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Strategic Job Analysis and Competency Modeling

Outline

MITRE System's Engineering Competency Model

Job Analysis and the Strategy behind It

- Types of Job Analyses

- The Legal and Practical Reasons for Doing a Job Analysis

Job Descriptions and Person Specifications

Common Job Analysis Methods

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- The Job Elements Method

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- The Task Inventory Approach

- The Structured Questionnaire Method

Planning a Job Analysis

- Time and Resources

- Identifying Job Experts

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Conducting a Job Analysis

- Get the Support of Top Management

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- Generate the KSAOs

- Form the Job Duty Groupings

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- Collect Critical Incidents

- Weight the Job Duties

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- Write the Job Description and Person Specification

Other Methods: Competency Modeling and Job Rewards Analysis

- Competency Modeling

- Job Rewards Analysis

- Develop Your Skills: Assessing a Job's Intrinsic Rewards*

Summary

LEARNING OBJECTIVES

After studying this chapter, you should be able to:

- Explain why doing a job analysis can be strategic.
- Describe the different types of job analyses, and for what they are used.
- Define *job description* and *person specification*, and describe how they are used.
- Describe the advantages and disadvantages of different job analysis methods.
- Describe how to plan a job analysis.
- Describe how to conduct a job analysis.

MITRE System's Engineering Competency Model

The MITRE Corporation is a not-for-profit organization with expertise including systems engineering and information technology chartered to work in the interest of the public.¹ Approximately two-thirds of MITRE's 7,600 scientists, engineers, and support specialists have master's or PhD degrees. MITRE employees work on hundreds of different projects across the company, in roles demanding a high level of technical, operational, and domain knowledge.²

MITRE wants to develop a competency model for its systems engineers to enhance its strategic capability in this key area.³ Systems engineering integrates all engineering disciplines and specialty groups relevant to a project to ensure that all stakeholders' requirements are balanced and met during the life cycle of a project. MITRE believes that a more specific and accurate competency model for its systems engineers will enhance its recruitment and staffing activities and improve its employee development programs. Imagine that MITRE asks you for advice in how to build this competency model. After studying this chapter, you should have some good ideas.

What every employee does in an organization should enhance a firm's business strategy execution and positively contribute to the company's effectiveness. Sometimes these behaviors are done when performing a formal **job**, and other times these behaviors result from different **roles** or expected patterns or sets of behaviors people play in a company.⁴ Some organizations function best with clearly defined and well-structured jobs, such as positions on a manufacturing line. Other firms function best with employees performing multiple, sometimes changing, roles that do not fit into a single job description. Sometimes jobs are expanded to incorporate a new hire's talents in areas unrelated to the initial job description.

Young organizations often need their few employees to each wear many hats and to perform duties spanning the finance, human resources, product development, sales, and marketing functions. Rigid, formal job descriptions can be too restrictive for the needs of these organizations. Organizations that require employees to be flexible in what they do, including consulting firms like Accenture and Proxicom, often prefer employees to be flexible and rely less on formal job descriptions. Many organizations rely on formal job descriptions for some positions, such as administrative or staff jobs, and on less structured roles for creative or leadership positions. Procter & Gamble often hires people with no clear position in mind, focusing on bringing in people with soft skills and talent who have the potential to grow with the company.⁵

Regardless of whether a company relies on jobs or roles, the person hired must have the competencies and motivation to do what the firm needs done. Understanding what is and what will be required to do a job well is necessary if companies are to hire the right people. Job analysis is the process that staffing professionals use to first identify the tasks required by a job, and then evaluate what is required to perform each of the tasks that comprise the job. The process can be a strategic tool that results in a competitive advantage if it aligns the requirements of a job with the company's business strategy, taking into account what is required to perform the job today as well as in the future. Imagine the job of corporate marketing in the late 1990s, when the Internet was beginning to have business impact. If a company planned to begin using the Internet as a marketing tool within the next year or two, hiring a marketing person unable to use technology could have been a poor strategic choice. A job analysis identifies the type of people to recruit and on what characteristics to evaluate them. It can also help to identify career paths and pinpoint turnover risk factors.

JOB

a formal group or cluster of tasks

ROLE

an expected pattern or set of behaviors

When CitiFinancial conducted a job analysis of its loan officer position, it identified three different levels associated with the job as well as the top 10 skills and abilities needed for each of the three. This allowed CitiFinancial to hire based on the specific skills and specific abilities needed for each level.⁶

Jobs performed in a consistent, predictable manner can be readily analyzed. However, this doesn't work as well for organizations that are structured around networks, teams, and roles rather than around individuals performing well-defined jobs.⁷ Because the roles in the groups change and are unique to each employee, a job analysis often cannot adequately define them.

Thus, evaluating the broader roles played by people in these positions rather than specific jobs can better capture the responsibilities and requirements of flexible, team-based work.⁸ One procedure that looks at roles rather than jobs is *competency modeling*, which analyzes the broader competencies needed to perform well in roles as opposed to jobs. For example, Nordstrom's customer service strategy means that it needs to hire people with the competencies of having a customer focus and good interpersonal skills as well as good sales skills. Walmart's low-cost strategy means that it needs to hire people who are efficiency oriented. It is important to consider how the job can best contribute to strategy execution, not just what tasks need to be done. Because competency modeling identifies these "extra" behaviors and characteristics, it often augments job analysis, even when a job is well defined.

Job analysis can enhance the execution of strategy. General Electric (GE) performed a job analysis on its sales force and found that salespeople were spending 80 percent of their time on bureaucratic duties, not directly toward activities driving sales. This insight allowed GE to reorganize the functions of its sales representatives to better align their activities with the mission of the organization.⁹

In this chapter, you will learn the fundamentals of doing both job analysis and competency modeling. After reading this chapter, you should have a good understanding of how to identify the essential elements of a job and determine what employees need to do to execute the firm's business strategy and to give the company a competitive advantage.

JOB ANALYSIS AND THE STRATEGY BEHIND IT

Types of Job Analyses

JOB ANALYSIS

the systematic process of identifying and describing the important aspects of a job and the characteristics a worker needs to do it well

A **job analysis** is the systematic process of identifying and describing the important aspects of a job and the characteristics a worker needs to do it well. It identifies the job's important tasks and working conditions as well as the tools and technologies people doing the job use. It also involves making judgments about what an employee needs to do to perform a job well given the specific business strategy and culture of an organization. It does not necessarily mean profiling the job incumbent to hire someone similar. The goal is to define the ideal individual for a job from the perspective of the company, its strategy, and the employees with whom the new hire will work.

Job analyses are used for multiple purposes throughout human resource management, including:

- Determining a job's entry requirements
- Developing a strategic recruiting plan for the firm
- Selecting individuals for employment
- Developing employee training plans
- Designing employee compensation systems
- Developing performance evaluation measures

JOB FAMILY

a grouping of jobs that either call for similar worker characteristics or contain parallel work tasks

Doing a job analysis also helps HR professionals categorize jobs into **job families**, or groupings of jobs that either call for similar worker characteristics or contain parallel work tasks. Job families enhance an organization's flexibility by allowing workers to perform more than just one official job. Grouping jobs into families can also help streamline the staffing process by enabling firms to hire people for different jobs from the same pool of candidates, apply the same selection procedures to them, and provide a systematic procedure for promoting employees. Table 4-1 presents an example of grouping jobs into job families.

TABLE 4-1 Grouping Jobs into Job Families

Job Family	Examples of Jobs Within Job Family
Personnel Recruiters	Recruiter Executive Recruiter Human Resources Specialist Employment Coordinator
Secretaries	Secretary Clerk Typist Department Secretary Administrative Support Assistant
Chemical Engineers	Project Engineer Chemical Engineer Engineering Scientist Scientist

Different purposes require different job analysis techniques. The techniques of interest to us are those used for staffing-related purposes. A staffing-oriented job analysis ultimately aids in the development of valid, or job-related, recruiting plans and selection devices that identify the best candidates for a job. A job analysis that produces a valid selection system identifies characteristics in candidates that

- distinguish superior from average and unacceptable workers;
- are not easily learned on the job; and
- exist to at least a moderate extent in the applicant pool.

There are many ways of conducting a job analysis, but most involve a job analyst managing the process and collecting information from job experts—typically people who already hold the job and their supervisors—via interviews and written surveys. The job analyst then compiles and summarizes this information, and the job experts check their work for accuracy and thoroughness. Before staffing can be done strategically, it is critical that the contributions of the position to the organization as well as the characteristics and requirements of the job be thoroughly understood. Companies like Oral-B Laboratories and Equistar Chemicals conduct thorough job analyses before deciding how to staff key positions.

Research has shown that firms that engage in effective job analysis financially outperform their competitors in a variety of ways.¹⁰ Unless the way a position contributes to the execution of the business strategy is understood, it is impossible to consistently hire people able to do the job in the manner it needs to be done to reinforce the firm's strategy. For example, a manufacturing company pursuing a specialist business strategy is likely to require sales representatives with advanced degrees or with specific educational and experiential backgrounds—backgrounds that make them best suited to contribute to the organization's market niche. But a manufacturing company pursuing a low-cost strategy may focus on hiring efficiency-minded people who can do their jobs well but are willing to work for lower wages to keep the company's costs down.

A **future-oriented job analysis**¹¹ is a technique for analyzing new jobs or how jobs will look in the future. Whereas a traditional job analysis focuses on describing jobs as they exist today, a future-oriented job analysis focuses on identifying the skills the company also anticipates needing in the future. Think about the typical administrative assistant job in the 1990s as computers began entering the workplace: Administrative assistants were selected based upon their Dictaphone and shorthand skills. The scenario is clearly different today. In future years, with the increasing use of speech recognition technology, the scenario will be different too: firms might need secretaries who can speak rapidly and articulate clearly. Sometimes the speed at

FUTURE-ORIENTED JOB ANALYSIS

a technique for analyzing new jobs or how jobs will look in the future

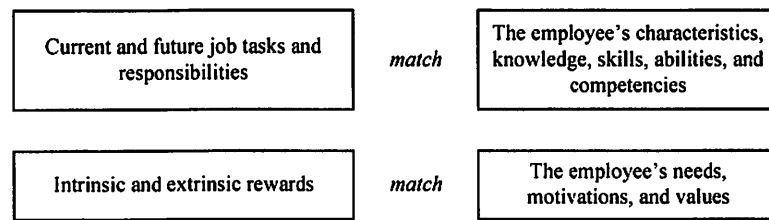


FIGURE 4-1 Components of the Job-Worker Match

which jobs change can make it difficult to maintain current job profiles cost-effectively. In this case, organizations should focus on key jobs or on jobs they need to fill frequently to maximize the return on their investment.

