

PRACTICAL GUIDE

JOB ANALYSIS

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About This Book

Why is this book important?

A competent job analysis is the foundation of all other human resource functions. If we do not understand the nature of the job to be done, we cannot select appropriate candidates for that job, assess their worth in the job market, develop appropriate training and development programs, mentor them, or adequately carry out any of the multitudinous HR functions. It all must begin with a proper job analysis, a task for which this book provides a comprehensive guide.

What can you expect from this book?

This book provides the reader with a context for understanding the importance of doing a proper job analysis together with a step-by-step guide to conducting such an analysis. One unique element of this guide is a series of eight templates that provide the basis for conducting job analyses for eight different levels of job families, from the entry-level to the senior manager/executive. HR professionals or line managers can readily use these templates with confidence that they have the necessary tools as well as the understanding of the context of this process.

How is this book organized?

Beginning with two chapters on the context and importance of doing a competent job analysis, the book provides guides to specifying the work activities of tasks that make up the job, identifying the competencies necessary to successfully perform that job, spelling out the unique characteristics of the workplace in which the job will be performed, and finally, specifying the performance level at which this job needs to be executed. The templates or instruments necessary to complete each of the elements of a thorough job analysis are provided in an appendix and on a website (www.pfeiffer.com/go/LeonardGoodstein). This provides a convenient way that they easily can be customized for use in doing a job analysis.

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A Practical Guide to Job Analysis

Erich P. Prien, Leonard D. Goodstein, Jeanette Goodstein, and Louis G. Gamble, Jr.



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Preface

This workbook was written with three audiences in mind. The first audience is the relatively new human resource (HR) professional who needs to develop an understanding of the procedures and methodology of job analysis in order to conduct such analyses and then use the data from such analyses in their daily work. The second audience is the experienced HR professional who is trained and experienced in job analysis but who can use specialized information about specific methods and approaches for conducting job analyses, applying the results of such analyses, and training and supervising more junior members of the HR staff. A third audience is line managers who are interested in understanding how competent job analyses can improve the quality of the workforce and positively impact the bottom line.

The organization of this workbook follows the sequence in which job analyses are conducted. The introductory chapter places job analyses in the context of the process of the management of the organization's most important asset—its human capital. In the second chapter we discuss in some depth what is involved in job analyses, including some caveats and cautions to observe. Chapter Three provides a detailed description of how to perform a job analysis. The next chapter provides information on how to use the eight generic job analyses that are, to our knowledge, unique contributions to the field. Each of these eight generic job analyses then follows in a separate section, arranged in order of increasing complexity of the job from entry-level jobs to managerial positions. But work is always done in an organization,

and the nature of that organization—its unique culture, strategy, and structure—provides a context within which work is performed. No job analysis is complete without understanding the characteristics of that workplace. The next chapter provides an overview for understanding those characteristics and introduced our Workplace Characteristics Profile (WCP), a newly revised instrument for identifying the specific characteristics of a workplace that directly impact job performance. Our final chapter deals with how the various levels of job performance can and should be established. Thus we provide a comprehensive manual for performing a job analysis.

Our focus is always on identifying and specifying the particular tasks involved in effectively performing an identified job and the necessary competencies required to do that job. Such a focus is required to produce narrative job descriptions that can be used successfully in recruiting, screening, selecting, and integrating new employees into the workforce.

Although job analyses have been conducted on a systematic basis in business and industry for many decades, for the most part they have not led to producing job descriptions that effectively communicate to others the competencies required to fill those jobs successfully. It seems to us that many of these earlier job descriptions were not written with sufficient attention to how the information included was to be used. All too often, the focus was on describing the tasks involved in the job, rather than on the competencies necessary to carry out the tasks. This focus left the end-user of the job description having to interpret the competencies required for success from the narrative description. The approach of this workbook is to obviate the need for such interpretation. The model of job analysis presented here produces both a clear statement of the work activities involved in the job and the knowledge, skills, and abilities required for successful performance of that job.

