, Psychology, or a related field plus 3–5 years experience in HR management, 2-3 of which should include compensation administration experience. An advanced degree in Industrial Psychology, Business Administration, or HR Management is preferred, but not required.

Physical Requirements	Rarely (0–12%)	Occasionally (12–33%)	Frequently (34–66%)	Regularly (67–100%)
Seeing: Must be able to read reports and use computer.				X
Hearing: Must be able to hear well enough to communicate with co-workers.				X
Standing/Walking:	Χ			
Climbing/Stooping/Kneeling:	Χ			
Lifting/Pulling/Pushing:	Χ			
Fingering/Grasping/Feeling: Must be able to write, type and use phone system.				X

Working Conditions: Normal working conditions with the absence of disagreeable elements.

Note: The statements herein are intended to describe the general nature and level of work being performed by employees, and are not to be construed as an exhaustive list of responsibilities, duties, and skills required of personnel so classified. Furthermore, they do not establish a contract for employment and are subject to change at the discretion of the employer.

IDENTIFICATION The first part of the job description is the identification section, in which the job title, reporting relationships, department, location, and date of analysis may be given. Usually, it is advisable to note other information that is useful in tracking jobs and employees through human resource information systems (HRIS). Additional items commonly noted in the identification section are:

- Job code
- Pay grade
- Exempt/nonexempt status under Fair Labor Standards Act (FLSA)
- EEOC Classification (from EEO-1 form)

GENERAL SUMMARY The second part, the general summary, is a concise statement of the general responsibilities and components that make the job different from others. One HR specialist has characterized the general summary statement as follows: "In thirty words or less, describe the essence of the job."

ESSENTIAL FUNCTIONS AND DUTIES The third part of the typical job description lists the essential functions and duties. It contains clear, precise statements on the major tasks, duties, and responsibilities performed. Writing this section is the most time-consuming aspect of preparing job descriptions.

JOB SPECIFICATIONS The next portion of the job description gives the qualifications needed to perform the job satisfactorily. The job specifications typically are stated as (1) knowledge, skills, and abilities (KSAs), (2) education and experience, and (3) physical requirements and/or working conditions. The components of the job specifications provide information necessary to determine what accommodations might and might not be possible under Americans with Disabilities Act (ADA) regulations.

DISCLAIMER AND APPROVALS The final section on many job descriptions contains approval signatures by appropriate managers and a legal disclaimer. This disclaimer allows employers to change employees' job duties or request employees to perform duties not listed, so that the job description is not viewed as a "contract" between the employer and the employee.

Preparing Job Descriptions

The ADA focused attention on the importance of well-written job descriptions. Legal compliance requires that they accurately represent the actual jobs. Some guidelines for preparing legally satisfactory job descriptions are noted next.

IDENTIFYING TITLES Job titles should be descriptive of job functions performed. For instance, one firm lumped all clerical jobs into four secretarial categories, even though the actual jobs were for such functions as payroll processor, marketing secretary, and receptionist. When the firm reviewed its descriptions, each job was given a function-related title. However, the jobs were grouped for pay purposes into the same pay grades as before. In summary, job titles should reflect the relative responsibilities in the organization and be linked to the pay grade system.

WRITING THE GENERAL SUMMARY AND ESSENTIAL FUNCTION STATEMENTS Most experienced job analysts have found that it is easier to write the general summary *after* the essential function statements have been completed. Otherwise, there is a tendency for the general summary to be too long.