Figure 4-1 illustrates the need for staffing to match the job's current and future tasks and responsibilities with the characteristics and competencies of the worker, and the job's intrinsic and extrinsic rewards with the needs and motivations of the worker. To supplement the job analysis, some organizations also perform an organizational analysis to identify personality attributes that best fit the organizational culture. This approach is best used in organizations that give employees sufficient freedom to use their unique characteristics when performing the job.¹²

The Legal and Practical Reasons for Doing a Job Analysis

As we have explained, the job analysis process enables firms to hire the people best able to contribute to the company's organizational effectiveness and performance. However, there are legal reasons for conducting a job analysis as well. The legal reasons relate to the organization's ability to show that its hiring methods are job related. A job analysis helps create an accurate and current list of the essential functions of a job and the required and desired qualifications employees that do it should have. Because an applicant must meet the stated job-related requirements, crafting a job description based on objective standards is a critical step for avoiding and defending future failure to hire and wrongful discharge lawsuits.

Companies are not required by law to conduct job analyses, but they do increase a firm's ability to make staffing decisions based solely on job requirements. For example, under the Americans with Disabilities Act (ADA), as long as disabled applicants can perform the essential functions of a job with reasonable accommodation, they have to be considered for the position.

Doing a job analysis helps staffing specialists systematically identify a position's essential functions, as well as the corresponding knowledge, skills, abilities, and other characteristics (KSAOs) an employee needs to perform those functions. For example, if a job requires climbing stairs, stating this in the job description will help protect an employer from a claim from someone confined to a wheelchair that he or she was discriminated against based on his or her inability to do so.¹³ **Essential functions** are defined by the ADA as the fundamental duties or tasks of a position. According to the ADA, a job function may be deemed essential for a number of reasons, including, but not limited to, the following:

- Because the reason the position exists is to perform that function.
- Because of the limited number of employees available among whom the performance of that job function can be assigned or distributed.
- Because the function is so highly specialized that the incumbent in the position is hired specifically for his or her expertise or ability to perform the particular function.
- Because of the consequences of not requiring an incumbent to perform the particular function.
- Because of the terms of a collective bargaining agreement.

Therefore, it is critical to complete a job analysis before a recruiting and selection system is developed. To meet legal requirements, a job analysis must

1. Be valid and identify the worker's knowledge, skills, abilities, and other characteristics necessary to do the job and differentiate superior from barely acceptable workers.
2. Be in writing and relevant to the particular job in question.
3. Be derived from multiple sources.

ESSENTIAL FUNCTIONS

the fundamental duties or tasks of a position

TABLE 4-2 The Practical Reasons for Doing a Job Analysis

- It links the staffing process to the firm's business strategy and to what the firm needs in terms of the position in the future.
- It helps HR personnel write an accurate description of the job's requirements and duties for the purposes of advertising and recruiting for an open position.
- It enables HR personnel to write an accurate description of the type of person the organization wants to recruit.
- It aids in the identification of the best selection methods that should be used to fill a position.
- It clarifies how to present the job's rewards to candidates in the most appealing way to match their needs and interests.
- It helps to identify what to change in the current staffing system for a job.
- It provides a foundation to determine the best way to combine a job candidate's scores on multiple assessment methods to compute a total score for comparison with the scores of the other candidates.
- It assists potential recruits when they are making up their minds about whether to apply based on their perceived fit with an interest in the requirements and responsibilities of the position.

There are many practical reasons to do a job analysis. In addition to enhancing the effectiveness of staffing efforts, job analysis procedures are useful for other human resource management activities, such as performance management, compensation, training, development, and succession planning. Table 4-2 summarizes some of the reasons related to staffing.

JOB DESCRIPTIONS AND PERSON SPECIFICATIONS

One of the primary outcomes of a staffing-oriented job analysis is a **job description**, or a written description of the duties and responsibilities associated with a job itself. Job descriptions usually include:

- The size and type of organization
- The department and job title
- The salary range
- Position grade or level
- To whom the employee reports and for whom the employee is responsible
- Brief summary of the main duties and responsibilities of the job
- Brief summary of the occasional duties and responsibilities of the job
- Any special equipment used on the job
- Any special working conditions (shift or weekend work, foreign travel, etc.)
- Purpose and frequency of contact with others
- The statement, "Other duties as assigned" to accommodate job changes and special projects

Job descriptions are typically part of an organization's recruitment materials to inform potential candidates about the requirements and responsibilities of the job being filled. When writing a job description for a recruiting advertisement, avoid using vague language and try to capture the interest of targeted job seekers. Use language that makes it easy for job seekers to understand what the job is and how to determine whether or not they are qualified for it. Also, communicating information about the company and its culture can be helpful in attracting applicants who possess desired characteristics and qualities. Research has found that recruiting advertisement messages containing information about a company's values¹⁴ and work requirements¹⁵ increases the attractiveness of the opportunity to individuals who fit those values and organizational needs. To best attract talented job seekers, also include information on how working for your company will benefit them. Providing information about factors including advancement opportunities, work-life balance, and career development can make your company look most attractive.

Restaurant chain Red Lobster believes that although job descriptions need to identify essential job functions to meet federal legislation guidelines, they don't have to be boring. So the company made its description of essential job functions engaging by incorporating the company's principles, values, and mission statement. After doing a job analysis, Red Lobster identified what managers do,

JOB DESCRIPTION

written description of the duties and responsibilities associated with a job

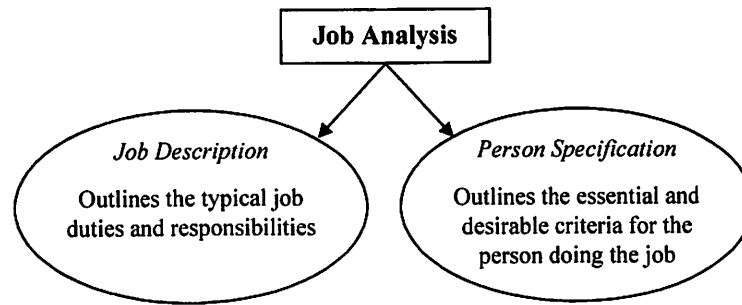


FIGURE 4-2 Outcomes of a Job Analysis

and then developed a competency model to link those activities with its business strategy, values, and vision. Because their revised job descriptions gave applicants a better understanding of the job requirements and how well they fit them, Red Lobster was able to hire one of every six candidates it interviewed rather than only one of nine. Red Lobster estimates that the reduction in managerial turnover due to the improved job descriptions has saved the company about \$7 million.¹⁶

PERSON SPECIFICATION

summarizes the characteristics of someone able to perform the job well

The other primary outcome of a job analysis is a **person specification**, also called a “success profile.” Person specification summarizes the characteristics of someone able to do the job well. Based on the job description, the person specification profiles the personal skills, qualifications, abilities, and experiences the organization needs to evaluate in job candidates during the recruitment and selection process. These characteristics should relate directly to the duties of the job, contain the minimum requirements essential to do the job effectively, and should be as specific as possible. These characteristics form the basis of the recruiting strategy to attract qualified applicants. Because it describes the type of person best suited for the job, the person specification helps to identify where and how job openings should be communicated, as well as provide assessment and screening criteria for job applicants.

Person specifications often describe the “ideal” candidate, which is usually someone with many years of experience, high past performance, excellent leadership and teamwork skills, and strong technical skills. In reality, the goal of finding the “perfect” candidate who excels at every job requirement is rarely attainable. Prioritizing the characteristics a person most needs to do the job successfully and being willing to accept a slightly lower degree of performance in less important areas can lead to more appropriate person specifications. The job candidate characteristics that are critical can be categorized as **essential criteria**, and job candidates should be screened for them. Criteria that can enhance the new hire’s success on the job but that are not essential can be categorized as **desirable criteria**. To choose among candidates who all possess the essential criteria, a firm can look at their desirable criteria. Figure 4-2 illustrates the relationship between doing a job analysis and sorting out essential and desirable criteria for the job.

It is worthwhile to give some thought to what the “effective performance” of a new hire means when writing person specifications. Arbitrary criteria unrelated to job success should not be included in person specifications. Many person specifications state a minimum number of years of experience, GPA, specific degrees, and other activities or skills. Sometimes these qualifications are not at all relevant to job success. For example, in some jobs, a person’s technical skills might be less important than his or her persistence, cooperativeness, interpersonal skills, and conscientiousness. When degrees are required for hiring but are not really necessary to do the job, the risk of adverse impact also increases. Rather than arbitrarily specifying the requirements a new hire must meet, firms need to evaluate job candidates on those criteria that truly predict whether they will be able to do the job successfully.

ESSENTIAL CRITERIA

job candidate characteristics that are critical to the adequate performance of a new hire

DESIRABLE CRITERIA

job candidate criteria that may enhance the new hire’s job success, but that are not essential to adequate job performance

COMMON JOB ANALYSIS METHODS

Different job analysis methods vary with regard to how job information is collected, analyzed, and documented. Each method requires different amounts of time, resources, and involvement by job experts. As a result, some methods are better at describing the job and some are better at describing the worker. Job analysts typically use more than one method because collecting all the relevant information about a job is usually impossible to do using just one of the methods. It is best to think of each job analysis method as a distinct tool that leads to different insights and information about a job.

Two of the most important features of any job analysis method are that it be *reliable*, or replicable, and *valid*, or accurately measure what it was intended to measure. A reliable job analysis procedure will produce the same results when it (1) is applied to the same job by a different job specialist, (2) when a different group of job experts is used, and (3) when it is done at a different time.

Next, we will discuss five of the most commonly used job analysis methods and then describe a job analysis approach that uses multiple methods and works for many different types of jobs.

The Critical Incidents Technique

The **critical incidents technique**¹⁷ is a job analysis method that identifies extremely effective and ineffective behaviors by documenting critical incidents that have occurred on the job.¹⁸

For each incident, the critical incidents job analysis technique identifies

1. the *circumstances* leading up to the event, or the sequence of events that occurred;
2. the *action* taken by the worker; and
3. the *consequences* of the action taken.

Critical incidents can be collected through interviews with incumbents and supervisors or by reviewing logbooks or other written records of job events (these are usually more effective for collecting negative critical incidents). Job experts can discuss any events they feel most clearly illustrate effective or poor job performance.

Alternatively, the duties of the job can be collected first. Job experts can then discuss a work event that is an example of particularly good or poor performance on a particular job duty. If the job duties are not predetermined, after recording the incidents, the job analyst reviews them to identify a set of critical job duties (e.g., problem-solving or customer-relations duties), and then identifies the relevant worker characteristics required for the successful performance of these duties.

The critical incidents technique is a particularly useful method for identifying infrequent or unusual work events that may be missed by other job analysis methods (particularly standardized questionnaires). The technique is also one of the few methods that consider what applicant characteristics should be screened out as well as screened in. Critical incidents that help to explain why employees with the skills and qualifications for the job failed to perform up to expectations can identify personality and other characteristics that should be avoided in new hires.

Collecting critical incidents is relatively inexpensive and is often used in conjunction with other job analysis techniques to capture the “extremes” of job behaviors and, thus, to distinguish superior from average or barely acceptable workers. The critical incidents technique is sometimes used to collect information about “average” job performance as well. Because stories about actual work events are collected, the method is also very good for developing interview questions and other screening types of tests. Doing a critical incidents job analysis can also help a company defend itself against hiring discrimination if it can document that the person ultimately hired demonstrated the capability to do the job under critical circumstances.