In conventional job analyses the individual(s) responsible for performing the analysis must begin with an examination of the tasks involved, and then determine the knowledge, skills, and abilities necessary to perform those tasks; this analysis leads to a job description that typically will combine similar tasks and then separately identify the necessary competencies to perform each set of tasks. This resultant job description serves as a template for this specific job and others in that job family.

In order to circumvent this time- and labor-intensive process, we have developed eight standardized questionnaires that ask respondents first to rate the relative importance of each of a series of work activities involved in a particular job family provided in a list and, second, to rate the importance of a separate set of competencies known to be involved in the successful completion of those work activities. Compiling both these ratings of the importance of various work activities and of the associated competencies produces a job description based on quantitative ratings that identify the required competencies.

Considerable prior work in developing standardized job analysis questionnaires does exist, but all of these efforts have focused on producing a single set of work activities and competencies (e.g., Fleishman, 1992). While there is merit in having a single instrument that covers the entire range of jobs, we firmly believe that such a single-minded approach cannot do justice to the enormous range of jobs and competencies necessary in today's increasingly complex workplace. Chapter Four addresses these issues in greater depth.

Any work of this scope involves the efforts of several others besides the authors. We extend our sincere appreciation to Dr. Kristin Prien for her technical assistance and, even more importantly, her support and affection. Rebecca Taff provided her usual editorial expertise to producing a final product, for which we are exceedingly grateful.

1

AN INTRODUCTION TO JOB ANALYSIS

Identifying the right person to fill a job vacancy has always been difficult. Our aging, culturally diverse, and heterogeneous workforce has increased that difficulty, and our globally competitive economy makes searching for competent workers an even more formidable task. The rise of the Internet and the virtual avalanche of resumes employers receive in response to each job posting make the task of finding suitable candidates yet more laborious.

Still, hiring the wrong people poses serious risks to all businesses—from the smallest to the large, multinational corporation. Indeed, the costs of a hiring mistake are estimated to be from one-half to ten times an individual's yearly salary. The expense of hiring mistakes must be controlled by using a systematic and consistent approach to identifying and hiring competent and suitable people.

Hiring a competent and suitable individual to fill a position is a true win-win proposition—a win for both the new employee and the employer. Recruiting competent people for positions in which they can succeed, feel good about what they are doing, and experience the positive regard of their co-workers is highly reinforcing to everybody. New employees should experience a boost in their sense of self-worth and self-esteem. They should begin to feel secure and bring greater focus and energy to their work, as job satisfaction increases. This growing sense of achievement and capability, in turn, leads to greater increases in motivation, to further achievement, and to a greater sense of competence.

Why Do We Analyze Jobs?

Completing a competent job analysis is ordinarily necessary in order to write the job description, the formal statement of the responsibilities involved, and the qualities necessary for success on this specific job. Without such a job analysis, it is difficult, if not impossible, to prepare a useful job description—and without a job description it would be impossible to fill any job vacancy successfully. A sample job description is included as Appendix A.

But job descriptions have a bad reputation in most organizations. Both employees and managers regard writing job descriptions as a waste of time—until they need to use the information from that job description. Many feel that job descriptions are too confining, that they limit people to a specific set of tasks, and that they limit the behavior of job incumbents. Consequently, writing job analyses is one part of human capital management that everyone loves to hate, arguably even more than performance reviews. People give various reasons for not wanting to do (or even be involved in preparing) job descriptions:

- "It's too much work, and I have more important things to do."
- "It's a waste of time; my people know what their jobs are."
- "Our jobs change too fast to write descriptions."
- "A job description is too confining. I want my people to be flexible."

However, the information obtained from job analyses and which leads to the job description is essential for virtually all of the other human resources (HR) functions. The manager who does not have time to work on job descriptions today certainly doesn't have time to defend against an EEO suit later. Perhaps the current employees really do know what their jobs are, but what happens when a key employee suddenly leaves, and the information necessary for recruiting a replacement is

not there? And if jobs are changing rapidly, knowing what skills are needed to perform these jobs is even more essential, since training people in the newly necessary skills will be a constant requirement. Finally, while flexibility is good in the abstract, organizations require a functional level of responsibility and accountability, which requires job descriptions, which in turn require competent job analyses. Thus, the job description should include information about the duties the employee performs, the knowledge, skills, and abilities, that is, the competencies, necessary to perform those tasks, and any other job-related information. Nowhere is this more important than in the hiring process.