The general format for an essential function statement is as follows: (1) *action verb*, (2) *to what applied*, (3) *what/how/how often*. There is a real art to writing statements that are sufficiently descriptive without being overly detailed. It is important to use precise action verbs that accurately describe the employee's tasks, duties, and responsibilities.²⁷ For example, it is generally advisable to avoid the use of vague words such as *maintains*, *handles*, and *processes*. Compare the statement "Processes expense vouchers" to "Reviews employee expense reports, verifies expense documentation, and submits to accounting for payment." The second statement more clearly describes the scope and nature of the duty performed. However, it is just as important to avoid the trap of writing a motion analysis. The statement "Walks to filing cabinet, opens drawer, pulls



BNA Job Descriptions 415.40.20

Review the sample policy on job descriptions to see how the process of developing and maintaining job descriptions can be identified. Also, the sample job description form is useful for generating job descriptions.

folder out, and inserts material in correct folder" is an extreme example of a motion statement. The statement "Files correspondence and memoranda to maintain accurate customer policy records" is sufficiently descriptive without being overly detailed.

The language of the ADA has stressed that the essential function statements be organized in the order of importance or "essentiality." If a description has eight statements, it is likely that the last two or three duties described are less essential than the first two or three. Therefore, it is important that job duties be arranged so that the most essential (in criticality and amount of time spent) be listed first and the supportive or marginal ones listed later. Within that framework, specific functional duties should be grouped and arranged in some logical pattern. If a job requires an accounting supervisor to prepare several reports, among other functions, statements relating to the preparation of reports should be grouped together. The *miscellaneous clause* mentioned earlier is typically included to assure some managerial flexibility.

Some job descriptions contain sections about materials or machines used, working conditions, or special tools used. This information is often included in the specific duty statements or in comment sections. Job descriptions of executive and upper-management jobs, because of the wide range of duties and responsibilities, often are written in more general terms than descriptions of jobs at lower levels in the organization.

Writing Job Specifications

Job specifications can be developed from a variety of information sources. Obviously, the job analysis process provides a primary starting point. But any KSA included must be based on what is needed to perform a job duty. Furthermore, the job specifications listed should reflect what is necessary for satisfactory job performance, not what the ideal candidate would have. For example, it is not appropriate for a manager to list as KSAs five years' experience in the specific industry and an MBA, when satisfactory performance would require only three years' experience and a bachelor's degree in marketing or advertising.

With this perspective in mind, a job analyst can obtain job specification information by talking with the current holders of the jobs and their supervisors and managers about the qualifications needed to perform the jobs satisfactorily. However, caution is needed here, because the characteristics of the current job occupant should not be the sole basis for the job specification statements. The current incumbent's job qualifications often exceed the minimum KSAs required to perform the job satisfactorily. Checking the job requirements of other organizations with similar jobs is another means of obtaining information for job specifications.

The ADA and Writing KSAs

In writing job specifications, it is important to list specifically those KSAs essential for satisfactory job performance. Only nondiscriminatory, job-related items should be included. For example, a high school diploma should not be required for a job unless the manager can demonstrate that an individual with less education cannot perform the job as well. Because of this concern, some specification

HR PERSPECTIVE

Research on Identifying Minimum Qualifications for Jobs

The process of identifying the minimum qualifications for jobs is often somewhat subjective and less clear than it should be. This is especially true given the legal implications of using these minimum qualifications for disqualifying job applications from further consideration.

Levine, Maye, Ulm, and Gordon conducted research on a methodology for developing and validating minimum qualifications for jobs in a state mental health facility. The researchers focused on fourteen different jobs in the state hospital.

First, the researchers gathered information on each job and its specifications. They reviewed the *Dictionary of Occupational Titles* (DOT) and obtained job analysis information on the tasks and KSAs

from those performing each of the jobs.

Next, the researchers identified individuals knowledgeable about each of the jobs, known as subject matter experts (SMEs). Those selected as SMEs included supervisors, managers, incumbent employees, and other knowledgeable persons for each job studied. Each panel of SMEs received the lists of tasks and KSAs, and the members rated each of those items on four scales. The SMEs rated the items independently, and the results were compiled by the researchers.

Following this rating process, the researchers and job analysts reviewed the results and grouped the items into profiles of minimum qualifications in each area identified. The final product of the process was a listing of the final profile criteria for each job. The completed system was tested by having raters independently evaluate past applicants using the identified minimum qualification profiles.