The Job Elements Method

The **job elements method**¹⁹ is used primarily with industrial occupations and lesser-skilled jobs. The job elements method focuses on identifying the characteristics of workers who are able to do the job at a satisfactory level. The process involves:

1. Selecting a group of experts (including incumbents and their supervisors).
2. Conducting brainstorming sessions with them to identify the characteristics successful workers currently have.
3. Assigning weights to each characteristic (element) based on the following criteria:
 - a. the proportion of barely acceptable workers who have the job element (or characteristic);
 - b. how effective the element is when it comes to picking a superior worker;
 - c. the trouble likely to occur if the element is not considered; and
 - d. practicality, or the effect that using the job element in screening job candidates will have on the organization’s ability to fill job openings.
4. Analyzing the job element data.

CRITICAL INCIDENTS TECHNIQUE

a job analysis method that identifies extremely effective and ineffective behaviors by documenting critical incidents that have occurred on the job

JOB ELEMENTS METHOD

a job analysis method that uses expert brainstorming sessions to identify the characteristics successful workers currently have

UNSTRUCTURED JOB ANALYSIS INTERVIEW

a job analysis technique involving an informal conversation with a job expert with no prepared questions

STRUCTURED INTERVIEW METHOD

a job analysis method in which subject matter experts provide information about the job verbally in structured face-to-face interviews

TASK INVENTORY APPROACH

a job analysis method in which job experts generate a list of 50 to 200 tasks grouped into categories reflecting the job's major functions; the functions are then evaluated on dimensions relevant for selection purposes

TASK

a collection of more elemental activities directed toward the achievement of a specific objective on the job

Interview Methods

An **unstructured job analysis interview** is an informal conversation with a job expert, usually a capable job incumbent or the manager of a job incumbent, with no prepared questions. A job expert can be any person who exhibits expertise in a job. The job expert is told the purpose of the job analysis and the focus of the interview, which helps focus the conversation. The interviewer asks questions to create a conversation exploring the job expert's perceptions of the job, and takes detailed notes to enable follow up questions. The interview typically starts by exploring the most important job responsibilities, the key tasks for each, the worker characteristics required to perform these tasks, and the performance criteria for each task and for the job as a whole. Any broader competencies that are important for job performance are also discussed.

The **structured job analysis interview** technique asks job experts to provide information about the job verbally in structured face-to-face interviews. This method can be a good choice when only a small number of job experts are able to participate in the job analysis effort or if the job analysis must be completed quickly. Because a relatively small amount of data is collected using this technique, a job analysis professional should conduct the interviews to reduce the risk of interviewer bias and ensure participants focus on identifying characteristics that distinguish superior from average or barely acceptable workers. For example, two possible questions that would be asked during a structured job analysis interview for a radio assembler's job are, "What is the sequence of activities you perform in assembling a radio?" and "How much time do you spend on each part of the assembly process?"

Using an interview guide can expedite job analysis interviews and help to standardize the information collected in each interview. Job analysis interview guides are lists of questions to ask different job experts, and sometimes include rating scales of the amount or frequency of a job characteristic. An example of a job analysis interview guide for an administrative position is shown in Table 4-3. Because interviewees will vary in how they perceive and describe the job, it is important to conduct multiple interviews to identify common themes and competencies. Organizations usually verify interview results with a more objective technique such as a checklist or questionnaire.

The Task Inventory Approach

The **task inventory approach** relies on job experts to generate a list of job relevant tasks (typically 50 to 200). A **task** is a collection of more elemental activities directed toward the achievement of a specific objective on the job.²⁰ Job incumbents and/or their supervisors typically

TABLE 4-3 Sample Job Analysis Interview Guide for an Administrative Position

1. Describe the most important duties you perform on the job daily, using as much detail as possible. Describe the knowledge, skill, ability, or other characteristic you use in performing each duty.
2. Describe in detail the most important duties you perform on the job less frequently (weekly, monthly, annually, etc.) and explain how frequently you perform them. Describe the knowledge, skill, ability, personality trait, or other characteristic you use in performing each duty.
3. Describe any equipment (computers, machines, etc.) that you regularly use on the job.
4. Describe the working conditions on the job. Please include any objectionable conditions in which you work and how frequently these conditions are encountered.
5. Describe the supervision you receive on the job, including its extent and proximity.
6. How much autonomy do you have in performing your job? Imagine a 1 to 10 scale, with 1 reflecting no autonomy and 10 reflecting complete autonomy. Where would you place your job autonomy on this scale?
7. Describe any supervision you give to others, including the number of employees you supervise and the degree of accountability you have for their job performance and results.
8. Describe the complexity of your job.
9. What type of training or formal education is necessary to perform this job satisfactorily?
10. How much job experience is necessary to perform this job satisfactorily? Where can this experience be obtained (both inside and outside of this organization)?

complete structured questionnaires rating each task statement using one or more rating scales. Raters' background information including their work experience, tenure with the employer, sex, race, job satisfaction, management level, and other characteristics that might influence their responses and perceptions of the job are also collected. Then the tasks are grouped into categories reflecting the job's major functions. These categories are evaluated on dimensions relevant for selection purposes, including the relative importance of each category of tasks and the relative amount of time a worker spends on each one. Because the focus is on identifying what is typical of the job, this technique might not identify worker characteristics that are important but infrequently displayed or those that distinguish superior from average or barely acceptable workers. The task inventory approach can be combined with other approaches to address these limitations.

The Structured Questionnaire Method

A **structured questionnaire method** is a job analysis method that involves using a list of preplanned questions designed to analyze a job. The **Position Analysis Questionnaire (PAQ)**²¹ is a copyrighted, standardized job analysis questionnaire designed to be used for just about any job. It uses 194 questions to assess the information input, mental processes, work output, relationships with other persons, job context, and other job characteristics associated with a position. Because the PAQ is worker oriented, its questions and results are written in terms of what a successful worker must know or be able to do. The PAQ report outlines the job's requirements for the worker's mental, perceptual, psychomotor, and physical abilities, as well as the desirability of certain personality characteristics and interests. This makes the PAQ very useful for designing selection systems. Because the makers of this questionnaire keep all the results in a comprehensive database, purchasers of this technique can also learn about studies done on similar jobs.

The advantages of using structured questionnaires for job analysis include their speed and low cost. The standardized format also allows for a more objective comparison to be done of different jobs. The disadvantages include the fact that some of the questions may be written at a high reading level, and the predetermined questions restrict the job analyst's ability to customize the questionnaire to fit the organization's unique needs.

Multiple approaches to job analysis can be combined to address the limitations of any single approach and to enhance the quality of the information obtained. Because of the time, expertise, and resources required, many small- and medium-sized businesses do not do job analyses, and instead buy CD-ROMs with collections of generic job descriptions or adapt job descriptions found from similar companies online. In addition to not necessarily providing an adequate legal defense, these methods do not do as good a job of integrating a firm's business strategy with its talent needs as a tailored job analysis done from scratch.

Table 4-4 summarizes the five job analysis methods we just discussed and their advantages and disadvantages.

PLANNING A JOB ANALYSIS

By adequately planning and preparing for the job analysis, the results are likely to be more accurate and useful, and the job analysis should take less time and effort. Although the process can be complex in terms of political implications, who does it, and how it is managed, it is important that the information be as accurate as possible. A job analysis should be performed in such a way as to meet the professional and legal guidelines that have been published in the *Uniform Guidelines on Employee Selection Procedures*.²²

The process of doing a job analysis can become politicized; it is not uncommon for the job experts doing the analysis to try to color the job analyst's interpretation of the job to suit their personal goals and needs. For example, an incumbent good at the interpersonal part of a secretarial job might play up the importance of the job's interpersonal aspects, whereas another incumbent who excels at the administrative part of the job might play up the job's administrative requirements. Therefore, it is important to try to identify any conflicting motivations job experts might have in terms of accurately interpreting the job. When people know that job analysis information will be collected from multiple sources, they are often more honest about the information they provide.

STRUCTURED QUESTIONNAIRE METHOD

a job analysis method that involves using a list of preplanned questions designed to analyze a job

POSITION ANALYSIS QUESTIONNAIRE (PAQ)

a copyrighted, standardized job analysis questionnaire that can be used for just about any job

TABLE 4-4 A Summary of the Five Most Commonly Used Job Analysis Methods

Method	Advantages	Disadvantages
Critical Incidents: Subject matter experts provide incidents of good and poor performance.	• Examples of particularly effective or ineffective job behaviors are detailed. • The incidents are examples of actual on-the-job behavior.	• Narrative data can be difficult to analyze and use. • It requires a fair amount of time and resources to collect enough critical incidents.
Job Elements: A panel of subject matter experts list and rate the important job elements (worker characteristics that influence success in the job, including the person's knowledge, skills, abilities, and personal characteristics).	• Job experts are involved in every stage and feel ownership over the process. • It is efficient and relatively fast. • A relatively small number of people are needed. • It results in well-organized documentation of the job and the worker.	• It can be difficult to explain and communicate the job elements methodology.
Structured Interview: Verbally in a face-to-face interview, subject matter experts provide information about the job and worker characteristics that distinguish superior from average or poor workers.	• It is fast. • It requires minimal time and resources. • It is good when only a small number of job experts are available and when the job analysis must be completed quickly.	• Interviews require a job analysis professional to reduce interviewer bias. • If many experts are involved, then the interviews can be time consuming. • Interview data can be difficult to analyze and use.
Task Inventory: A list of tasks (typically 50 to 200) are generated by job experts and then grouped in categories reflecting major work functions. The categories are subsequently evaluated on dimensions relevant for selection.	• It is objective. • It results in a reliable description of the job.	• It may not identify worker characteristics that are important but infrequently displayed. • It does not identify worker characteristics that distinguish superior from average or barely acceptable workers.
Structured Questionnaire: A written questionnaire that assesses the job's required information input, mental processes, work output, relationships with other persons, job context, and other job characteristics. The characteristics related to the job are then related to worker characteristics (rather than only the job's tasks, or duties being described).	• It is fast. • It is relatively cheap. • It can be used for almost any position. • It is standardized so different jobs can be compared. • It produces estimates of the job requirements for mental, perceptual, psychomotor, and physical abilities, including estimates of the job's requirements for certain personality characteristics.	• A high reading level may be required for some questionnaire items. • Information obtained is limited by the predetermined questions. • It may miss unique aspects of the job or employee context.

Employees can also get very defensive and worried when their jobs are being analyzed. The process should be thoroughly explained to them and the fairness and objectivity of it stressed. Sometimes top managers are reluctant to spend any time on job analyses because it seems pointless to them to collect data on "something everyone already knows." Emphasizing the fact that the process will help identify employee characteristics that will augment the firm's

business strategy and increase the company's return on its staffing investment can help gain the support of top managers. Communicating the job analysis system, purpose, and needs to both employees and management is important in securing the buy-in and support that is essential to performing a quality job analysis.