The Hiring Process

For the employer, hiring such people is equally important. First, it saves money by raising productivity, lowering personnel turnover, and reducing supervisory problems. Further, personnel conflicts and problems decline sharply, as does the turnover of new hires, all of which result in considerable savings in additional hiring costs and downtime. Proper selection processes significantly reduce the risk of litigation for negligent or discriminatory hiring practices. An organization succeeds when its hiring process places people in jobs that allow them to utilize their abilities, capabilities, and skills. Finally, from a societal point of view, good selection also provides genuine equal opportunity to all people and helps our economy grow by increasing productivity and reducing job dissatisfaction.

Despite the many benefits of hiring the right candidate to fill a job vacancy, doing so is rarely easy for most organizations. In our experience, one of the most important reasons for this difficulty is that all too many supervisors and managers do not have a clear understanding of the competencies necessary for success in that job and how to assess those competencies. If you do not know what you are looking for, it is difficult to find it!

Prior to an in-depth analysis of job analysis, it is important to place job analysis in a proper context, one that illuminates its importance in the management of an organization's most important asset, its human capital.

The Human Capital Life Cycle

We believe that the ideal human capital life cycle is best understood as involving six more or less discrete steps. All too often employers do not differentiate these steps clearly and thus do not follow them, leading to poor-quality outcomes. The six steps approach employee recruitment, selection, and hiring as the initial aspects of an employee life cycle, one that is concerned with employees throughout their employment careers. The six steps are

- Job analysis
- Recruitment
- Screening
- Final selection
- Job orientation
- Training and development

Additional phases of human capital management appear later in work life as employees move through a career and into retirement, but we will concern ourselves only with these initial six steps, ones that build on the job analysis and universally affect virtually all employees and most jobs. Beginning with job analysis, we will review each of these steps briefly.

Job Analysis

It is not possible to overestimate the importance of a competent job analysis in the human capital process. It is the step on which the entire employee life cycle hinges and thus should be regarded as one of the most important professional responsibilities of both the human resource staff who must conduct thorough job analyses and of their managers who must initiate and oversee the process.

Simply stated, the purpose of a job analysis is to provide an in-depth understanding of the competencies required for success in order to select appropriate candidates. A job competency is a behavior, or set of behaviors, necessary to accomplish a specific work task or achieve a specific goal. These competencies can range from the most simple, such as filing, operating a punch press, or answering callers politely and warmly, to the most complex, such as neurosurgery or getting along with a difficult supervisor.

The importance of using comprehensive job analyses in selecting among candidates is strongly supported by empirical research. This research (e.g., Campion, Palmer, & Campion, 1997; Campion, Pursell, & Brown, 1988;) clearly shows that, when the hiring process was based on a careful job analysis, the prediction of job success is greatly increased, and that it is possible to identify correctly those candidates most likely to succeed. This line of research also supports the conclusion that much of the early research on the problems in predicting job success was seriously flawed by one critical omission—the lack of job analyses that identified the characteristics necessary for success on that job. While the following chapters of this book are concerned with the nuts and bolts of conducting a competent job analysis, the remainder of this chapter will continue with the importance of using job analyses throughout the employee life cvcle.

Recruitment

In job postings for recruiting candidates, the job analysis should be used to clearly specify clearly the knowledge, skills, and abilities (competencies) of successful candidates. Although this will probably not reduce the flood of resumes that recruiters currently experience with every job posting, it does serve two important purposes: First, it provides a template for screening the mass of resumes. Which of these resumes clearly indicates that the sender possesses the requirements necessary for success? For example, to what extent has the applicant tailored the resume to fit the articulated set of requirements in the job posting? How carefully has the resume been prepared? How often have there been job changes? What is the nature of the self-described accomplishments?

