CHAPTER 3

Job Analysis

CHAPTER OUTLINE

Some Terminology
Approaches to Job Analysis
Job-Analytic Methods
Task-Oriented Techniques
Worker-Oriented Techniques

PRACTITIONER FORUM: John F. Binning
Advances and Issues in Job Analysis Practice and Research

Defining the Job: Descriptions and Specifications
Competency Modeling

I/O TODAY The Future of Job Analysis

The Many Purposes of Job Analysis
Job Classification
Criterion Development and Performance Appraisal
Selection and Placement
Job Design and Redesign
Training

Job Evaluation
Point System
Comparable Worth

Summary

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The second part of this book centers on industrial psychology, or what has been traditionally called personnel psychology. Before discussing the major applications of industrial psychology, you must first have an understanding of the foundation for virtually all of this work—job analysis, the focus of this chapter. Employees get evaluated at work all the time. Think about the person who serves you in your favorite restaurant; she gets evaluated by her boss in various ways, but that evaluation can't be effectively done without the boss and the server knowing the job. That's where the job analysis comes in. Imagine trying to evaluate someone’s performance without knowing what the job or what the outcomes of the work are intended to be. Now think about your first job, even as a babysitter or fast-food employee—picture someone appraising your performance without knowing the details of the job for which you were hired.

Unfortunately, job analysis is often taken for granted by I/O researchers and practitioners, but in this chapter I argue that it is the most important building block for industrial psychology. In order to develop predictors to select and place employees in appropriate jobs, to identify criteria used to evaluate employees’ effectiveness, and to identify remedial training needs of particular employees, we must first understand the job. We gain this thorough and comprehensive understanding of jobs through job analysis.

Doing performance appraisals without such knowledge would be like cooking a dish without knowing the ingredients, how to prepare them, or how the dish is...
supposed to taste. The job analysis provides the recipe—information that is integral to everything else that follows in industrial psychology. Figure 3.1 illustrates how job analysis relates to the major human resource (HR) functions that will be covered in this section of the text. Throughout this chapter we will talk about the three major products of the job analysis: the job evaluation that is used in setting pay levels in organizations, the job description that relates to what is actually done on the job, and the job specifications that identify the skills that folks need to be able to do the job effectively.

**SOME TERMINOLOGY**

**Job analysis** is the process of defining a job in terms of its component tasks or duties and the knowledge or skills required to perform them. Job analysis is the basis for the solution to any human resource problem (Brannick, Levine, & Morgeson, 2007). Before discussing approaches to job analysis, we must familiarize ourselves with some terms that have very specific meanings within this domain. First in the list are elements. An **element** is the smallest unit of work activity, such as pressing a button to start a machine or entering a line of code for a computer program. Multiple elements join together to form a **task**, commonly defined as the activity of work that is performed to achieve a specific objective. For instance, among the necessary elements involved in a cab driver taking his passenger to her destination are turning the key, shifting the transmission into “drive,” and pressing the accelerator. Collectively, these elements form a task that is the operation of the vehicle. The tasks performed by an individual in an organization define that person’s **position**. A **job** is a collection of positions similar enough to one another to share a common job title. **KSAOs** are the knowledge, skills, abilities, and other characteristics that are required for successful job performance (Primoff & Eyde, 1988). They are very important in I/O psychology because they are the basis for much of the work done in employee selection.
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(see Chapters 6 and 7). In short, organizations prefer to hire those employees who possess KSAOs that are likely to make them successful performers. Indeed, this is largely what selection and placement in organizations are all about.

To recap here: The most basic level of work activity is made up of the elements of work, which combine to form tasks, which in turn constitute one’s position in the organization; similarly defined positions are what we term a job (see Figure 3.2). Of course, we should be careful to avoid confusing the job and the position with the individuals who occupy them (Harvey, 1991). In other words, job analysis should be focused not on the person who holds the job or occupies the position but, rather, on the job or position itself.

Most procedures in I/O psychology can be conducted in various ways. Job analysis is no exception. Whatever the approach, however, the job analyst needs to consider the purpose of the job analysis when deciding on a strategy. One approach may be more beneficial for a given purpose than a different approach. In this section and the one to follow, we will examine a couple of general perspectives taken in the area of job analysis as well as some specific ways in which job analysis data can be collected.

The traditional classification espoused by most job analysis experts over the years categorizes job analysis methods as either task-oriented or worker-oriented (McCormick, 1976). Task-oriented techniques focus on describing the various tasks that are performed on the job. Worker-oriented techniques examine broad human behaviors involved in work activities (Gatewood & Feild, 2001). Unlike task-oriented approaches, which focus on very specific levels of tasks, worker-oriented job analyses focus broadly on general aspects of the job, such as the physical, interpersonal, and mental factors necessary for completion of the job and the related worker attributes. In fact, a review and analysis in this area also suggests a third category—hybrid methods. These approaches attempt to gather information about the work and the worker at the same time (Brannick et al., 2007). The distinction between the two traditional categories is not always clear; some job-analytic techniques cross over into the other category (Sackett & Laczo, 2003). Furthermore, one approach is not necessarily better than the other; as a job analyst, you can choose a hybrid approach or any combination of pieces from different job-analytic techniques (Brannick et al., 2007) for whatever purpose is being served by your job analysis.

For simplicity’s sake, this chapter largely employs the traditional task-oriented and worker-oriented distinction, but it also presents the important results of a hybrid approach employed in the development of the Occupational Information Network (O*NET). There are many job analytic techniques, but we will only cover a sampling of the most used approaches. Certain techniques might fit better with particular jobs.
Task-Oriented Techniques

Task-oriented techniques for conducting job analyses tend to be focused on tasks. (Recall our previous definition of a task as the activity of work that is performed to achieve a specific objective.) One task-oriented approach is called the Task Inventory Approach, in which task statements are generated by experts who are familiar with the jobs—subject matter experts (SMEs). These experts may be incumbents—that is, people who are currently occupying the job of interest. Or they may be individuals who have expertise or knowledge about the job for some other reason, such as being a supervisor of individuals in that job or an I/O psychologist who has gathered expertise through his or her work. Once a list of task statements has been generated, this list, which can include hundreds of task statements, is usually administered to incumbents, who put a check next to those statements that describe a task that they do on their job. A sample task inventory for the job of college professor is provided in Figure 3.3. The task statements that are checked as being done on the job are also often rated as to the importance or criticality of the task to the job and the relative

<table>
<thead>
<tr>
<th>Task Statements</th>
<th>Is task done on this job?</th>
<th>Importance of task to job</th>
<th>Relative to other tasks performed on the job, how much time is spent on each of the following tasks?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes or No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Develops written assignments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Grades exams</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Meets with students individually to help them understand things</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Lectures to groups of students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Designs research studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Collects data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Mentors and advises students regarding career issues</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3.3** Task Inventory for College Professor
time spent on the job doing each task. Together, these pieces of information can provide a thorough analysis, or picture, of the job.