Time and Resources

Determining the amount of time and resources to invest in a job analysis is an important consideration. Although time and money are often important factors, in general, the greater the resources invested in analyzing the job, the greater the validity and legal defensibility the resulting selection system will be. Establishing the desired level of validity and legal defensibility of the job analysis influences the needed timeline and resources. A firm that wants to do the best job it can at hiring the right people will invest more time and resources in the job analysis than a company that merely wants a minimal level of legal defensibility in case it finds itself in court.

Identifying Job Experts

The third step in the job analysis planning process is to identify the subject matter experts who will be able to participate in the job analysis. These might include current jobholders, customers, and supervisors. Involving as many high-performing employees in the job analysis as possible will help the job analyst identify all of the most important job tasks and worker behaviors.

Identifying Appropriate Job Analysis Techniques

The fourth step is to identify the job analysis technique(s) that will be used. If the job analyst is unfamiliar with the job, it can be a good idea to first observe one or more employees who do the job before choosing a job analysis technique. This is particularly helpful for manufacturing jobs and jobs that are easily described once the job analyst understands the tasks a worker physically does. Asking one or more people who do the job to keep a diary of what they do can also be helpful, but may not be practical for all jobs. Once the analyst has a general understanding of the position, the appropriateness of various job analysis techniques can be better evaluated.

Identifying the nature of the resources and expertise the firm has available is necessary to determine the best job analysis techniques and the resources required to do the job analysis. For example, in smaller organizations, too few job experts may be available for some techniques. In larger organizations, so many job experts might be available that different people can be involved in each stage of the process. A larger number of available job experts can provide a wider range of insights into the position.

Job analysis techniques can be inductive or deductive. *Inductive* means that the main duties and work tasks of the job have not yet been determined. The job analyst is essentially starting from scratch, in other words. *Deductive* means that the duties and sometimes even the work tasks of the job have already been determined. In this case, the job analyst will be able to build on this information. For example, the job of university professor usually has three duties: teaching, research, and service. In a *deductive* job analysis, these three duties are already specified. More specific work tasks and behaviors within each duty might be identified during the job analysis. The deductive job analysis only needs to identify which work behaviors current professors do, how important they each are, and how much of the professors' time they take. Because quite a bit of descriptive job information is already predetermined, to save time, deductive job analyses are usually conducted via questionnaires rather than personal interviews with employees.

CONDUCTING A JOB ANALYSIS

Next, we discuss a job analysis procedure that is adaptable to suit most jobs. We would like to stress that depending on the job or the purpose of the job analysis, other methods might be more appropriate. Table 4-5 lists the 11 steps in performing a typical job analysis.

TABLE 4-5 The Eleven Steps in Performing a Typical Job Analysis

1. Get the support of top managers and ensure that all managers support the job analysis effort
2. Thoroughly communicate the purpose of the job analysis to all participants and ensure they are diligent about completing the tasks objectively
3. Collect background information and analyze how the job contributes to the execution of the firm's business strategy
4. Generate the task statements
5. Generate the KSAOs
6. Form the job duty and task groupings
7. Link the KSAOs back to the job duties
8. Collect critical incidents
9. Weight the job duties
10. Construct a job requirements matrix
11. Write the job description and person specification

Get the Support of Top Management

The first and perhaps most important step in a job analysis effort is to secure the support of the firm's managers, especially its top managers. Without it, the appropriate resources are not likely to be provided for the effort, and employees who are asked to participate will not be as likely to take the effort seriously or be given enough time away from their regular job duties to do it. The job analyst is more likely to gain managerial support by explaining that the goals are to better identify what the firm's jobs require so as to improve how the positions are staffed and reduce costly turnover.

Communicate the Purpose of the Job Analysis to All Participants

After securing the support of the firm's top managers, the purpose of the job analysis needs to be communicated to all employees who will participate in the effort. Often it can be helpful for top managers to make an internal announcement about the importance of the effort and how employees can help improve the quality of the information collected by participating honestly and objectively. Explaining why the job analysis is being done and describing how the results will be used can promote cooperation among employees and help reduce their fears that the process might somehow negatively affect their own jobs.

Collect Background Information

The next activity that should be undertaken is a review of the firm's existing documents and information related to the position, including the following:

- ***A job family description***, which provides a quick overview of the job family that contains similar jobs.
- ***Desk audits***, which involve asking people who currently do the job to walk you through their most important and most frequent tasks. (This can be particularly useful for analyzing clerical and technical positions.)
- ***Entry examinations*** currently used for the job.
- ***Worker logs***, which can provide the job analyst a feel for the tasks done and identify particularly important job functions. The logs might also include critical incidents that can be looked at.
- ***Any existing job analyses, job descriptions, person specifications, or job profiles***, which can be a useful starting point for developing task statements and identifying competencies.
- ***Performance reviews*** of current and previous occupants of the position, which can provide the job analyst with information about what job behaviors and outcomes are currently considered important.
- ***Recruitment information***, such as Internet postings and brochures given to past applicants.
- ***Training materials***

Documents such as these will obviously only be available for existing jobs. Before beginning a job analysis for a brand-new job, the people doing it need to understand the reasons why the position is being created and what the managers who have authority over the position perceive its important duties and characteristics to be. If no previous information on the job exists, and if there are no job experts currently performing the job, it is particularly important to gather information from as many people who will be affected by the job as possible. It can also be helpful to establish what job duties will *not* be assigned to the new position to ensure that appropriate boundaries are created. Considering the organization's culture and business strategy and how the target job fits into the broader organization is important, too. This information can help identify appropriate job experts and frame why the position exists and how it contributes to strategy execution and to the company's competitive advantage.

Another helpful source of background information about a current or new job is the government's current online job classification system called the Occupational Information Network (O*NET).²³ O*NET replaced the Dictionary of Occupational Titles, which described what workers did on a job with regard to seven categories: (1) things, (2) data, (3) people, (4) worker instructions, (5) reasoning, (6) math, and (7) language. O*NET contains a variety of information about a wide variety of jobs. Although the job analysis information contained in O*NET must usually be modified and supplemented to fit the particular job and organization, it is a great place to begin gathering background job analysis information and a starting point for identifying a job's requirements. Because O*NET was developed for general occupations, the information will likely need to be made more specific to suit a particular job and organization. The Dictionary of Occupational Titles²⁴ and Job Analysis Dot Net²⁵ can also be useful resources.

It is also important at this stage to analyze the organization's culture and business strategy and learn how the target job fits into the broader organization. Why does this position exist in the organization? What do other people in the organization need from the people in the target job? What must people in the target job be able to do to enable the organization's work to be done well and be done consistently with the organization's business strategy? What values and work styles are necessary for effective performance? The answers to these questions can identify important behaviors and tasks that should be included in the job analysis.

This is also a good time to begin identifying any changes anticipated for the position. Incumbents, supervisors, and company executives may all have insights as to how what the company needs from the position might change in ways that affect how the position should be staffed. Job analyses should be future oriented, and conducted in a way that the talent placed in a job will be able to perform the job both now and in the future.

Generate the Task Statements

The fourth step is to identify in specific behavioral terms the regular duties and responsibilities of a position. A **job task** is an observable unit of work with a beginning and an end. For example, one of the job tasks of a warehouse worker might be to sort a box or complete a purchase order. After consulting the existing materials collected during the literature review, interview multiple job experts, including incumbents, supervisors, and others with a thorough knowledge of the job to generate task statements. Each task statement should describe a discreet, identifiable aspect of the work performed on the target job and describe *what* the worker does, *how* the worker does it, and *for what purpose*. Then combine any related or similar task statements and write them as one statement. Table 4-6 shows examples of task statements and how to format them.

Task statements reveal a lot of information about a job, including:

- the type of knowledge used,
- the amount of supervision exercised and received,
- the decisions made,
- the physical working conditions,
- the physical requirements of the job (e.g., how much lifting, stooping, and bending is conducted and under what conditions),
- the technology used, and
- the necessity of working individually or as a team member.

JOB TASK

an observable unit of work with a beginning and an end

TABLE 4-6 Task Statement Examples

What? (action verb)	To Whom/What?	How?	Why?
Writes	Advertising copy	Using Microsoft Word	For placement in newspaper and magazine advertisements
Mows	Lawn area	Using rider and push mowers	To maintain appearance of company grounds
Supervises	Assistant store managers	In person and using surveillance cameras	To ensure compliance with company policies
Compares	Unit expenses with budget	Using basic math computations	To ensure budgetary compliance
Drives	Fuel truck containing gasoline to work sites	Following all safety procedures	To refuel construction vehicles

To comply with the ADA, task statements should focus on *what* needs to be done and not *how* it needs to be done. Try to avoid nondescriptive verbs, such as *prepares* or *conducts*, and be as specific as possible. Here is an example of a poor versus a good task statement:

- Poor:** Accounts for all cash at the end of a shift.
- Good:** Balances the cash in register at the end of a shift by counting the money, visually comparing the total with the register tape total, and identifying and correcting errors in order to account for all the cash received.

The physical requirements of a job description must be addressed to ensure ADA compliance. Table 4-7 presents a sample physical requirements checklist.

Generate the KSAOs

One of the primary goals of a staffing-oriented job analysis is to identify the job-related worker characteristics that need to be present for recruits to be considered minimally qualified for the job, and those characteristics that help to identify the job candidates likely to be most successful on the job. Job-related worker characteristics can be thought of in terms of knowledge (K), skills (S), abilities (A), other characteristics (O) (referred to as a group as KSAOs), and competencies.

KNOWLEDGE
An organized body of factual or procedural information that can be applied to a task

Knowledge refers to an organized body of factual or procedural information that can be applied to a task. The knowledge of computer programming languages, foreign languages, and machine operating procedures are examples. A job’s knowledge requirements should be stated as specifically as possible. Consider the knowledge requirements a corporate recruiter must have, for example: Instead of stating, “knowledge of staffing-related legal principles and laws is required,” it would be more appropriate to state, “knowledge of Equal Employment Opportunity (EEO) and affirmative action guidelines and laws, such as the Americans with Disabilities Act, is required.”

SKILL
The capability to perform tasks accurately and with ease; skills often refer to psychomotor activities

A **skill** is the capability to perform tasks accurately and with ease. Skills often refer to psychomotor activities (e.g., activities performed using body movements, such as one’s arms and hands, vision, and so forth). When a skill is identified as necessary, a performance standard must also exist for using that skill (e.g., 20/20 vision, typing 120 words per minute with five or fewer errors, and so on).