Second, an accurate and sufficiently detailed posting will serve as a template that gives a measure of protection against charges of discriminatory hiring. The degree to which the applicant does not meet the specific requirements set forth in the job posting is critical in any defense against discriminatory hiring practices, providing that it can be shown that these requirements are actually related to on-the-job success, a topic to which we return later.

If the initial recruitment process includes some interviewing, the recruiter needs to remember that this interview has two purposes. One is to sell the job to attractive candidates, those who appear to have the necessary set of requirements. The other is to verify that the applicant does have the requirements. This means that the recruiter must understand both the job and the candidate well enough to probe for the validity of the information contained in the resume. Deciding whether or not the recruiter knows enough about the job to test the requirements should be an important factor in selecting recruiters for specific jobs.

One of the dangers of conducting initial interviews of this type is that the recruiter may view the purpose solely as selling the candidate on the job. Organizations should be careful not to reward recruiters for the number of candidates they promote to the screening process. Rewarding recruiters for the number of candidates who make it through the screening process to the final selection stage is far wiser.

Screening

Most hiring organizations do not make a clear distinction between screening and selection, which means that the organization is putting too much time, effort, and energy into examining too many inappropriate candidates. By screening we mean the identification of those few applicants who appear most likely to possess the requirements for advancement to the selection process. We would argue that the optimal number of such candidates who should be advanced to the final selection process is between three and five.

Final Selection

This final selection among the best three to five candidates will ordinarily involve a series of interviews with different key supervisors and managers in the organization. All too often the final selection process tends to be unplanned, which leads to non-functional redundancy in the topics addressed. We strongly recommend that the persons who will be conducting the interviews meet prior to the first interview and develop an interview plan based on the job analysis; for example, decide who will ask what questions, decide which issues need to be covered by more than one interviewer, and so forth. Such planning greatly increases the database developed by the interview process, and also makes the candidate feel that, if this is a sample of management behavior, the organization is well managed.

In addition, an in-depth follow-up and verification of each candidate's education, work history, and background should occur in order to determine if the candidate possesses the essential requirements. Our experience revealed that there are too many cases of falsified educational records, non-existent jobs, bankruptcies, convictions for a variety of offenses, and other misdeeds, none of which were included in the resume, of course. Research has shown that in most resumes as many as one-third of all the

so-called "facts" are simply not true. Each of these issues needs to be carefully checked.

This final step of the selection process that we are advocating requires time and effort, but it has the capacity to pay rich dividends in the kind of employee that it yields. Indeed, the same can be said of the entire hiring process that we have described thus far. There is a clear rule at work here: "Hire hard, and manage easy!" The reverse, however, seems to be more often the rule.

Job Orientation

Most descriptions of the initial human capital management process do not include job orientation as part of this process, but we insist that they should do so. Most frequently, orientation involves simply turning the new hire over to the human resources staff, who spend their time explaining the various company benefit programs and having the new hire fill out the necessary forms. While these are important ingredients of any orientation program, they are not the issues that are paramount to most new employees.

What new employees really want to know and should be told is how to succeed on the job and how to avoid getting in difficulties early on. Two questions we often suggest the supervisor should answer as if the new employee were asking them are: "If your best friend were to come to work here, what bit of advice would you offer about how to succeed?" and "What could I do in the short run that would cause me to fail?" This is clearly the advice that one would give to a close friend or relative, but is often very difficult for a new employee to obtain. And this advice should be based on the data developed through the job analysis.

In our judgment, the hiring process does not end with the final selection decision. After that decision is made, every organization should want the successful candidate to succeed. A job orientation that provides psychological support as well as administrative

support enhances the likelihood of that success, as does having a training and development plan in place for the new employee, one based on the job analysis.

Training and Development

Once the new employee is oriented and working toward becoming successful, the issue of the employee's needs for further training and development become important. When a new employee is hired as a trainee, the importance of a training and development plan should be obvious—a plan ready to be implemented should be available. Indeed, virtually all new employees will have training and development needs—needs that the job analysis and the selection process should have highlighted.