In Functional Job Analysis (FJA), a highly structured task-oriented approach developed by Sidney Fine many years ago, data are obtained about what tasks a worker does and how those tasks are performed. (For a summary of this technique, see Cronshaw, 2012.) Specifically, a series of task statements are developed that are believed to be relevant for the job in question. Incumbents or SMEs rate each of these statements (which are similar to those shown in Figure 3.3) on a series of dimensions. These dimensions are what set this approach apart from the standard Task Inventory Approach.

A picture of the job is generated when these task statements have been rated with regard to data, people, and things—three factors with which employees in all jobs are assumed to interact. One way to understand a job is to know the extent to which these interactions take place and the complexity of those interactions. This is the focus of FJA. A task focusing largely on data requires the employee to use cognitive resources in handling information, ideas, and facts. Tasks coded along this dimension range from simple comparisons to more complex synthesizing.

The people dimension refers to the extent to which the job requires employees to use interpersonal resources such as understanding, courtesy, and mentoring. Tasks coded along this dimension range from simply taking instructions to more sophisticated behaviors such as mentoring. Finally, a task that is linked to the things scale requires the use of physical resources and includes the use of strength, speed, and coordination. Tasks coded along this dimension range from the simple handling of things to more intricate and precise operations.

In the 1930s, the Department of Labor used FJA to develop the Dictionary of Occupational Titles (DOT), a tool that matches people with jobs. Consisting of narrative descriptions of tasks, duties, and working conditions of about 12,000 jobs, the DOT codes each of these jobs according to the data, people, and things dimensions developed by Fine. The information presented in the DOT is based on years and years
Job-Analysis Methods

of data collected through job analyses. The DOT presents a hierarchical organization of jobs, with nine major occupational clusters at the uppermost level of the hierarchy. Figure 3.4 shows the DOT entry for a faculty member, including labels for the particular parts of the entry. The nine-digit occupational code is important in that it uniquely identifies this particular job. The first three digits classify the job with respect to its occupational category. The next three digits identify where the job is classified with respect to data, people, and things; in this example, the digits 227 indicate that the job is high on both data (analyze) and people (instruct) but low on things (handle). This probably fits your preconceived notion of what faculty members do, which is to spend a great deal of time working with data and people but less time manipulating tools, equipment, and so on. The industry designation in this case is “education.”

The lead statement is always the first sentence of the description itself, followed by a colon. This statement provides the best simple description of the job. The task element statements, which come next, describe with more precision what is done on the job to meet the objectives presented in the lead statement. In other words, college

### DOT Description for Faculty Member

<table>
<thead>
<tr>
<th>Occupational code</th>
<th>Occupational title</th>
<th>Industry designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>090.227-010</td>
<td>FACULTY MEMBER, COLLEGE OR UNIVERSITY (education)</td>
<td>Conducts college or university courses for undergraduate or graduate students:</td>
</tr>
<tr>
<td></td>
<td>Teaches one or more subjects, such as economics, chemistry, law, or medicine, within prescribed curriculum. Prepares and delivers lectures to students. Compiles bibliographies of specialized materials for outside reading assignments. Stimulates class discussions. Compiles, administers, and grades examinations or assigns this work to others. Directs research of other teachers or graduate students working for advanced degrees. Conducts research in particular field of knowledge and publishes findings in professional journals. Performs related duties, such as advising students on academic and vocational curricula and acting as advisor to student organizations. Serves on faculty committee providing professional consulting services to government and industry.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>May be designated according to faculty rank in traditional hierarchy as determined by institution’s estimate of scholarly maturity as Associate Professor (education); Professor (education); or according to rank distinguished by duties assigned or amount of time devoted to academic work as Research Assistant (education); Visiting Professor (education). May teach in two-year college and be designated Teacher, Junior College (education); or in technical institute and be designated Faculty Member, Technical Institute (education). May be designated: Acting Professor (education); Assistant Professor (education); Clinical Instructor (education); Instructor (education); Lecturer (education); Teaching Assistant (education).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GOE: 11.02.01 STRENGTH: L GED: R6 M5 L5 SVP: 8 DLU:81</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3.4** DOT Description for Faculty Member
professors teach subjects, prepare lectures, stimulate class discussion, and so on, in order to conduct college courses. Finally, the “may” items indicate activities that may be done in some organizations by individuals who occupy this job but are not routinely part of this job in most organizations.

The Occupational Information Network (O*NET) About 20 years ago the Department of Labor (DOL) undertook an initiative to replace the DOT, which it viewed as incompatible with the current workplace. This initiative, known as the Occupational Information Network (O*NET), identifies and describes the key components of modern occupations (Occupational Information Network, 2009, January 13) and has replaced the DOT, which has become obsolete as a resource. In contrast to the DOT, the O*NET is not based on FJA; rather, it is based on data gathered in various ways, including an initial review of existing literature in the domains of human performance and occupational analysis. Thus, it is categorized as a hybrid approach because it focuses simultaneously on both the work and the worker. This database of over 950 occupations is now available online (http://onetcenter.org), making it much more accessible than the older DOT. In addition to having data on thousands of jobs, it allows individuals to search for occupations through key words relating to skill requirements, and it is connected to America’s Job Bank and school-to-work initiatives in which schools train students to be better prepared for the workplace and to successfully find employment. The greater ease of access (through the Internet) and its focus on both job and worker characteristics make the O*NET a very useful and attractive tool for organizations and I/O psychologists.

Indeed, the O*NET has widespread implications for the world of work and the practice of I/O psychology. The O*NET database of occupational information is based on the O*NET Content Model, which identifies the structure of information stored in the database. The structure, which is presented in Figure 3.5, involves six classes of information: (1) worker characteristics, such as abilities and interests; (2) worker requirements, such as general knowledge and skills; (3) experience requirements, such as past employment history, training, or licensure; (4) occupational requirements, such as generalized work activities; (5) occupation-specific information, such as technical information particular to a certain job family; and (6) occupational characteristics, such as labor market and social information. The database is quite useful for career management; for organizational functions like selection, training, and development; and for researchers trying to better understand organizational performance. Counselors, students, human resource professionals, and researchers are among those who benefit from this DOL initiative.