Skills reflect the ability of people to effectively use their knowledge to perform physical tasks. Driving skills are a good example. It is not only an individual’s knowledge about how to drive that’s important, but also his or her skill in actually doing so. Imagine, for example, a child knowledgeable about the function and use of a steering wheel, gas pedal, and brake pedal but who is clearly unable to actually drive a car. This child would have driving knowledge but no driving skills. Other examples of skills are:

- Depth perception
- Manual dexterity

TABLE 4-7 A Partial Checklist of the Physical Activities and Requirements, Visual Acuity, and Working Conditions of the Position²⁶

The physical requirements of the position (Please check only ONE)

- *Sedentary Work*: Exerting up to 10 pounds of force occasionally and/or a negligible amount of force frequently or constantly to lift, carry, push, pull, or otherwise move objects, including the human body. Sedentary work involves sitting most of the time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met.
- *Light Work*: Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or a negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary work and the worker sits most of the time, the job is rated for Light Work.
- *Medium Work*: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds frequently, and/or up to 10 pounds of force constantly to move objects.
- *Heavy Work*: Exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.
- *Very Heavy Work*: Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

The physical activity of this position (Please check ALL that apply)

- *Climbing*: Ascending or descending ladders, stairs, scaffolding, ramps, poles, and the like using feet and legs and/or hands and arms. Body agility is emphasized. This factor is important if the amount and kind of climbing required exceeds that required for ordinary locomotion.
- *Balancing*: Maintaining body equilibrium to prevent falling when walking, standing, or crouching on narrow, slippery, or erratically moving surfaces. This factor is important if the amount and kind of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
- *Stooping*: Bending body downward and forward by bending spine at the waist. This factor is important if it occurs to a considerable degree and requires full use of the lower extremities and back muscles.
- *Kneeling*: Bending legs at knee to come to a rest on knee or knees.
- *Crouching*: Bending the body downward and forward by bending legs and spine.

The conditions the worker will be subject to in this position (Please check ALL that apply)

- *The worker is subject to inside environmental conditions*: Protection from weather conditions but not necessarily from temperature changes.
- *The worker is subject to outside environmental conditions*: No effective protection from weather.
- *The worker is subject to both environmental conditions*: Activities occur inside and outside.
- *The worker is subject to extreme cold*: Temperatures typically below 32 degrees for periods of more than one hour. Consideration should be given to the effect of other environmental conditions, such as wind and humidity.
- *The worker is subject to extreme heat*: Temperatures above 100 degrees for periods of more than one hour. Consideration should be given to the effect of other environmental conditions, such as wind and humidity.
- *The worker is subject to noise*: There is sufficient noise to cause the worker to shout in order to be heard above the ambient noise level.
- *The worker is subject to vibration*: Exposure to oscillating movements of the extremities or whole body.

Source: Reprinted with permission from the North Carolina Office of State Personnel.

An **ability** is a more stable and enduring capability to perform a variety of tasks than a skill allows. Abilities can be inherited, acquired, or a combination of both. Unlike skills, abilities reflect more natural talents, including cognitive abilities (e.g., verbal or quantitative abilities), psychomotor abilities (reaction time), sensory abilities (e.g., the ability to see or hear particularly well), and physical abilities (e.g., a person's strength, endurance, or flexibility).

ABILITY

a more stable and enduring capability to perform a variety of tasks than a skill allows

- Mathematical ability
- Perceptual ability
- The ability to lift 50 pounds

“OTHER” CHARACTERISTICS

characteristics that do not fall into the knowledge, skill, or ability categories; they include a person’s values, interests, integrity, work style, and other personality traits

“Other” characteristics is typically a catchall category for worker characteristics that do not fall into the knowledge, skill, or ability categories. They include a person’s values, interests, integrity, work style, and other personality traits. Additional examples grouped into this category include one’s degrees and/or certifications and the ability to work weekends. It is important to note that while some personality traits, such as conscientiousness, are consistently predictive of job performance, their relationship with job performance is not strong enough to base hiring decisions exclusively on them.

After the task statements are generated, the third step is to ask a different group of job experts to identify the KSAOs necessary to perform each task. It is sometimes more efficient to identify the KSAOs *after* conducting the next step, forming job duty and task groupings. The risk is that important, but infrequently used KSAOs may be overlooked. In addition to KSAOs, job experts can identify the competencies needed for a worker in the job to be successful. It is particularly important that this group identify knowledge that a worker needs but that he or she cannot refer to (in manuals or other written instructions) while actively on the job. For example, someone working as a press operator for a newspaper publisher cannot stop the presses to look up operating information. Some tips for writing good KSAOs are to maintain a reasonable balance between being too general and too specific. A common error is to include trivial information when writing KSAOs. Do not simply restate the task statement. Focus on providing new information by identifying what KSAOs employees really need to perform a given task. Of course, as we hinted at in previous chapters, the job expert should also identify whether each KSAO is something that new hires are expected to have before being hired or whether the organization intends to train new hires to develop the KSAOs.

A substantial amount of empirical research has helped us to identify some of the employee characteristics that seem to be related to better job performance in virtually all jobs. For example, intelligence²⁷ and conscientiousness²⁸ have consistently been shown to be related to higher job performance. Additionally, a person’s emotional stability and extraversion can enhance his or her job performance in many different types of jobs, particularly those involving interpersonal relations.²⁹ If the goal is to recruit top performers for a dynamic job, focusing on the intelligence and the ability of candidates to learn quickly should help. If honesty and integrity are key, recruiting people who display these traits can result in employees who are less likely to engage in counterproductive behaviors and steal.³⁰ Table 4-8 summarizes some of the characteristics likely to be important in specific job environments.

TABLE 4-8 The Characteristics Related to Specific Job Requirements

Characteristic	Job Requirements
Adaptability: The ability to effectively manage change, delays, or unexpected events	Complex, dynamic jobs (e.g., CEO and research & development jobs)
Emotional Stability: The disposition to be calm, optimistic, and well adjusted	Jobs involving interpersonal interaction (e.g., police and air traffic control jobs)
Conscientiousness: The tendency to be purposeful, dependable, and attentive to detail	Jobs requiring dependability, consistency, and motivation (e.g., quality control jobs)
Extraversion: The tendency to be sociable, assertive, and upbeat	Jobs requiring interpersonal interaction and persuasion (e.g., sales and customer service jobs)
Emotional Intelligence: The ability to control one’s emotions, read the emotions of others, and relate to others	Jobs requiring interpersonal interaction, negotiation, and influence (e.g., sales, customer service, and management jobs)
Ethics: One’s honesty, willingness to follow rules, and tendency to treat people with respect	Jobs with a high level of discretion or with a high risk of employee theft (e.g., casino and bank jobs, and cashier and accounting jobs)
Team Orientation: The tendency to be oriented toward the achievement of collective goals	Jobs requiring a high degree of teamwork or sharing of resources (e.g., jobs as part of creative or medical teams)

Form the Job Duty Groupings

In the next step, the job analyst groups similar task statements into job duties that reflect broader job responsibilities (e.g., decision making, supervision, and customer relations). A **job duty** is a set of related tasks that are repeated on the job, such as servicing customers or maintaining an office's supplies. The grouping process is subjective, but the goal is to reduce a lengthy list of task statements into a much shorter list—generally to fewer than 12 job duties each containing 6 to 30 task statements. Often the KSAOs required for each task will help the job analyst determine which tasks should be grouped together. Each job duty should then be labeled to reflect the broader tasks it represents. Table 4-9 lists some task statements for the job duty of classroom instruction for a university professor.

JOB DUTY

a set of related tasks that are repeated on the job

Link the KSAOs Back to the Job Duties

In the seventh step, a third set of job experts links the KSAOs associated with the tasks contained in each job duty back to the various job duties. These experts are asked to confirm whether each KSAO is important to the performance of the tasks in each given category. Ideally, the relationship of every KSAO to every task category is rated in terms of its importance. This helps the firm identify which KSAOs should be given priority when it comes to making its recruiting and selection decisions. The step also confirms that each of the KSAOs is critical to the performance of the job.

Collect Critical Incidents

The eighth step is to collect critical incidents to identify the behaviors that differentiate very good from poor job performance. Ask job experts to consider each of the job duties one at a time and imagine instances of particular effective or ineffective performance. Ideally, both good and bad critical incidents will be collected to try to identify the behaviors, competencies, skills, and so on, that differentiate good job performers.

Certain questions can help employees recall the details of an incident. A job analyst might use the following questions to probe for details about a negative critical incident that occurred for a customer service representative:

1. **What were the circumstances leading up to the incident?** Answer: A caller was using abusive language but not communicating what the actual problem was.
2. **What did the worker do that made you think that s/he was a good, average, or poor performer?** Answer: The customer service representative "told off" the caller and angrily hung up.
3. **What were the consequences of the worker's behavior in the critical incident?** Answer: The caller worked for a large customer, which subsequently discontinued its relationship with the firm.

This negative critical incident suggests that patience, the ability to stay calm in the event of a belligerent call, and emotional control are useful screening criteria for a telephone-based customer service representative.

TABLE 4-9 Group Task Statements into a Job Duty

For the job of: *University Professor*

Job Duty: *Classroom Instruction*

Task Statements:

- a. Prepare course syllabus using Microsoft Word to inform students of instructor's expectations and grading criteria, provide a reading schedule, and summarize course goals
- b. Prepare lectures in advance using appropriate software and media to communicate the course material to students
- c. Lecture students verbally to accurately communicate the course materials in an engaging way

An example of a positive critical incident for a customer service representative might be the following:

A caller was hysterical because the birthday gift she ordered for her child arrived damaged and the birthday was the next day. She yelled incoherently about the incident. The customer service representative talked in a clear, calm voice and persuaded the woman to repackage the damaged product for return. The customer service representative checked to ensure that the product was still available and personally assured the caller that a replacement would immediately be sent for overnight delivery.

This example suggests that the ability to regulate one's emotions, remain calm in the presence of an emotional caller, and be persuasive are useful screening criteria for a customer service representative.

Weight the Job Duties

After finalizing the job duties, task statements, and KSAOs, employees, supervisors, and others familiar with the job weight its duties according to their relative importance to the overall performance of the job and the relative time spent on each. The weights should each add up to 100 percent. Table 4-10 shows how to weight the job duties of an administrative job.

The weights for each job duty's relative importance are used to identify Bona Fide Occupational Qualifications (BFOQs), or the essential qualifications of new hires, and to prioritize the characteristics that will be recruited and screened for. If the optimal weights for each job dimension cannot be determined statistically—a situation that we will discuss further in Chapter 8—the weights for the relative time spent on each job duty are used to prioritize them into essential versus desirable categories.

In Table 4-10, database administration is the most important job dimension for this position although administrative assistants spend most of their time performing clerical duties. Staff administration is the least important relative to the others (although still an important job duty); administrative assistants spend the least amount of time performing these job duties.

The staffing specialist may then determine that database administration will be weighted 45 percent, clerical will be weighted 35 percent, and staff administration will be weighted 20 percent in computing an overall evaluation score. Equally weighting the three duties would

TABLE 4-10 Weighting Job Duties by Their Importance and the Relative Time Spent on Each

In the left column, record a number of points between 1 and 100 that reflects the importance of the particular task category to the overall performance of an administrative assistant. The total number of points distributed over the job duties should equal 100. In the right column, indicate what percentage of time is spent on the activities like those represented by the three job duties. Again, the total number of points distributed across the job duties should equal 100.