Because there are no perfect new hires, each will pose some kind of unique needs for further training and development, and it is at this early stage that these needs should be addressed. While obviously other training and development needs will surface over time, the new hire offers a unique opportunity for training and development. What are this new hire's specific training needs? Where could a training program, a course, some coaching, or mentoring early on make a real difference in performance and enhance the possibilities for long-term success? Further, this kind of effort on the part of organization is likely to make a real difference in the attitude of the new employee. "Someone up there really wants me to succeed!"

That the job analysis is the cornerstone of every employee life cycle process should be obvious, as should the fact that it affects applicants, new hires, employees, and employers. In every instance, the job analysis is the core of the process, from identifying what requirements are necessary to developing training and development plans for individual employees as well as in supporting and mentoring them to become successful parts of a well-functioning organization Ployhart, Schneider, & Schmitt, 2006).

In summary, we have sketched out a human capital management process that provides a context for understanding the important role competent job analyses play in that process, and we now turn to an in-depth look at what is involved in job analyses.

2

WHAT IS A JOB ANALYSIS?

Defining Job Analysis

Human capital management in organizations virtually always requires an in-depth understanding of the work that people do in that organization. The process by which this understanding is developed is a *job analysis*; a *job description* is the documentation of the results of that analysis. While these two terms are often used interchangeably, we strongly recommend against such usage, as job analysis is a process and a job description is a product of that process. Simply put, a job analysis is a *systematic process* for collecting and analyzing information about a job.

In a more comprehensive and detailed definition, Harvey (1991) defined job analysis as "the collection of data on (a) 'job-oriented' behavior, such as job tasks and work procedures; (b) more abstract 'worker-oriented' behavior, such as decision making, supervision, and information processing; (c) behaviors involved in interactions with machines, materials, and tools; (d) methods of evaluating performance, such as productivity and error rates; (e) job context, such as working conditions and type of compensation systems; and (f) personnel requirements, such as skills, physical ability, and personality traits" (p. 74.) This definition of job analysis focuses on the systematic collection of data on the observable job behaviors of employees and what is accomplished by these behaviors and what technologies are required to do so. A second aspect focuses on the work environment

in which the employees function. While not every job analysis involves all of these components, Harvey's definition does articulate the parameters of job analysis. Those interested will find that Wilson's (2007) comprehensive history of the development of job analysis provides a context for better understanding these definitional issues.

Job analysis has further been codified by the Uniform Guidelines on Employee Selection Procedures (1978), designed by the U.S. Government to assist employers and others to comply with Federal law prohibiting discriminatory employment practices on the grounds of race, color, religion, sex, or national origin. The Guidelines specify, "Job analysis ... includes an analysis of the important work behavior(s) required for successful performance and their relative importance and, if the behavior results in work product(s), an analysis of the work product(s). Any job analysis should focus on the work behavior(s) and the tasks associated with them. If work behavior(s) are not observable, the job analysis should identify and analyze those aspects of the behavior(s) that can be observed and the work products" (section 1607, 14.C.2.) The purpose of these Guidelines is to provide a framework for determining the proper use of tests and other selection procedures. The many cases that have been based on allegations of violations of these Guidelines provide ample evidence that employers who fail to conform to them do so at their own peril.

Given the importance that job analyses play in the management of human capital, it is surprising that job analyses are not regarded as a more critical tool in the field of human resources. Over three decades ago, Prien (1977) observed, "Although job analysis is an essential feature of every activity engaged in by industrial-organizational psychologists, the subject is treated in most textbooks in a manner which suggests that any fool can do it and thus is a task which can be delegated to the lowest level technician" (p. 167). Unfortunately, the situation has not much changed, and this important function is not given the proper

degree of attention and respect either by psychologists or HR professionals.

Applications of Job Analyses

A variety of important reasons support conducting job analyses in the workplace. These include recruitment, candidate selection, employee training and development, performance management, organizational management and planning, and litigation protection. Each of these will be briefly reviewed.