Research on the O*NET has started to emerge over the past 10 years. For instance, researchers at the University of Nebraska, Omaha, have developed and tested a web-based job-analytic technique using the O*NET (Reiter-Palmon, Brown, Sandall, Buboltz, & Nimps, 2006). More recent work has been focused on matching Occupational Interest Profiles (OIPs) from the O*NET with interest-based assessments often used in career
An interesting new study has used information from the O*NET to identify the likelihood of experiencing carpal tunnel syndrome based on various hand exposures such as repetitive movements, movement of objects, reliance on hand/finger speed, and so forth (Evanoff, Zeringue, Franzblau, & Dale, 2014).

Task-oriented approaches to job analysis have been criticized as being potentially too narrowly focused on the tasks for a particular job (Harvey, 1991). Critics say it follows that by focusing microscopically on the tasks of a particular job, we rule out the possibility of making a real comparison across jobs because no job is likely to emerge as similar at such a fine-grained level. In other words, we may miss similarities in jobs because of the high level of technological and behavioral specificity of the tasks and thereby fail to detect more abstract similarities across jobs. Worker-oriented approaches to job analysis address this very problem.
Worker-Oriented Techniques

Compared to task-oriented techniques, worker-oriented techniques focus less on the specific tasks done on a job and more on the human characteristics that contribute to successful job performance (Sackett & Laczo, 2003). E. J. McCormick (McCormick, Jeanneret, & Mecham, 1972) provided a very clear distinction between the two types: “The task-oriented concept typically would be reflected by the use of specific task statements. . . . In turn, the worker-oriented concept typically would be reflected by the use of descriptions of reasonably definitive human behaviors of many kinds” (p. 348). Worker-oriented methods are particularly effective for analysts who are comparing multiple jobs because they allow for comparisons to include a focus on KSAOs.

The Job Element Method (JEM) was designed to identify the characteristics of superior workers in a particular job (Primoff & Eyde, 1988). Note that, in this context, the word element refers to general work behaviors, not to the smallest unit of work activity as defined earlier. More specifically, job elements in the JEM refer to the KSAOs we talked about earlier. The JEM’s aim is to directly connect job analysis to the selection context by identifying the KSAOs that are necessary for successful job performance. The procedure is rather simple. First, SMEs are asked to develop a comprehensive list of job elements, as well as subelements or employee characteristics that are more specific than the job elements. For instance, one element for a college professor might be “ability to communicate clearly,” and subelements within this element might include “can express ideas in an interesting manner to large groups of people” and “able to explain complex issues to students in a one-on-one environment.” Once the final list of elements and subelements has been generated, the SMEs are instructed to provide work examples of each. Together, the elements, subelements, and work examples provide a complete picture of the job.

A common criticism of this approach is that the JEM ignores the specific job tasks, making it difficult to demonstrate that a particular element is related to the job (Gatewood & Feild, 2001)—in other words, a JEM approach may identify “ability to communicate clearly” as an important element, but this isn’t a specific job task and may leave us wondering what particular task is important and how the element is related to it. This criticism is consistent with other researchers’ (e.g., Harvey, 1991) concerns that job analysis needs to remain focused on observables instead of inferring hypothetical worker traits or abilities. However, much of what we do in psychology involves inferences of some sort, so excluding them seems unreasonable. We can resolve this paradox by realizing that an important focus of job analysis is to ensure that when inferences are drawn, they are based on observable work-related data. The job analyst can choose to focus only on work activities or only on worker attributes or on both, which is consistent with the hybrid approach discussed earlier.

Perhaps the best-known job analysis method is the Position Analysis Questionnaire (PAQ), a standardized instrument that focuses on general work behaviors (McCormick et al., 1972). The PAQ consists of 195 items or elements, 187 of which describe general work behaviors, work conditions, and job characteristics. The incumbent employee or SME decides whether each item pertains to the job in question; each one that does
is evaluated in terms of various dimensions, such as the extent to which it is used on the job, its importance to the job, and the amount of time on the job that is spent on this behavior. These 187 job elements are organized along six dimensions: information input, mental processes, work output, relationships with other persons, job context, and other job characteristics. Table 3.1 lists these six dimensions, along with two examples of each. A profile of the job emerges as a result of this rather large data collection effort.
Despite its historically widespread use, the PAQ has been the target of at least three major criticisms. First, some data indicate that the reading level of the PAQ is at least college level, if not graduate level (Ash & Edgell, 1975). This is a problem because it limits who can competently do the job analysis and rules out the less educated incumbents in many jobs. Second, the PAQ does not seem well suited for managerial jobs; and, third, the items themselves are too abstract (Harvey, 1993). These criticisms have led other job analysis researchers and practitioners to develop alternative worker-oriented instruments.

The Common-Metric Questionnaire (CMQ), developed by Harvey (1993), is one such instrument. Two basic beliefs about worker-oriented approaches to job analysis are reflected in the CMQ: (1) The instrument must comprehensively describe work activities using a common set of items written at a more behaviorally abstract level than the typical task statements, and (2) the rating scale must have the same meaning across all jobs. The focus here is on describing jobs at a level that allows the descriptions to be compared across jobs, as opposed to describing them so abstractly that differences across jobs are lost.