Using the minimum qualification profiles resulted in four of the nine profiles being validated as most directly applicable to evaluating applicants. Interestingly, using the profiles also led to positive interrater reliability, which deals with the consistency of ratings among different raters. In conclusion, the researchers indicated that this methodology appears to be acceptable in identifying minimum qualifications for each of the jobs under consideration.²⁸

statements read, "High school diploma or equivalent acceptable experience." As the HR Perspective indicates, it is important to use a process to identify the minimum qualifications associated with jobs.

In light of the ADA, it is crucial that the physical and mental dimensions of each job be clearly identified. If lifting, stooping, standing, walking, climbing, or crawling is required, it should be noted. Also, weights to be lifted should be specified, along with specific visual and hearing requirements of jobs. Refer to Figure 7–11, the sample job description, for examples of KSA statements. Remember, these job specifications are the foundation for evaluating individuals with disabilities for employment.

Summary

- Job analysis is a systematic investigation of the tasks, duties, and responsibilities necessary to do a job.
- The changing nature of jobs and work has led to additional approaches being used to analyze jobs and work.
- Work analysis examines the workflow, activities, content, and output in an organization.
- Task-based job analysis focuses on the tasks, duties, and responsibilities associated with jobs.

- The competency approach to job analysis identifies competencies, which are the basic characteristics that are linked to performance of individuals or teams.
- Once competencies have been identified, they can be used for HR selection, development, compensation, and performance management.
- The end products of job analysis are (1) job descriptions, which identify the tasks, duties, and responsibilities in jobs, and (2) job specifications, which list the knowledge, skills, and abilities (KSAs) needed to perform a job satisfactorily.
- An organization chart reflects the groupings of job families and reporting relationships among jobs.
- Job analysis information is useful in most HR activities, such as human resource planning, recruiting and selection, compensation, training and development, performance appraisal, safety and health, and union relations.
- Legal compliance in HR must be based on job analysis. The Americans with Disabilities Act (ADA) has increased the importance of job analysis and its components.

- Behavioral factors, including creating a managerial straitjacket and employee anxieties, must be considered when conducting a job analysis.
- Methods of gathering job analysis information include observation, interviews, questionnaires, some specialized methods, and computer job analysis. In practice, a combination of methods is often used.
- The process of conducting a job analysis has the following steps:
 - 1. Planning the job analysis
 - 2. Preparing and communicating the job analysis
 - 3. Conducting the job analysis
 - 4. Developing job descriptions and job specifications
 - 5. Maintaining and updating job descriptions and job specifications
- Writing job descriptions and job specifications can be challenging. The essential functions and KSAs should be described clearly.

Review and Discussion Questions

- 1. What are the implications for job analysis, considering that some jobs are more varied and require more advanced capabilities compared to other jobs that are more routine and require less knowledge and skills?
- 2. Why is competency-based job analysis more difficult to conduct than the traditional task-based approach?
- 3. Obtain an organization chart from an existing organization and evaluate it in light of the suggestions contained in this chapter.
- 4. Why is job analysis the foundation of many other HR activities?

- 5. Discuss why the Americans with Disabilities Act (ADA) has heightened the importance of job analysis activities.
- 6. Describe three methods of analyzing jobs, including some advantages and disadvantages of each method.
- 7. Explain how you would conduct a job analysis in a company that had never had job descriptions.
- 8. Discuss how you would train someone to write job descriptions and job specifications for a small bank.

Terms to Know

competencies 217 duty 216 essential job functions 227 job 214 job analysis 214 job description 221 job family 221 job responsibilities 216 job specifications 221 marginal functions 227 organization chart 221
performance standards 221
position 214
task 216
work analysis 215

Using the Internet



Conducting a Job Analysis

Your organization is in need of performing a job analysis on all your current jobs. The top level of management has asked you, the HR manager, to make a presentation on the process. Included in this presentation should be the uses and importance of job analysis, some of the legal consequences of poor job analysis, and just what a job analysis should in-

clude according to the EEOC guidelines. Your job is to educate some of the senior managers who are not current on these issues. Prepare a brief summary for your presentation from the web site found at:

http://ijoa.org.