Relative Importance	Job Duty	Relative Time Spent (%)
45	1. <i>Database Administration.</i> Maintaining and developing databases and spreadsheets, including collecting and entering information. Using databases and spreadsheets to obtain summaries and answer questions.	25
35	2. <i>Clerical.</i> General clerical activities including answering phone, filing, handling mail, and duplicating.	50
20	3. <i>Staff Administration.</i> Record keeping and handling payroll duties, including auditing and resolving discrepancies. Maintaining unit personnel files.	25
100	*Total must equal 100	100

misrepresent their relative contribution to the job. Of course, the weights different job experts give each job duty will vary. Consequently, the job analyst will have to use good judgment when deciding which weights to actually assign.

When First Hawaiian Bank conducted a job analysis on its customer service positions, it found that 40 percent of a customer service employee's time was being spent on administrative duties, not focusing on customer service. This information prompted First Hawaiian Bank to restructure its customer service department, which resulted in a more efficient workforce.³¹

Construct a Job Requirements Matrix

The tenth step in a job analysis is to construct a job requirements matrix summarizing the information collected so far. Table 4-11 shows what a job requirements matrix looks like.

In addition to looking at a single job description to plan for a particular job, a firm can pool together job analyses from a variety of positions to identify key KSAOs or competencies that are important for multiple jobs. Job analyses for jobs in the same job family, or for jobs that tend to link into career paths for employees, can be used for strategic planning.

Write the Job Description and Person Specification

The final step is the writing of the job description and person specification. At the very minimum, the previous steps should generate a list of tasks and duties with some information regarding their importance to the overall performance of a satisfactory employee, an indication of the frequency these duties are performed, and the job's essential and desirable qualifications. To write the job description, the job analyst should be able to use the tasks and duties to describe the basic functions. The Web site www.jobdescription.com can be a helpful resource for writing job descriptions. After searching to find a desired job title, the wizard can be used to customize the generic job description for this position using the information obtained from the job analysis.

TABLE 4-11 A Job Requirements Matrix for a Project Manager

Characteristics of the Job				Characteristics of the Worker	
Job Duty	Tasks	Relative Importance of Job Duty (%)	Relative Time Spent (%)	Competency or KSAO	Importance of KSAO or Competency to Task Performance (1 = Low, 10 = High) (E = Essential)
Project Management	1. Develop and implement plans, schedules, and responsibility charts to ensure adherence to the project's timeline	35	20	1. Ability to develop plans and schedules	8.2
	2. Report the project's progress and results to superiors			2. Time management skills	9.1 E
Supervision	1. Schedule and track team members' work assignments to ensure appropriate progress	35	30	3. Knowledge of project management reporting software	7.6
	2. Acquire the resources the team needs to function			1. Ability to work with diverse people	5.9
Customer Service	1. Research and understand customers' needs and take actions to ensure their needs are met	30	50	2. Ability to delegate	7.6
				3. Negotiation skills	8.3
				4. Prioritization skills	8.9 E
				5. Leadership ability	7.4
				1. Communication skills	8.1
				2. Listening skills	8.8 E
				3. Empathy	7.9

In addition to precisely specifying the actual job duties that have to be performed from a business or management standpoint, to comply with certain requirements of the ADA, a job description has to be very specific about the physical, ergonomic, environmental, and other requirements of the job. For example, a job description for a sales position should include a specific description of the physical requirements of the job, such as “must stand for significant periods of time without a break” or “must meet with customers outside under all weather conditions.” If the job analyst isn’t specific in describing every important aspect of the job, then the ADA assumes that the employee can perform the actual job duties any way he or she wants to, regardless of whether or not his or her way complies with company policy.³²

The person specification summarizes the KSAOs needed to perform the job well as well as the minimum worker qualifications and BFOQs. One way to create a person specification is to look at the job duties and try to identify the most important KSAOs or competencies needed to do the job. The necessary KSAOs should be stated in the most job-related terms possible. Also, both the required qualifications and the required level of education for the job should be stated as precisely as possible. If the organization intends to train new hires, the required aptitudes or training-readiness criteria should be stated. If related experience is included in the person specification, the quality of a person’s experience is often more important than the length of experience. If any qualifications are deemed essential, they should reflect the minimum basic educational requirements necessary to carry out the job to an acceptable standard.

The quality and specificity of the job description and person specification are critical for the recruiting function to match candidates’ skills to job requirements. However, rather than simply developing a laundry list of all the tasks required of the position, it is more strategic to consider the business strategy and competitive advantage, a job’s performance needs, and what it means to be successful on the job in addition to these base skills. By first defining outstanding performance, the key competencies, styles, and traits desired in a new hire can become more apparent. To comply with the requirements of the ADA, job descriptions must also identify the essential job functions and the physical and mental requirements needed to perform these essential functions.

Consider the position of executive assistant. The job requires filing, answering phones and screening calls, scheduling the executive’s time, processing requisitions, and light bookkeeping. As a result, the job posting could describe a need for a person with strong typing, filing, organization, and communication skills, and an understanding of the company’s requisition and bookkeeping procedures. A deeper analysis of what has made past incumbents most successful in this position, however, may be their ability to multitask and to not be turned off by the executive’s aggressive managing style. The amount of typing required by the job is minimal, and the bookkeeping and requisition processing are easily trained. Focusing the recruiting effort on identifying people who are organized, are good at multitasking, and work well under pressure may be more important in hiring a high performer for this job.

The longer the list of skill requirements in a person specification, the fewer the number of people who will feel qualified and apply. Focusing on the key characteristics to be sought in recruits increases the likelihood of hiring a superior performer. Also, if the person specification calls for qualifications greater than those actually required by the job, problems can arise. Hiring more highly qualified candidates is likely to cost more. Moreover, if the candidates are hired but then begin to feel underchallenged in their positions, their turnover is likely to be higher.³³ Next to analyzing actual performance data for employees with differing levels of qualifications to assess the relationship between qualification level and job performance for that position, the best gauge for specifying required qualification levels is generally the judgment of an experienced manager.

Writing an effective job description can be as much an art as a science. Because job descriptions can quickly become outdated, supplement them with regularly negotiated goals and developmental opportunities.³⁴ It is also important to write enough flexibility (including something like, “and any other tasks as assigned by the supervisor”) into job descriptions so that workers do not think, “That’s not my job,” and they are comfortable helping coworkers, cross-training, and finding additional ways to contribute to the organization.³⁵ Table 4-12 provides some tips in crafting an appealing job description for a job advertisement.

TABLE 4-12 Crafting an Appealing Job Description for a Job Advertisement

1. Include an understandable and engaging job title. The job title is often the headline in a job board posting and is the first thing a job seeker usually searches for. Including additional information to make the position stand out against similar postings, such as, "Sales Manager, Partner with Customers to Find Solutions," or, "Entry Level Java Developer, Grow with Us."
2. Include positive information about the company to give the job more context. Keep this brief, but focus on what current employees in similar jobs in your organization like about working for the company. This could include industry information, company growth information, work-life balance, mentoring programs, and key elements of the company culture and values. Describe how the organization is unique by communicating its mission statement, future vision, and why it is meaningful to work in the firm.³⁶
3. Include information about the job that can help the job seeker get a feel for it. Why is this position a great opportunity? What are the most important characteristics of top performers? Help job seekers evaluate their fit and likelihood of success.
4. Describe any minimum job requirements such as education, certifications, years of experience, and so on. This should be limited to only those requirements that are required for applicants to be minimally considered for the position.
5. Try to write the job description to reflect the company's culture. If the culture is fun and relaxed, incorporate those elements into the design style and wording. If the culture is more formal and professional, use more structure and formatting in the description. This can help to attract those job seekers who are the best fit with the characteristics you are seeking.
6. If possible, let high performing incumbents get involved in writing or reviewing the job description. You ultimately want to attract more people like them, so asking their advice on what to include, what not to include, and how to best present the information can shape the posting to be most appealing to these targeted job seekers.
7. Include a link to the company's Careers page that has more information about the position and organization, and a way to apply for the position.

Both job analyses and competency modeling techniques can be applied in a forward-looking manner to jobs that are evolving or that do not yet exist. In this case, the job or subject matter experts are interviewed and asked to identify the KSAOs and competencies likely to be critical in the future.

OTHER METHODS: COMPETENCY MODELING AND JOB REWARDS ANALYSIS

Competency Modeling

Competency modeling³⁷ is a job analysis method that identifies the necessary worker competencies for high performance. **Competencies** are more broadly defined components of a successful worker's repertoire of behavior needed to do the job well. Rather than mere job skills, they are the worker characteristics that underlie on-the-job success. Competencies can encompass multiple types of knowledge, skills, attitudes, personalities, and so on.

The differences between KSAOs and competencies can be confusing. One way to think about the difference is to think of competencies as "job-spanning" whereas KSAOs are often limited to an individual job. Also, competencies often come from the top managers of an organization and serve to reinforce the firm's culture. By contrast, KSAO statements are derived mostly by job analysts for staffing purposes.

Because competencies are linked to the organization's business goals, strategy, and values, a person specification resulting from a job description can enhance hiring quality and strategy execution. Because competency modeling may not identify worker characteristics that are important but infrequently displayed, it often supplements other job analysis methods. Because competencies are better linked to the organization's business goals and strategy than traditional KSAOs, competency modeling is gaining in popularity.

COMPETENCY MODELING

a job analysis method that identifies the necessary worker competencies for high performance

COMPETENCIES

more broadly defined components of a successful worker's repertoire of behavior needed to do a job well

A competency-based job description enhances a manager's flexibility in assigning work, lengthens the life of a job description, and can allow firms to group jobs requiring similar competencies under a single job description. Competency modeling allows for greater flexibility in specifying a job's requirements. Because competencies define how to perform a job more broadly than does a traditional job analysis, if the job is changing, then the job analysis will not have to be updated as frequently. The broader description of a job also discourages workers asked to perform a new work task or behavior from saying, "That is not in my job description," unlike workers in a more rigidly specified job.

Therefore, identifying the organization's business strategy, vision, and values is the first step in competency modeling. Job experts with different perspectives on the job, including incumbents, supervisors, and internal and external customers, then identify the characteristics, values, and so on, that enable an employee in that position to best execute the strategy and ensure that the company's values are consistently practiced. For example, a strategy based on innovation and fast product development requires employees with a sense of urgency and the ability to innovate. If the organization's strategy requires employees to continually adapt to or apply new or changing technologies, adaptability and the ability to learn quickly can be more important than specific skills. A strategy with a large customer service component requires hiring employees who are committed to integrity and customer service. Low-cost strategies generally require people who are efficient, detail oriented, and committed to reducing waste and enhancing the firm's efficiencies.

Table 4-13 shows some examples of competencies and jobs that require them.