Think back to such task-oriented approaches as the Task Inventory Approach and Functional Job Analysis. In these cases, the focus is on extremely specific tasks conducted on the job, making it very difficult to uncover any similarities across jobs. But the worker-oriented approaches, best exemplified by the PAQ, may be so abstract as to result in the emergence of dissimilar jobs with very similar profiles. For instance, what jobs do you think might emerge with a profile similar to that of

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information input</td>
<td>Where and how does the worker get the information he uses in performing his job?</td>
<td>Use of written materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Near-visual differentiation</td>
</tr>
<tr>
<td>Mental processes</td>
<td>What reasoning, decision-making, planning, and information-processing activities are involved in performing the job?</td>
<td>Level of reasoning in problem solving</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coding/decoding</td>
</tr>
<tr>
<td>Work output</td>
<td>What physical activities does the worker perform, and what tools does she use?</td>
<td>Use of keyboard devices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assembling/disassembling</td>
</tr>
<tr>
<td>Relationships with other persons</td>
<td>What relationships with other people are required in performing the job?</td>
<td>Instructing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contacts with public, customers</td>
</tr>
<tr>
<td>Job context</td>
<td>In what physical or social contexts is the work performed?</td>
<td>High temperature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpersonal conflict situations</td>
</tr>
<tr>
<td>Other job characteristics</td>
<td>What activities, conditions, or characteristics other than those described above are relevant to the job?</td>
<td>Specified work pace</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount of job structure</td>
</tr>
</tbody>
</table>

Source: McCormick (1979)
police officer? You probably listed things like firefighter, prison guard, and private detective. However, research indicates that one answer is the job of homemaker (Arvey & Begalla, 1975). This is probably not one of the jobs you had on your list, but the profiles tend to be similar because both police officers and homemakers are often involved in handling emergencies and troubleshooting. However, I would argue that if the PAQ elements were a little less abstract, these jobs would not emerge as so similar.

The CMQ is computer-based, consisting of 2,077 items that are organized along 80 dimensions. Obviously, one issue with respect to this instrument is its length, but the author reports that over 90% of those who have used the CMQ completed it in less than three hours (Harvey, 1993). A sample question asks whether a particular job involves a skill that requires instruction at a college or university, along with the response scale for that item; the response scale displays the criticality of this particular skill. The items for all 80 dimensions are set up in a similar way. Its items are more behaviorally specific than those included on the PAQ, its reading level is much lower, and it is relevant for both managerial and nonmanagerial jobs.

Advances and Issues in Job Analysis Practice and Research

Technology has played a role in the development of job analyses. For instance, researchers have demonstrated how to use the Internet to generate job-analytic information via the O*NET (Reiter-Palmon et al., 2006). In their work, they emphasized the use of the web to gather and organize job-analytic information with minimal intervention and guidance from a consultant. Other researchers have worked to develop metrics, or quantitative rules of thumb, to help with analyzing and using the mass of job analysis data resulting from technological innovations like the O*NET (McEntire, Dailey, Osburn, & Mumford, 2006). They have developed metrics that would allow organizations to make better use of the existing O*NET data. These metrics, or mathematical formulae, can be used with the O*NET database to answer specific questions in the areas of selection, training, and development, for example, who is the best employee for a particular promotion. Given the ever-increasing use of the O*NET database in organizational analysis, the development and use of related metrics hold even greater potential for organizations.

There has also been considerable advancement regarding issues of SME ratings. For instance, two studies have examined the role of personality and motivation in SME job analysis ratings. One investigation examined the potential role of the self-serving bias in affecting job analysis ratings (Cucina, Vasilopoulos, & Sehgal, 2005).
The authors argued that SMEs may engage in self-serving behavior when asked to identify which traits are important for the jobs. This would suggest that an SME might weight intelligence, flexibility, and creative thinking as important characteristics for successful employees in their job even though others might more objectively not view these characteristics as terribly important.

In a more sophisticated study testing self-presentation in SME ratings, it was found that SME incumbents tended to endorse ability statements as important for job effectiveness even when those abilities were really nonessential (Morgeson, Delaney-Klinger, Mayfield, Ferrara, & Campion, 2004). Individuals were presenting themselves in a positive light to suggest that, in order to do the job that they currently did, one needed to have a plethora of abilities. Individuals may do this unconsciously and without any real plan to alter the objective job analysis, but the result is job analysis data that are inaccurate—and the implications and potential detrimental effects to the organization are very real. For instance, requiring an ability for a particular job because the job analysis identified it as important makes good sense; however, if the ability really isn’t essential for the job, it may lead to many competent individuals not being hired for lack of this ability.

Other researchers found that one’s attitude toward one’s job may bias one’s job analysis ratings; this was especially the case for tasks that were objectively coded as discretionary (Conte, Dean, Ringenbach, Moran, & Landy, 2005). By “discretionary,” the authors mean tasks like “join and participate in community and social organizations,” which may not be required as often as other tasks. It appears that SMEs (in this case, incumbents) allow their attitudes about their own jobs as well as the extent to which the task is required to impact job analysis ratings. Further, a recent examination of O*NET data that focused on the source of the job analysis ratings concludes that using both job analytic experts and incumbents to provide job data is the best approach because each may bring meaningful and useful information to the situation (Wamslet, Natali, & Campbell, 2012).

Another recent study argues that the appearance of unreliable competency ratings made by incumbents is due to “job crafting” (Lievens, Sanchez, Bartram, & Brown, 2010). For instance, in complex jobs that allow incumbents to make choices that allow them more creativity and flexibility, there are more opportunities for these incumbents to exercise discretion and “craft” their jobs in particular ways. Because employees can tweak their jobs, resulting in something that looks quite different from the way the jobs were originally defined, incumbent ratings of competencies may not agree with the competencies from the original job analysis. Results found that 25% of the differences in the two sets of competency ratings appear to be meaningful differences that emerged because of the job crafting (Lievens et al., 2010). That is, incumbents don’t see their jobs as the same—even though the jobs were originally defined as the same—because they have crafted their job to be different based on their skills and weaknesses. Variance in incumbent ratings may not be error at all, but rather a reflection of how incumbents view and craft their own jobs. Therefore, organizations might be wise to encourage employees to craft jobs in ways that are consistent with the strategic plan of the organization.

A newer perspective on job analysis is taken by some recent researchers who argue that we need new types of job analyses. Traditional job analyses assume stable
jobs, but jobs have a tendency to change and morph into different-looking jobs, leading some to argue for a novel approach to job analysis (Singh, 2008). With the changing of environments in North American organizations, we need more strategic job-analytic approaches in which experts consider not just the current status of jobs but also how jobs are likely to change and evolve in the future. **Strategic job analysis** is an intentional, systematic process of collecting current and future work-related aspects of a job within the organization’s strategic context (Singh, 2008). Although not much has been written about this approach yet, it still represents a potential trend in the discipline. For more information on the concept of strategic job analysis, see J. S. Shippmann’s 2013 book *Strategic Job Modeling: Working at the Core of Integrated Human Resources* (Psychology Press).