CASE

Job Analysis Guides Reorganization at Bethphage

Bethphage, with approximately 3,000 employees, is a nonprofit organization that provides living and rehabilitative services for individuals with developmental disabilities through operating entities in 15 states and several foreign countries. Dr. David Jacox, CEO, and the Board of Directors identified that due to continuing growth the structure of the organization needed to be reexamined. Previously Bethphage had the parent corporation serving as headquarters and providing corporate functions. Then there were four regional corporations throughout the United States and internationally, each with its own board of directors. Concern about coordination of efforts and the legal issues associated with having so many "governing" bodies led to a need for an organizational restructuring.

Job analysis efforts tied to HR activities provided key information for the parent company board and senior managers throughout all entities. The process of changing Bethphage's organization structure took several years and was done in several phases. Three years ago, Bethphage took a comprehensive look at all jobs. To provide Bethphage's Board, Dr. Jacox, and senior managers with an understanding of the jobs in the organization, a job analysis of all jobs and entities was required.

Raul Saldivar, Senior Vice-President of Human Resources, and a committee of managers and executive directors from throughout Bethphage guided the comprehensive look at all jobs in the firm. Like many organizations, Bethphage had a small HR staff that was busy with many other HR activities. Consequently, Saldivar gave the responsibility for conducting the job analyses and preparing the job descriptions and specifications to Kelli Jorgensen, Bethphage's Compensation and Benefits Manager.

Jorgensen developed an extensive 12-page job analysis questionnaire tailored to the various job functions common throughout Bethphage. Then questionnaires were distributed to all employees in all locations. In spite of grumbling from some employees about the questionnaire length, over 90% of the ques-

tionnaires were returned within the allotted period to the appropriate departmental and agency managers for review. They were then sent to Jorgensen and the HR staff. At that point several HR interns from a local university began the arduous task of writing approximately 300 job descriptions and specifications. Once draft descriptions were available, Jorgensen coordinated their review by the appropriate managers and team leaders. Then the drafts were revised, reviewed by the compensation committee, and prepared for use in developing a coordinated compensation system. The entire process of conducting the job analysis and developing final job descriptions and specifications took four months of intensive effort. The process of developing the compensation and performance appraisal systems took another nine months, and the refinement and implementation of all components of the "new and improved" HR activities took over a year.

Once the compensation system had been installed for most of the jobs below the senior management level, the next phase of reorganization proceeded two years later. Bethphage redefined its executive structure, beginning by establishing one Board of Directors for the entire organization and dissolving the separate regional corporations. A revised management structure was created by the addition of a Senior Vice-President of Operations, Linda Timmons, to whom all regional directors report. The structural reorganization affected only about 15–20 jobs at the managerial level; those jobs were analyzed and redesigned before developing new job descriptions, compensation groupings, and ranges.

Now that all phases of the reorganization have been completed, Saldivar and Jorgensen have established procedures so that all jobs are reviewed each year and the compensation structures are updated. Several beneficial outcomes are based on the comprehensive job analysis developed by Bethphage:

- The HR department has been able to use the job analysis process for developing job descriptions for new jobs.
- Bethphage's new compensation program enables the HR department to ensure a more equitable system of pay increases and to provide a more accurate method for developing pay structures and determining pay levels.
- Over the past few years, Bethphage also has provided managers with a better system for conducting performance evaluations to ensure that they are promptly and accurately completed, and that a pay-for-performance system is developed and used.

As a result of all these activities managers throughout Bethphage are now using the HR department on a consultative basis for organizational decisions of all types. The job analysis activities were the foundation for all of the actions taken by Bethphage.²⁹

Questions

- 1. Discuss why job analysis was an essential part of the corporate change process at Bethphage.
- 2. How does the process described in the case illustrate the linkage between job analysis and other HR activities?

Notes

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