Recruitment

The first external application of job analysis is in recruitment, when the job description becomes the basis for recruiting applicants. In beginning to fill a vacant job, the recruiter needs to know the job responsibilities as well as the skills and other characteristics required of candidates. Not only is it necessary for the recruiter to know these things, but candidates need to know the kind of job for which they are applying. The need for a job description should be obvious to all.

Candidate Selection

In our experience, candidate selection accounts for most job analyses. Employers need to know in some detail the work activities involved in each job vacancy and, most importantly, the knowledge, skills, and abilities—the competencies—required to fill that job successfully. While most employers maintain files of job descriptions, there is widespread understanding that many, if not most, of these job descriptions are dated and need to be redone, especially for jobs deemed to be critically important.

The work activities of a job change over time, as do the requirements for successfully carrying out those activities. As an example, consider the impact that the computer has had

on the work activities both in the office and on the shop floor. Administrative positions that once had a heavy dose of taking shorthand and transcription are now given over to a very different set of activities, ones that require a rather different set of requirements. Similarly, the introduction of the computer onto the shop floor and into the warehouse has produced an equally large impact on the work activities. The tightening of bolts on the assembly line is now done by a computer-driven robot, the contents of the warehouse are all bar coded, and most jobs require computer skills for success. Such changes are ongoing and have enormous impact on the competency requirements for hiring. And these changes can be specified only by a careful job analysis.

Further, it is important to recognize that many skills are specific to a given occupation (Reiter-Palmer, Young, Strange, Manning, & James, 2006) and that these occupationally specific skills are only be identified by a job analysis.

One use of job analyses is in developing behavioral interviewing protocols for candidate screening. The job description that is the end-product of the job analysis should provide a clear picture of the work and activities and the requirements. These then should provide the basis on which to develop a behavioral interviewing protocol—questions inquiring into a candidate's experience in such work activities and seeking to establish the degree to which the candidate has the necessary requirements to perform the important work activities. This is a method for developing a behavioral interview much preferred to the more generic approach that lacks a specific job-relevant focus.

Another important use of job analyses is as the criteria for validity studies of any pre-employment selection procedure, especially psychological tests. The Standards for Educational and Psychological Testing (American Educational Research Association and others, 1999) specify that the job requirements involved in studies of predictor-criteria relationships should be "determined by a job analysis" (p. 160). In other words, the validity of a psychological test or any procedure for selecting job candidates

must be determined by the correlation of that procedure with an important aspect of job performance as identified by a job analysis.

Employee Training and Development

Once a current job analysis becomes available, the competency of current employees in that job becomes apparent. Employees without a high level of the identified necessary competencies will be less productive than they otherwise should be. For example, if a new applicant tracking system is introduced in the HR function, someone has to be hired to manage that system. But, implicit in that decision, is the question of the competency of the existing HR staff to use that new system. Without knowing the answer to that question, the positive impact of the introduction of this new system will be less than intended. Thus, the job analysis used for the new hire should lead to an analysis of the competencies of the existing staff, and a training and development program should be instituted to produce the necessary competencies.

The job analysis can impact on the individual training and development level as well. It is rare that even those candidates who are the best fit developed through the job analysis are a perfect fit. The selection process should have identified both the candidate's strengths—those that led to the selection—and weaknesses—those that need to be addressed by some training and development process. This might be part of a supervisory or mentoring process or by some actual training, either on the job or somewhere else. In a somewhat dated example, a very experienced travel agent with an established clientele was hired by a large travel agency. The agent, despite her considerable experience, has little experience using Sabre Travel Network®, the computer booking system that had been identified as an important requirement in the job analysis. Her experience and list of clients were sufficient to outweigh her lack of skill with Sabre, a lack that could be remedied by taking a week-long

training course, which was an acceptable solution to both parties. Clearly in this case, as in all training decisions, the job analysis is the starting point.