### DEFINING THE JOB: DESCRIPTIONS AND SPECIFICATIONS

The basic goal of job analysis is to define the job in terms of its component parts. As noted earlier, job analysis yields three major outcomes: job description, job specifications, and job evaluation. The first of these will be discussed in a separate section. The second outcome, **job description**, is a written statement of what the jobholders do, how they do it, and why they do it (Cascio, 1998). It presents the *task requirements* of the job. The job description typically includes the job title and descriptions of the tasks and machinery involved, and it sometimes includes information about the working conditions and physical environment, social environment, and conditions of employment. Think about the job of college professor and ask yourself what college professors do, how they do it, and why they do it. Upon answering those questions, you might arrive at the following job description, which looks very similar to the DOT entry for faculty member, presented earlier in Figure 3.4:

College Professor: Teaches college or university courses within a particular curriculum (e.g., psychology, mathematics, history) to classes of undergraduate and graduate students. Prepares and delivers lectures that conform to a predetermined course outline. Stimulates class discussions in smaller informal groups. Evaluates students’ knowledge and achievement through reading, writing, and other assignments as well as through examinations that are graded so as to provide feedback. Conducts research in his or her area of expertise and disseminates the findings of that research in appropriate outlets (e.g., scientific journals, books) to further the knowledge in the field. Provides mentoring and advising to students who are seeking academic degrees. Serves on university committees that serve the interests of students, the university, the government, and the community.
The third outcome derived from the job analysis is a description of the people requirements that are reflected in the job specifications (often called job specs). The job specifications delineate the KSAOs deemed necessary to perform the job. Let’s return to our college professor example. We’ve generated a job description, but what would comprise the job specifications or KSAOs necessary to be a successful college professor? Here is one such list:

- Reading and writing at the post-college level
- Advanced knowledge verified by an advanced degree (master’s or doctorate)
- Willingness or desire to work with others
- Ability to communicate clearly
- Ability to communicate in an interesting manner
- Methodological and statistical skills
- Mentoring and advising skills
- A deep knowledge/understanding of one’s own discipline

One way to view the relationships among job analysis, job description, and job specifications is to view the job description as stemming directly from the job analysis and the job specifications as being inferred indirectly from the job analysis through the job description. (Look back at Figure 3.1 for this organizational scheme.) For instance, we might use the JEM to develop a picture of the job and to write a job description (like the preceding one) that includes mentoring and advising students who are seeking academic degrees. From the job analysis and this job description, we might infer that successful college professors must have mentoring and advising skills. In short, the job analysis, job description, and job specifications are necessarily intertwined. As you may recall, many experts argue that job analysis should be focused only on observables; inferences about KSAOs from the job analysis should be avoided (Harvey, 1991).

Of course, one of the major purposes of job analysis is to identify KSAOs that can be used in the selection of employees. This process is covered in Chapter 6, but it’s worth noting here that even if one limits job analysis to observables that result in a job description, the job analysis and job description must be used to infer job specifications that are of paramount importance for selection and placement. The bottom line is that, as I/O psychologists, we are not simply focused on describing the job; indeed, our longer-term goal is the use of this job analysis information for selection, placement, performance appraisal, and other HR functions.

**Competency Modeling**

In Chapter 1, I defined competencies as the skills, behaviors, and capabilities that allow employees to perform specific functions. Obviously, this definition is very similar to the one I have specified for KSAOs in this chapter. In fact, many experts consider competencies and KSAOs to be the same thing (e.g., Schippmann et al., 2000). Another way to think about this relationship, though, is to view competencies as sets or groupings of specific KSAOs that allow employees to perform specific organizational functions (Reilly & McGourty, 1998). For example, interpersonal communication may be considered a competency. That competency, in turn, may
consist of several KSAOs such as (1) the knowledge of different communication styles, (2) the skill to communicate positive and negative feedback to individuals, and (3) the ability to understand what individuals need to hear from their supervisor to increase their motivation.

*Competency modeling* may parallel job analysis in that both involve describing jobs in a careful and methodical way so that HR practices such as selection and placement can be based on this information (Schippmann et al., 2000). Differences have been observed as well. For example, competency modeling is believed to be more worker-oriented and job analysis more task-oriented (Schippmann et al., 2000).

### I/O Today

**The Future of Job Analysis**

Although job analysis has historically been a key step in developing solid I/O practices, many researchers and practitioners have suggested that this approach is outdated given the ways that jobs have changed over the past few decades. Technological innovations lead to products that need rapid updates, globalization has increased the pace of competition, and organizations need to be flexible to meet customer needs. As a result, workers are less likely to be hired to do a specific job for the rest of their career; instead, a valuable worker will be able to grow and change with the needs of the company. This, in turn, means that a job analysis can quickly become obsolete.

One potential solution to this problem is competency modeling. In practical terms, competency modeling focuses more on identifying people who have a broad set of capabilities that will help them to adapt as the job changes. In other words, for the role of a retail manager, a job analysis might indicate that the individual must know general management principles and have good communication skills. Competency modeling, meanwhile, might indicate that the manager has a competency in “engaging leadership”—a general competency that might include specific skills such as communication, critical thinking, and charisma. Often, organizations will use competencies such as “mentoring and teaching” or “strategic thinking” at all levels of the organization. A sales representative’s version of “mentoring and teaching” might look different from that of a manager’s—she might help train new employees or provide in-the-moment feedback to her peers—but arguably, a sales representative who can demonstrate these skills has the potential to one day be an effective manager.

This example helps to illustrate both the benefits and difficulties of competency models. Having broad competencies such as “mentoring and teaching” can provide an organization with a consistent language that can be used with all employees to discuss expectations and performance. Competencies also make it easier to adapt these expectations as the organization changes. However, because competencies tend to be umbrella terms that encompass many different KSAOs, they are not as specific and detailed as a traditional job analysis would be. So while a competency might be more flexible and parsimonious, it also lacks specificity.

Despite these shortcomings, competency modeling is becoming more common among organizations. Researchers have also found that consumers such as HR managers and CEOs are much more interested in adopting competency models rather than conducting numerous job analyses. The challenge for I/O psychologists will be to ensure that these competency models are developed with just as much care and rigor as a job analysis would be.