A good example of linking core competencies, values, and experiences to job descriptions and staffing practices is professional services company PwC. PwC identified core competencies that reinforce its culture and contribute to job performance, and assesses them throughout the application process. Characteristics including being curious, building and sustaining relationships, and communicating with impact and empathy are used to determine which job candidates to pursue and hire.³⁸

Like the other methods, job experts using competency modeling also observe and judge the behaviors displayed by successful employees. Ideally, one group of job experts identifies the competencies, and another group reviews them and offers input. Similar competencies are combined, and a set of from 6 to 12 competencies is generated. It is important not to include too

TABLE 4-13 Competencies Related to Specific Job Environments

Competency Required	Job Examples
Adaptability: The ability to effectively manage change, delays, or unexpected events	Complex, dynamic jobs (the job of the CEO and research & development jobs)
Communication: Includes choosing the appropriate communication medium, presenting verbal and written information clearly and concisely, listening, and giving and receiving feedback	Jobs involving interpersonal interaction (most jobs)
Leadership: Building motivation and a sense of shared purpose in others	Jobs requiring the supervision or influencing of others (managerial jobs and jobs in team settings)
Emotional Intelligence: The ability to control one's emotions, read the emotions of others, and relate to others	Jobs requiring interpersonal interaction, negotiation, and influence (sales, customer service, and managerial jobs)
Problem Solving: Acquiring, analyzing, and integrating information from relevant sources to make timely and appropriate decisions	Jobs requiring analyzing and troubleshooting (customer service, maintenance, and product design jobs)
Creativity: The ability to come up with novel ideas and insights	Jobs requiring original and unique ideas and insights (marketing executive, interior designer, and graphic artist jobs)

many competencies to ensure the staffing effort focuses on those most important and useful for selection purposes. Accomplishing this goal may require the generation of a longer competency list at first, collecting data over time on employees' performance of the skills and behaviors thought to be important, and analyzing the data to see which actually make the most difference. Although many organizations can brainstorm relatively good lists of key competencies, there is no substitute for taking an objective, data-driven look at which competencies actually matter.

Competency modeling is becoming more popular for a number of reasons: Because competencies are broader than skills, job analysts have greater flexibility in terms of specifying a job's requirements. This can help discourage workers from refusing to undertake certain duties not explicitly written into their job descriptions. Also, if the job is changing, then the job analysis will not have to be updated as frequently. Thus, the method's greater simplicity and flexibility appeals to many organizations with rapidly changing jobs for which traditional job analysis methods are costly and time consuming.

Competency analysis is less useful than most other job analysis techniques for describing technical skills. As a result, it often supplements other job analysis methods. However, it's worth noting that the most important competencies, values, and experiences are likely to vary across business units and departments as well. The competencies required by people in a firm's accounting department, for example, are likely to differ from those required by the firm's marketing or research and development departments.

Some companies are experimenting with the elimination of multiple job titles to refocus employees on their work rather than their job title. Marketing firm the Richards Group eliminated the titles of its 560 employees and gave all of its 20 executives the same title of principal. The move was welcomed by clients, who didn't care about the title of the people handling their accounts, and seems to have refocused employees on what they do rather than on climbing the corporate ladder.³⁹

Because the approach is relatively new, and because the level of rigor and documentation is less than traditional job analysis methods, it is unclear how well the approach will withstand legal challenges.⁴⁰ Until it has withstood greater legal scrutiny, it is advisable to combine competency modeling with more traditional job analysis techniques.

Job Rewards Analysis

Another type of job analysis is called a **job rewards analysis**. Job rewards analysis is a job analysis technique that analyzes a job's **intrinsic rewards** that are nonmonetary and derived from the work itself and from the organization's culture as opposed to **extrinsic rewards** that have monetary value. Intrinsic rewards can include the satisfaction of meeting one's personal goals, from engaging in continuous learning activities, and doing meaningful work. Extrinsic rewards include an employee's base pay, bonuses, and benefits. Some jobs provide unique extrinsic rewards like free travel for flight attendants and merchandise discounts for retail employees.⁴¹ Intrinsic and extrinsic rewards together comprise the **total rewards** related to a particular job.

The identified rewards can be used to better match candidates with different jobs, as well as to improve the recruitment process. For example, if a recruiter learns what motivates a job candidate, she or he can identify job rewards that will make the job more appealing to the candidate: A job candidate motivated by money can be told extensively about the company's pay-for-performance system. By contrast, a job candidate motivated by developing his or her skills can be told more about the company's training, development, and continuing education programs.

The **employee value proposition** is the balance between the intrinsic and extrinsic rewards an employee receives by working for a particular employer in return for the employee's job performance. If employees believe they receive rewards equal to or exceeding what they put into the company, they will be more satisfied and less likely to quit. When recruiting or convincing someone to accept his or her job offer instead of a competitor's offer, the recruiter and hiring manager must answer the candidate's most important question, "What's in it for me?" in a manner that makes the job opportunity the most appealing. Answering this question requires a job rewards analysis.

To do a job rewards analysis, one must first determine exactly what attracts job candidates and why incumbents enjoy their work. Then one must craft a message to clearly state what makes the company the obvious choice over the competition. Sometimes the selling points used for different candidates will differ—some are more motivated by financial rewards

JOB REWARDS ANALYSIS

a job analysis technique that identifies the intrinsic and extrinsic rewards of a job

INTRINSIC REWARDS

nonmonetary rewards derived from the work itself and from the organization's culture

EXTRINSIC REWARDS

rewards that have monetary value

TOTAL REWARDS

a combination of the intrinsic and extrinsic rewards related to a particular job

EMPLOYEE VALUE PROPOSITION

the balance between the intrinsic and extrinsic rewards an employee receives by working for a particular employer in return for the employee's job performance

than others, some prefer a team-based work environment, and so on. The rewards emphasized to each candidate should reflect what motivates them as individuals. To do this, the recruiter and hiring manager need to have a thorough understanding of the intrinsic and extrinsic rewards of the job.

Because even intrinsic rewards often cost money, it is important to balance what a firm can afford with what it would like to offer employees as attractive rewards. This relates to the three criteria for employee value propositions: magnitude, mix, and distinctiveness.⁴² *Magnitude* refers to a reward package that is neither too small nor too large in economic terms. Investing too little in a reward package risks offending applicants, discouraging them from applying or accepting job offers, and being noncompetitive. Spending too much on rewards can negatively impact the firm's financial stability, and hurt investors' return on their investment in the firm. *Mix* refers to the composition of the reward package matching the needs and preferences of applicants or employees. Offering stock options that vest in five years to a young, mobile workforce that tends to turn over every three to four years, or free day care to an older workforce might not be consistent with workers' needs and preferences. *Distinctiveness* refers to the uniqueness of a reward package. Rewards with no special appeal and that do not set the organization apart as distinctive do not present a compelling value proposition. Some Internet start-ups in the 1990s created distinctive intrinsic rewards by allowing employees to bring their dogs to work and to dress casually.

What a recruiter or hiring manager feels are a job's best selling points may not totally reflect reality. As a result, it is important to confidentially interview job incumbents, hold focus groups, or conduct formal surveys. First conducting a paper survey to identify categories of rewards and identify those employees most often to identify with them, then following up with interviews and focus groups can play each approach to its best advantage. If employees feel free to make honest comments, they are more likely to share their insights. Exit interviews—interviews workers give their employers after having resigned—can also identify job rewards employees tend to be dissatisfied with. In addition, a firm can benchmark its competitors' rewards to see how its own rewards stack up. Survey instruments, such as the Minnesota Job Description Questionnaire⁴³ and the Job Diagnostic Survey,⁴⁴ which are completed by employees and job experts, can also measure a firm's job rewards. This chapter's Develop Your Skills feature illustrates how some of a job's intrinsic rewards can be assessed.

DEVELOP YOUR SKILLS

Assessing a Job's Intrinsic Rewards⁴⁶

The following eight questions are intended for educational purposes to show how a job's intrinsic rewards might be assessed. Many more intrinsic rewards are possible, so professionally developed and validated scales should be used when doing a job rewards analysis.

Please answer each question as it applies to your job using the following scale. Write the number from 1 to 7 that

corresponds to your answer in the space to the left of each question number. The intrinsic job reward is in parentheses to the right of each question. Higher scores indicate a greater amount of that reward. Scores of 5 or greater indicate that the intrinsic reward is present in the job.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
1. My manager looks out for me. (management relations)						
2. I work closely with customers or coworkers. (interpersonal interaction)						
3. I use a variety of types of knowledge, skills, abilities, or competencies every day. (skill variety)						
4. My work allows me to complete an entire piece of work, rather than just a part of it. (task identity)						
				5. The results of my work affect the lives of others. (task significance)		
				6. I decide how to do my job. (autonomy)		
				7. I can tell how well I am performing my job just by doing it. (feedback from job)		
				8. My managers or coworkers communicate how well I am doing my job. (feedback from others)		

The amount, differential, and stability of each reward can also be a factor.⁴⁵ A reward's *amount* refers to how much of it is received (how much pay, what level of task variety the employee is given, and so forth). A reward's *differential* is how consistent the reward is among different employees—whether all employees receive the reward or only a certain number do based on certain criteria, such as their performance ratings. A reward's *stability* is how reliable the reward is. Is the reward the same all the time, or does it change based on the organization's performance or other business financials?

The job rewards associated with a position can be summarized in a *job rewards matrix* like the one presented in Table 4-14.

Job values and desired job rewards differ across individuals and change over time. Job rewards analysis helps a company tailor its employee value proposition and recruiting message to appeal to the needs, values, and motivations of targeted potential applicants and current employees. When American Express was grappling with increased competition it launched a company-wide effort to make sure it was focusing on the right aspects with regard to its recruiting. American Express conducted focus groups of its employees worldwide to find out what they valued most about their corporate culture, and identified eight points that all of the company's 500 recruiters should touch on when talking to job candidates: brand, culture, the company's

TABLE 4-14 The Job Rewards Matrix for a Purchasing Manager's Position

Reward	Amount	Differential	Stability	To Whom the Reward Might Appeal
1. Competitive base salary	\$32,000/year average	\$30,000–\$36,000/year	Changes based on market conditions and firm performance	Most workers
2. Benefits	Comprehensive health and dental insurance, 401(k), 10 personal days/year	None—all workers receive the same benefits package	Stable	Most workers
3. Performance-based pay	4 percent average	Ranges from 0 to 15 percent	Can change based on firm's performance	Workers who value making and being rewarded for individual contributions
4. Promotion opportunities	Average person is promoted within three years	Can be as early as 18 months; some never get promoted	Varies depending on the manager's performance and company's needs	Workers who desire career advancement
5. Having individual responsibility for tasks	Above average	Based on skills and job performance	Fairly stable	Workers who value making individual contributions
6. Doing different tasks every day	Above average	Fairly consistent across employees	Fairly stable	Workers seeking skill development

position within the financial services industry, global opportunities, career paths, compensation, training and development, and location. “Five years ago, when we went to a career fair we would have talked more about the American Express brand and products, but now we are talking more about these eight areas,” Murray Coon, director of recruiting for American Express, says. “Now it’s more about the industry, the people, and the culture.”⁴⁷

The reasons many people join an organization are often the same reasons they stay with that employer. Identifying what makes a company unique, and developing a compelling employee value proposition, helps identify and target candidates who will thrive in the firm and who will be likely to stay.