Performance Management

Another important use of job analysis is in performance management. Job analyses play an important role in developing or modifying compensation systems and in performance appraisal. Determining the various levels of performance on a given job is an essential aspect of every job analysis. The knowledge of what constitutes an outstanding level of performance, an average level, and a borderline level is a critical aspect of performance management and should be the basis for setting pay and bonuses, the need for training and development, and for virtually all other aspects of the HR function.

Job analyses have been used not only to set pay levels but also to help determine whether different jobs require different requirements or effort, or involve different working conditions. In either case, such differences merit different pay scales. Jobs that involve equivalent factors, however, should lead to equal pay.

The pay level a job warrants is also important, and the job characteristics as determined by the job analysis are frequently used to determine the level of pay. Among the factors included in such decisions are

- Level of education, training, or experience required
- Degree of creativity involved
- Strength or stamina necessary
- Amount of responsibility
- Degree of independence of action
- Scope of influence
- Intellectual demands, including problem solving
- Risk of death, injury, or sickness

Presumably the level of each of these factors can be identified by a job analysis and then combined in some meaningful way to determine the level of the job among the various jobs in that organization. The job description and the combined evaluation of these various factors provide the basis for establishing a compensation system that is then priced according to the data produced by a salary survey of similar jobs in the local job market.

Since such comparisons are fraught with uncertainties, they have become the basis of a considerable amount of litigation about the equality of pay for different jobs. As just one example of the ambiguities involved, consider the difficulties inherent in attempting to use job analysis to justify equal pay of elementary school teachers and truck drivers. While there is some evidence that sophisticated statistical analysis of the results of job analyses can be used successfully to predict market compensation rates (Harvey, 1991, pp. 144–146), this can be done only for blue-collar jobs. Further, it is often argued that such an approach captures only existing discriminatory pay polices and does little to advance the cause of equal pay for equal work. It is safe to conclude that setting compensation systems on the basis of job analysis is a complex and difficult process.

Job analyses are also used in the performance appraisal process. For this process, job analyses should highlight the various work activities involved in performing a job and the relative importance of each activity. A rational performance appraisal system would evaluate the quality of the work performed by the individual being appraised according to the various importance ratings. It should be far more critical for that employee being rated to perform the important tasks more competently than for him or her to perform those of lesser importance competently. Unfortunately, this does not always seem to be the case, and often employees feel that they are downgraded for not attending to rather trivial tasks, ones not critical to fulfilling the organization's mission. This leads to a feeling on the part of employees that

the performance appraisal process is an unimportant managerial task, so they often discount the entire process.

Organizational Management and Planning

As we noted above, the appropriateness of job descriptions tends to decay over time. Changes in the marketplace require new behaviors, technology changes jobs with warp speed, and incumbents begin to do their jobs in idiosyncratic ways. As a result of these and other changes, job descriptions become obsolete. Further, mergers and acquisitions lead to a need to integrate different human resources management systems. And a new CEO comes in and decides to rationalize the HR function, to update the job descriptions, create a new compensation system, one based on equal pay for equal work, none of which can be accomplished without starting with a job analysis.

When one of us became the CEO of a large professional association, he quickly learned about employee discontent over what appeared to be favoritism in assigning job titles, compensation, and a variety of other benefits. It appeared that the only way to deal with this unrest was through an organization-wide review and rationalization, beginning with job analyses. To win employee acceptance of the process, the staff was promised that no one would suffer financially or in status.

The organization had almost five hundred employees, and the HR function was inadequate to perform the required work. A national HR consulting firm was engaged to create an organization-wide series of job analyses, draft current job descriptions based on these analyses, create a uniform set of job titles, and recommend a compensation system based on the job content involved and a regional salary survey. This was done over a period of several months and was widely accepted by both rank-and-file employees and the organization's board of directors. Moreover, this work enabled the organization to identify where additional resources were needed and where redundancy would

provide some resources to fill those gaps. But all of this depended on the first step—the job analyses.