**Discussion Questions**

1. What situations might lead you to recommend that an organization adopt a competency model approach over a more traditional job analysis approach?
2. How could you use principles for job analysis to help ensure you have created a high-quality competency model?
3. In his 2012 article in *Human Resource Development Review*, Gregory Stevens suggests that using solid research methodology and avoiding “buzzwords” are two possible best practices that practitioners can follow. What other “best practices” might be important to keep in mind if an organization chooses to use competency modeling?
Competency modeling is usually much broader in focus because it tries to build a full framework for HR functioning by defining the responsibilities, skills, knowledge, abilities, personal attributes, and business challenges that are relevant for a particular organization (see Sanchez & Levine, 2009 and Stevens, 2012 for a thorough comparison of the two approaches). Although distinctions exist between the job-analytic approach to identifying KSAOs and the competency modeling approach to building competencies, the two terms are similar enough for our purposes that I will use them interchangeably throughout the text. Please understand, however, that job analysis tends to be a bit more methodologically rigorous, and competency modeling tends to consider organizational strategy a bit more and takes a broader look at the organization.

THE MANY PURPOSES OF JOB ANALYSIS

As I suggested earlier, job analysis is the foundation for much of industrial psychology. There are two reasons for this. First, a job analysis is necessary to the success of human resource functions. In other words, without a job analysis, many of the HR functions in organizations would be carried out ineffectively. Second, an increased emphasis on laws associated with the workplace has made it more desirable for companies to use job analyses as their first line of defense when accused of an unfair practice. Table 3.2 presents two cases that demonstrate the need for adequate job analysis to prevent unfair or discriminatory hiring and promotion practices. We will discuss legal issues in more depth in the next few chapters; for now, let’s consider job classification, an important purpose served by job analysis.

<table>
<thead>
<tr>
<th>Case Description</th>
<th>Legal Ruling</th>
</tr>
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<tbody>
<tr>
<td>Griggs v. Duke Power (1971): Among other tests/assessments, Duke Power was using measures of cognitive ability (Bennett and Wonderlic) to make hiring decisions into low-level laborer positions. This resulted in adverse impact against blacks who were hired at a much lower rate than whites. Though the defendant had no job analysis data linking cognitive ability to job performance, they argued that they used a professionally developed test and didn’t mean to discriminate against blacks.</td>
<td>The court found the lack of intent to discriminate irrelevant and ruled that tests, even if professionally developed, must be job-related. The burden of proof of demonstrating the job relatedness (business necessity) of the tests/assessments falls on the defendant and the court strongly supported the use of job analysis in this regard.</td>
</tr>
<tr>
<td>Albermarle Paper Company v. Moody (1975): The company was using the same two cognitive ability measures as Griggs, but had not done a validation study until just prior to trial and then did it poorly without a job analysis.</td>
<td>The court ruled that a test validated in one job may be used in another, but only if it is clearly demonstrated to be job-related for the current job. Further, they ruled for the plaintiff because Albermarle had done no analysis of the attributes of the jobs or the skills needed to perform the job.</td>
</tr>
</tbody>
</table>
Job Classification

Jobs are often categorized in terms of job families, each of which can then be used as a level of analysis for various personnel decisions. For instance, Word Processing Specialist I, Word Processing Specialist II, and Data Technician I may all be declared parts of a job family called “computer support staff” if the job analyses conducted on each job demonstrated enough overlap to warrant such a designation. If they did, all jobs within this job family would operate under the same benefits package, including number of allowable sick days, number of vacation days, and amount of health benefits. In addition, if a company’s 2,000 jobs can be grouped into 100 job families, many of the company’s personnel practices will be simplified.

Criterion Development and Performance Appraisal

Performance appraisal is certainly one of the most frequent uses of job analysis data. As we will discuss in Chapters 4 and 5, performance appraisal is one of the most important functions performed by human resource departments. Of course, to conduct a useful and fair performance appraisal, organizations must have clearly stipulated goals, objectives, and criteria on which employees can be evaluated. These criteria should come directly from the job analysis. For instance, if college professors are going to be evaluated annually with respect to their success in teaching, the college must be able to demonstrate that teaching is an important part of a professor’s job. (This should be an easy thing to do, but it still needs to be verified by the job analysis.) Suppose that I am evaluated based on the reactions of my students to my classes (and, in fact, I am evaluated in this way every semester), but the job analysis done by my school does not demonstrate that teaching is an integral part of my job. This would be neither fair nor appropriate. Here, of course, I would argue that the problem is not with the criteria but with the job analysis, which did not identify an important element of the job. This example, too, demonstrates the importance of doing a thorough and accurate job analysis because the job analysis is used in important ways.

Selection and Placement

There is perhaps no area of industrial psychology for which job analysis is more important than selection and placement (see Chapters 6 and 7). Indeed, a major purpose of job analysis is to help industrial psychologists identify the KSAOs that are necessary for successful performance on the job.

Let’s turn to the world of construction for an example. In doing a job analysis for the job of an architect, we conclude that spatial skills and knowledge of some basic engineering principles are required. Therefore, when screening applicants, we look for individuals who seem to be knowledgeable and skilled in these areas and hire them. This scenario makes sense, but it may also be too simplistic. For instance, we might ignore the part of our job analysis indicating that architects also need to have some
drafting (or drawing) skills because they need to be able to develop plans for new buildings. Given this flaw in our process, we may hire knowledgeable and spatially skilled individuals who do not have the drafting skills to put their ideas on paper. In short, because we weren’t careful in conducting and interpreting our job analysis, we may have made costly personnel decisions. Does this cost our company money? It sure does, and it also may cost individuals their jobs.

**Job Design and Redesign**

Job analysis may sometimes uncover problems with a particular job that the organization may want to address. For instance, interviews with incumbents may reveal that some of the current equipment used on the job needs to be updated because it cannot keep pace with other, newer equipment during the production process. A company may use this information to purchase newer equipment or to redesign the job so that the current equipment will work more efficiently within the process. Alternatively, PAQ or CMQ data may indicate that employees spend far too much time on a particular facet of the job, information that the company may use to initiate a job redesign intervention to make the work process more efficient. We can see that in this area of I/O psychology, job analyses are often used to make alterations in the work process with the intent of making the company run more efficiently.

Morgeson and Humphrey (2006) developed the Work Design Questionnaire (WDQ) as a comprehensive measure of job design to replace the incomplete and narrow existing measures. The WDQ consists of 77 items along 21 dimensions of work characteristics. The 21 work characteristics can be organized into: (1) task characteristics such as autonomy and task variety; (2) knowledge characteristics that reflect traditional KSAOs; (3) social characteristics that include social support and feedback from others; and (4) contextual characteristics, composed of physical demands and work conditions. Results suggest that the WDQ is a solid measure of work design that relates appropriately to various elements of the O*NET database—it has become a very popular measure for those doing research on job design.