Mitre System’s Engineering Competency Model

MITRE wanted to develop a competency model for its systems engineers to enhance its strategic capability in this important area.⁴⁸ MITRE felt that creating a specific and accurate competency model for its systems engineers would improve its recruitment and onboarding processes as well as its performance management and promotion systems. To create a competency model that it could apply to an individual or team environment, MITRE systems engineers and technical experts helped to build a competency model reflecting the company’s specific approach to systems engineering.

MITRE began by identifying competency information from standards bodies, the MITRE Institute, outside vendors, and relevant government sources. The company’s leadership and management competency model was also consulted to generate additional non-technical competencies for consideration as being important for successful systems engineers. The model went through numerous revisions with input from over 150 experts across MITRE.⁴⁹

MITRE’s team ultimately identified 36 competencies that it organized into five sections: enterprise perspectives, systems engineering life cycle, systems engineering planning and management, systems engineering technical specialties, and collaboration and individual characteristics. For example, the collaboration and individual characteristics section includes building trust, persuasiveness and influence, adaptability, and integrity.⁵⁰

MITRE recognizes that no organization is static, and regularly updates its competency needs to keep its competency model accurate. It has found the competency model to be so useful that it has made it available to other organizations interested in better understanding and improving their workforce systems engineering competencies.⁵¹

Summary

Job analysis is a process used to identify the tasks required by a job and the characteristics a worker needs to perform each of these tasks. Job analysis can be strategic by aligning the requirements of a job with the company’s business strategy and competitive advantage, taking into account what is required to perform the job today as well as in the future. If the job changes, it is important that the people hired to perform a job can also effectively perform the changed job. Competency modeling is a method of analyzing the broader competencies needed to perform well in

roles as opposed to jobs. Competency modeling also identifies the factors that align employees with an organization’s values and strategy. Job rewards analysis is a job analysis technique that identifies the intrinsic and extrinsic rewards of a job. Its purpose is to analyze a job’s intrinsic and extrinsic rewards to identify how to create and sell a compelling employee value proposition to recruits and employees. Job analysis is a key step in determining what employees need to do to enhance the firm’s competitive advantage and execute its business strategy.

Takeaway Points

1. A *Job analysis* is the systematic process of identifying and describing the important aspects of a job and the characteristics a worker needs to do it well. It identifies the job’s important tasks and working conditions as well as the tools and technologies people doing the job use. The goal is to define the ideal individual for the job from the perspective of the company, its strategy, and the employees with whom the person will work. A job analysis is strategic if it aligns the firm’s current as well as future job requirements with the company’s business strategy.
2. A *job description* is a written description of the duties and responsibilities of a job. A *person specification* summarizes the characteristics of someone able to perform the job well. Based on the job description, the person specification profiles the personal skills, qualifications, abilities, and experiences the organization needs to evaluate candidates during the recruitment and selection process.
3. Different methods can be used to conduct a job analysis. The *critical incidents* method uses subject matter experts to provide examples of good and poor performance incidents that have occurred on the

job. This method helps job analysts identify extreme behaviors but not necessarily typical day-to-day behaviors. The *job elements* method asks a panel of job experts to identify and rate the worker characteristics that influence success on the job. Although the process can be difficult to explain, it is efficient, and relatively fast. The *structured interview* method involves interviewing job experts about the job and the required worker characteristics. Although this method can be quick, the job analyst needs to minimize any political biases imparted by the job experts involved in the process. A *task inventory* is a list of tasks generated by job experts and grouped in categories reflecting major work functions. The functions are then evaluated on dimensions relevant for assessing job candidates. Task inventories are objective and produce reliable descriptions of the job but fail to capture worker characteristics displayed infrequently. Neither do the inventories identify the characteristics that distinguish superior from average or barely acceptable workers. The Position Analysis Questionnaire is a structured job analysis questionnaire that is fast, cheap, and useful for almost any position. Like any structured questionnaire, the predetermined questions limit the information the job analyst can obtain. Also, the reading level of the questionnaires may be too high for job experts providing input on certain positions.

4. The steps in planning a job analysis are to (1) determine the time and resources that can be invested in the job analysis, (2) identify

the job experts who will be able to participate, and (3) identify appropriate job analysis techniques to use.

5. The steps in conducting a job analysis are to (1) get the support of top managers; (2) thoroughly communicate the purpose of the job analysis to all participants and ensure they are diligent about completing the tasks objectively; (3) collect background information about the job, the business strategy, and the organization's culture; (4) generate task statements that describe the work done on the job; (5) generate the KSAOs associated with each task statement; (6) form job duty groupings; (7) link the KSAOs back to the job duties to be sure they are appropriate; (8) collect critical incidents to better distinguish excellent from poor performers; (9) weight the duties of the job; (10) construct a job requirements matrix summarizing the information collected; and (11) write a job description and person specification.
6. Competency modeling involves identifying more broadly defined components of a successful worker's repertoire of behaviors needed to do a job well. Competency modeling often comes from the top of an organization and serves to reinforce an organization's culture. By contrast, KSAO statements are derived mostly by job analysts for staffing purposes. A *job rewards analysis* identifies the intrinsic and extrinsic rewards of a job. The rewards that are identified can be used to recruit candidates and match them with certain jobs.

Discussion Questions

1. Why do you think some organizations choose to not perform job analyses given their benefits? What could be done to increase their willingness to analyze jobs?
2. How can job analysis make staffing more strategic?
3. How do you personally evaluate different job opportunities and decide which to pursue?
4. If supervisors and job incumbents disagreed about the relative importance and weights of various job duties, how would you reconcile their conflicting opinions? For example, if a supervisor

emphasized the technical aspects of a customer service representative's job and the representatives emphasized the interpersonal aspects of listening to customers and understanding their problems, what would you do?

5. Some jobs change so rapidly that companies do not feel doing a job analysis is worthwhile because by the time one is done, it's already outdated. What advice would you give such a company to help them take advantage of the benefits a job analysis has to offer without wasting unnecessary time and resources doing a traditional job analysis?

Exercises

1. *Strategy Exercise:* Imagine that you are a staffing specialist in Vroom, a 10-year-old company that manufactures toy cars. The cars are high quality and receive a premium price. Workers assemble pieces of the cars by hand on an assembly line. Some of the assemblers are great at what they do, but others have trouble keeping up and tend to slow the line down. Vroom wants to keep its labor costs as low as possible. However, it is willing to invest in assessment systems to evaluate job candidates and help it identify the most promising candidates to hire.

You believe that your staffing system for the assemblers could be improved so there's less performance variability among them. Unfortunately, it has been 10 years since the last job analysis was done for the position, and many of the tools and assembly methods have changed. After asking for money to use in conducting an updated job analysis on the assembler position, your CEO asks you to justify your request. Using what you have learned in this chapter, write a one-page report convincing your CEO to invest the money in the job analysis project, describing what resources you would need to do it.

2. *Develop Your Skills Exercise:* Working in a group of three to four students, do a job rewards analysis on the job one of your group members holds (or has held). Use the questionnaire in this

chapter's Develop Your Skills feature as part of your analysis. Summarize your analysis in a job rewards matrix. Then apply the results and describe the type of potential job applicant to which each reward might appeal.

3. *Develop Your Skills Exercise:* Using the Web browser of your choice, identify two poorly written and two well-written job descriptions. What makes the better job descriptions more effective? Now choose one of the weaker job descriptions and rewrite it to be more effective. Feel free to assume anything you need to about the job and organization to make these changes (but be realistic).
4. *Opening Vignette Exercise:* The opening vignette describes MITRE's effort to develop a competency model for its systems engineers. As explained in the vignette, systems engineering is a broad discipline requiring a variety of knowledge, skills, abilities, and other characteristics. Performing a job analysis or developing a competency model for this type of job requires using different methods than would doing the same for a more static, lower-skilled job such as a cashier or mail sorter. Your assignment for this exercise is to describe how you would conduct a job analysis or create a competency model differently for these two types of jobs. How would the process differ? Would you use different sources of information?

CASE STUDY

Imagine that you are the recruiting manager for RTMM Inc., a software development company. You have had trouble persuading top candidates to join your firm because it is not yet well known. You have attracted a sufficient number of qualified candidates, but too many of them are turning down your job offers and accepting opportunities with your competitors.

Based on your conversations with job candidates, you think that the key to increasing your job offer acceptance

rate is to enhance candidates' understanding of the company and its value proposition. To thoroughly identify the benefits of the job and of working for RTMM, you conducted focus groups with your current software engineers to learn what they valued about their jobs and about the company. This is the job rewards matrix you created through these focus groups:

Reward	Amount	Differential	Stability
Annual bonus	\$18,000 average	\$0 to \$40,000 depending on company and individual performance	Availability is based on company performance
401(k)	9 percent of base salary	Same for all workers after one year of service	Stable
Development opportunities	Depends on the project and skills used	Differs by need and by job performance level	Company annually invests at least \$3,000 per employee in its formal training program
Promotion opportunities	Promotion rate averages three years	Minimum of two years required for promotion; 50 percent are never promoted	Varies according to company needs and individual performance
Autonomy	Above average	Based on skills and job performance	Stable
Task variety	Above average	Same for all employees	Stable
Fun culture	Above average	Same for all employees	Stable

Your assignment is to identify the types of people who might be attracted to this opportunity, and to write a one-page letter to a hypothetical job offer recipient named Keisha

Jackson, persuading her to accept your previously extended, competitive job offer.

Semester-Long Active Learning Project

Perform a job or competency analysis on the job as it exists now and as it will look in the near future. Summarize your findings in a job requirements matrix. Identify which qualifications are essential and which are desirable in new hires. Also do a job rewards

analysis and summarize it in a job rewards matrix. Who might find the rewards offered by the job and organization attractive? These insights will help you complete the assignment in Chapter 6.

Case Study Assignment: Strategic Staffing at Chern's

See the appendix at the back of this book for this case study assignment.

Endnotes

1. "About MITRE," *The MITRE Institute*, March 1, 2012, <http://mitre.org/about/index.html>.
2. Ibid.
3. "Systems Engineering Competency Model," *The MITRE Institute*, 2011, http://www.mitre.org/work/systems_engineering/guide/competency_model.html.
4. Biddle, B. J., *Role Theory: Expectations, Identities and Behaviors*, New York: Academic Press, as cited in Ilgen, D. R. and Hollenbeck, J. R. "The Structure of Work: Job Design and Roles," In M. D. Dunnette and L. M. Hough (eds.), *Handbook of Industrial/Organizational Psychology* (2nd ed.), Palo Alto, CA: Consulting Psychologists Press, 1979, 165–207.
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