**Training**

In many instances, employees are hired into an organization without all the KSAOs necessary to do every facet of their jobs. Sometimes even highly skilled new employees require training to learn the procedures used in a particular organization (see Chapter 8). Job analysis can be used to identify areas in which training programs need to be developed. Ideally, job analysis should identify what work behaviors occur on the job so that the human resource department can develop training programs around these general and specific work behaviors. In addition, given that jobs are dynamic—in that they change considerably with changes in technology, in the workforce, and in economic demands—job analysis can be used to identify the extent to which job behaviors have changed to match the times. This information can then be used to develop and target training programs for existing employees.
Although we like to think that our job is as important to our particular organization as anyone else’s, the reality is that some jobs are more important than others. **Job evaluation** is a technique based on job analysis that attempts to determine the value or worth of particular jobs to organizations so that salaries can be set accordingly. Most of us would agree that the clerk who works in the hospital restaurant makes a less important contribution to the organization than the chief surgeon. Job evaluation is about trying to quantify differences of this sort so that salaries can be set in a fair manner based on the value or contribution of jobs. Because compensation is often the largest budget item in many companies, it has an important effect on profits and, therefore, attracts a good deal of attention from organizational administrators and HR practitioners.

**Point System**

There are various approaches to job evaluation, but I will focus on the one most frequently used: the **point system**. This approach involves estimating the value of jobs based on points assigned to various predetermined dimensions (Milkovich & Newman, 1984). Among the most common of these dimensions—referred to as **compensable factors** to indicate that employees are compensated based on them—are effort, skill, responsibility, and working conditions. The idea here is that jobs requiring more effort and skill, involving more responsibility, and taking place in less desirable working conditions (e.g., outdoors in subzero temperatures versus climate-controlled office buildings) should be more highly compensated than jobs that don’t have these characteristics.

The steps involved in conducting a point-system job evaluation are rather simple. First, managers or some other group of SMEs use a job analysis to identify the compensable factors. Second, each job is assigned points by a compensation committee with respect to the degree that each has these compensable factors. Third, the points assigned to each job are summed across the factors to arrive at a total score. Fourth, these points are then used to assign wages, with the goal being to maintain equity so that jobs of greater value are better compensated than those of lesser value. Finally, the scores can be plotted against the current wage for existing jobs, providing a clear picture of whether a job is currently undercompensated, overcompensated, or adequately compensated.

**Figure 3.6** shows an example of this kind of plot to determine how jobs within the organization stack up against each other in terms of the factors and compensation. The line marked “perfect wage equity” represents the ideal situation whereby the number of job evaluation points is exactly proportional to the level of compensation. The line marked “imperfect wage equity,” on the other hand, is more realistic but much less desirable. As you can see, jobs evaluated at 125 points are overcompensated at $8.75 per hour rather than the expected $6.25 per hour; jobs evaluated at 350 points are undercompensated at $13.75 per hour rather than the expected $17.50 per hour.
Clearly, there are compensation issues to be resolved in this particular organization: Some positions are compensated at a higher rate and others at a lower rate than the job evaluation indicates they should be. Yet once organizations have accumulated and examined such data, they can begin to develop ways to bring wages back in line. For instance, jobs that are undercompensated can be targeted for wage increases, whereas those that are overcompensated can be targeted for wage freezes.

So far, this sounds very scientific, and in some ways it is. But as is often the case with I/O psychology, when we move into the applied arena, things are not quite so simple. In the actual labor market, for instance, individuals in jobs with job evaluation scores between 100 and 200 points sometimes have to be “overpaid”; in other words, there are so few people who will take these lower-level jobs that, to be competitive with other companies, we have to pay higher wages for these jobs than our job evaluation tells us they are worth. At the same time, there may be so many managers interested in upper-level jobs that we can save money by “underpaying” them. Retention of good workers is yet another important issue: We will probably pay what we think is necessary to keep them on the job. In a practical sense, then, companies are likely to use not only job analysis and job evaluation information but also labor market information when setting compensation levels for jobs.
Comparable Worth

It is a long-established finding that women are paid considerably less than men for similar work. In fact, when a field has become dominated by women, as happened with the administrative assistant profession in the 20th century (for a review, see Lowe, 1987), the rate of pay has decreased. As of 2014, there was a difference of 21.7% between men’s and women’s wages (Hegewisch & Hartman, 2014; Institute for Women’s Policy Research, 2014). This means that, on average, women earn about 78% of what men earn, and this figure has been fairly stable since the mid-1990s, raising concerns about whether women’s compensation will ever catch up to men’s. There are some projections that suggest the gap may be completely reduced in 2058, but many question whether that is likely (IWPR, 2014). The wage gap is smaller, but still sizable (18%), when we consider salaries one year after graduation (Corbett, & Hill, 2012). A survey of almost 800 Harvard graduates of the class of 2014 reveals some interesting data (Robbins, 2014). First, about 50% of the women graduates received starting salaries under $50,000, while only 28% of men started below $50,000. Second, while only a little under 4% of women
accepted positions with starting salaries of over $90,000, about 20% of men did! Even among our most elite institutions we find substantial pay differences. Further, the wage gap does shrink in some industries and when we control for things like hours worked, job choice, etc., but it doesn’t disappear; for instance, female administrative assistants earn only 83% of what male administrative assistants earn (Fitzpatrick, 2010).

This issue is a troublesome one, as employees who are doing the same job should be paid similarly regardless of their gender. In fact, the Equal Pay Act of 1963 stipulates that men and women who do work that is equal must be compensated similarly. The word equal has been interpreted to mean jobs that are the same. But this act does not address the broader issue of gender differences in compensation across dissimilar jobs. For instance, should computer technicians (who are predominantly male) be paid more than executive secretaries (who are predominantly female)? Granted, these jobs aren’t the same—but are they equal in terms of their value to the organization? And if they are equal in this sense, shouldn’t they be compensated similarly? The Equal Pay Act and the recent Ledbetter Fair Pay Act are discussed in more detail in Chapter 7.

A study (Ostroff & Atwater, 2003) demonstrated that compensation is also affected by the gender composition of one’s coworkers. In particular, managers (regardless of gender) who work largely with women are paid considerably less than are managers who work largely with men. Apparently, gender issues in compensation extend beyond just the gender of the employees to the gender composition of the work group as well.

These kinds of questions have given rise to the doctrine of comparable worth, which maintains that jobs of equal (or comparable) worth to the organization should be compensated equally. This issue has been linked quite closely to gender differences in compensation. Proponents of comparable worth insist that job evaluation should play a larger role, and the market a smaller role, in setting compensation. They argue that the market is biased and that it artificially sets the compensation for female-dominated jobs lower than for male-dominated jobs. They argue that by focusing on job behaviors rather than on job performers, job evaluation decreases the likelihood of gender bias in compensation (Feder & Levine, 2010).

Opponents of comparable worth argue that there is no bias against female-typed jobs and that women can choose whatever jobs they prefer. They further argue that women are paid less because they choose low-paying jobs that provide greater flexibility or they leave the workforce to raise their families. However, the data do not support these conclusions because female-dominated jobs do not offer more flexibility and most women do not exit the workforce to raise their young children (National Committee on Pay Equity, n.d.). The issue of comparable worth is unlikely to be solved quickly or easily, complicated as it is by market factors and historical trends, potential biases in job evaluation, and both real and imagined gender differences. Of course, we have made progress in this area in recent decades, and with careful and fair practices we can continue to improve the financial situation for women who enter the workforce.

comparable worth
A doctrine maintaining that jobs of equal (or comparable) worth to the organization should be compensated equally.
Although job analysis tends to receive little empirical attention, it is among the most important areas of I/O psychology, providing the foundation on which all other HR processes are built. This chapter was largely structured around Figure 3.1, which shows the interrelationships among job analysis, job descriptions, job specifications, job evaluation, and the HR functions that are built on these processes. It should be clear by now that without a carefully designed and executed job analysis, HR practitioners and I/O psychologists would have very little to go on in making HR decisions.

Both task-oriented and worker-oriented approaches to job analysis were presented in this chapter, along with a discussion of different methods within each category. Also discussed were the advantages and disadvantages of each approach, the choice of which should depend on the job analyst’s purpose. Some developments in the area of job analysis were considered as well. First, although the DOT has been of great importance to the I/O field for many years, the Department of Labor’s current undertaking, the O*NET, should provide more updated, useful, and accessible data on occupations and jobs. Second, the CMQ was presented as one of the newer job analysis instruments with great potential to serve the purposes of worker-oriented job analysis methods while avoiding criticisms regarding reading level and work behaviors that are too general.

Job descriptions and job specifications are derived either directly or indirectly from the job analysis and are directly or indirectly connected to a myriad of HR functions. This chapter provided a brief discussion of the links between job analysis and these HR functions; the remainder of the second part of the text will cover these HR functions at length. Finally, we considered the role of job analysis in job evaluation. The Equal Pay Act of 1963 mandates that individuals who do equal work should receive equal pay, but it does not speak to wage gaps between “male-typed” and “female-typed” jobs. The emergence of the doctrine of comparable worth suggests that organizations and society need to do a better job in setting compensation for jobs while taking gender-based job classes into account.

**Key Terms**

- Common-Metric Questionnaire (CMQ) (p. 82)
- comparable worth (p. 94)
- compensable factors (p. 91)
- Dictionary of Occupational Titles (DOT) (p. 76)
- element (p. 73)
- Functional Job Analysis (FJA) (p. 76)
- incumbents (p. 75)
- job (p. 73)
- job analysis (p. 73)
- job description (p. 85)
- Job Element Method (JEM) (p. 80)
- job evaluation (p. 91)
- job specifications (p. 86)
- KSAOs (p. 73)
- point system (p. 91)
- position (p. 73)
- Position Analysis Questionnaire (PAQ) (p. 80)
- strategic job analysis (p. 85)
- subject matter experts (SMEs) (p. 75)
- task (p. 73)
- Task Inventory Approach (p. 75)
- task-oriented (p. 74)
- worker-oriented (p. 74)
Chapter 3: Job Analysis

Critical Thinking Questions

1. One use of job analysis is creating job descriptions. Why is it important to have a detailed and accurate job description? What are some possible outcomes of having a job description that is not based on a job analysis and does not accurately represent the job?
2. Job analysis was an important factor in three court cases presented in this chapter. How is job analysis used in a legal setting? What aspects of a job analysis will make it more likely to hold up in court?

3. As noted in the chapter, some proponents of comparable worth argue that compensation for female-dominated jobs is set lower than for jobs dominated by men. These proponents suggest that more rigorous job evaluations could help close the gap. What are some ways in which job evaluation could be used to more effectively determine fair compensation for male- and female-dominated jobs?

**Application Questions**

1. Find an online job posting. According to this posting, what are some KSAOs required for that position? Are there any KSAOs you believe might be expected but are omitted from this ad? What might be the consequences of this omission?

2. Consider a position you currently hold or that you have held in the past. What pieces of information about your job did you know well that you could share with a job analyst? What pieces of information did you not know? Who in the organization would have been better equipped to provide this information to a job analyst?

3. Imagine that your college or university is considering using a competency model to ensure that students who graduate have competencies that are necessary in the workplace. What might be some competencies that all students should master by the time they graduate?

4. Imagine you have a client who is hesitant to commit to a job analysis. She states that the investment of time and money into developing a job analysis for every position isn’t worth it, especially because she thinks that many jobs in the organization will change a lot within the next five years. What might you say to this client?

**Suggested Readings**


Gatewood, R. D., Feild, H. S., & Barrick, M. (2010). *Human resource selection* (7th ed.). Mason, OH: South-Western College Pub. This is an excellent reference for everything that constitutes industrial psychology, though it is perhaps strongest in its coverage of job analysis and other technical areas.

Peterson, N. G., Mumford, M. D., Borman, W. C., Jeanneret, P. R., Fleishman, E. A., Levin, K. Y., et al. (2001). Understanding work using the Occupational Information Network (O*NET). *Personnel Psychology*, 54, 451–492. This is a detailed discussion of why the O*NET was needed and how it was developed.


Wilson, M. A., Bennett, W., Gibson, S. G., & Alliger G. M. (2012). *The handbook of work analysis: Methods, systems, applications, and science of work measurement in organizations.* New York: Routledge. A very nice overview of job analytic techniques and theory. This provides a current look at the measurement and analysis of jobs and will serve as a great resource for those interested in job analytic issues.