Litigation Protection

Still another use of job analyses is to reduce an organization's exposure to litigation based on allegations of discriminatory hiring practices. In order to ensure that all individuals are treated fairly in the workplace, including in hiring, pay, training, and other conditions of employment, we need to base all of our decisions on job-related qualifications. The only way to be able to do this is through the use of job analyses. For example, if we wish to hire a plumber, we need to ascertain that applicants can run pipe and have a license to do so, requirements based on the job analysis. Simply stated, if we are to hire people based on the qualifications to perform a job, we first must determine what those requirements for doing that job are—and conducting a job analysis is the only legal way to do this.

As we noted above, the Uniform Guidelines are quite explicit in requiring "an analysis of important work behaviors required for successful performance" as the basis for any hiring action. Any selection process should begin with such a job analysis that establishes the criteria against which applicants should be compared. Further, the job analysis establishes the criteria for establishing the validity of any assessment measure to be used in the selection process. Goodstein and Prien (2006) provide a more detailed discussion of the use of criteria to establish the validity of psychological tests and a catalogue of commonly used tests.

While there is no absolute or certain shield against litigation, basing selection decisions on a careful, thorough, and current job analysis and using only well-validated selection procedures based on those job analyses will go a long way to deter frivolous filings. One additional point is the critical importance of a careful, contemporaneous record documenting what was done and why

it was done. In our experience, one of the major problems that our clients experience in defending themselves in HR litigation is the failure to document properly what was done.

This catalogue of the uses of job analyses is far from complete, as we have not included the use of job analyses in research on the nature of work and how work is changing, studies of the structure of work, and so on. But the focus of this book is on providing useful tools for the practicing HR professional and such conceptually focused research is of little practical use to this audience.

Elements of a Job Analysis

Traditional job analysis has four typical components:

- 1. A description of the work activity (WA) or tasks involved in doing the job;
- 2. The knowledge, skills, and abilities (KSA) or competencies necessary to perform the job;
- 3. Data on the range of job performance; and
- 4. The characteristics of the workplace.

The data contained in these four components provide the basis for drafting the job description, which should provide an integrated narrative picture of the job and what is required to fill that job successfully.

Work Activity (WA)

The process of a job analysis typically begins with a description of the major job functions, the activities in which a job incumbent regularly engages—the reasons why the job exists. One inherent problem in describing work activities is the level at which the activity is described. At the most basic level are the job *elements*,

"the smallest unit into which work can be divided without analyzing separate motions, movement, and mental processes" (Cascio, 1987, p. 185.)

A more useful approach is that of Functional Job Analysis (Fine, 1989, Fine & Cronshaw, 1999), which specifies (1) an action verb, which describes the action performed in observable terms: (2) the outcomes or results of that action: (3) the tools or other equipment used; and (4) the amount of discretion allowed the worker in that action. Two examples should serve to clarify some of the issues in this approach to WA. In the first, "The assembler takes one end of the red wire and one end of the green wire and joins them together with a screw nut." In the second, "The surgeon takes the scalpel and makes a long incision into the chest of the comatose patient." In both examples, the action is described clearly, the tools involved are specified, the outcomes are clear, and the level of discretion is implicit and very different. These examples represent both the approach and content of the approach, sometimes referred to as major job requirements, to describing the WA that we advocate.

There two aspects to the WA process: one is the importance of the action to the success of performing the job and the other is the frequency with which that action is performed. Obviously, important and frequent actions constitute the bulk of the WA. But important but infrequent actions often need to be included. For example, while most police officers never draw and fire their handguns in the course of their careers, when such action is required it is critical to the success of that job. Thus, descriptions of WA should identify both the importance and frequency of actions, especially when highly important WA occur infrequently.

Knowledge, Skills, and Ability (KSA)

The second question that every job analysis must address concerns the knowledge, skills, and abilities (KSA) or competencies

necessary to perform these WA. *Knowledge* is defined as an organized body of information, usually of a factual or procedural nature, that, when applied, makes the successful performance of a job action possible. Knowledge is usually not demonstrated in the action itself but rather by prior education, training, or testing. In observing the action, the knowledge base is assumed and inferred rather than directly observed.

In the above example of the assembler, he or she would need to have sufficient knowledge of the English language to follow directions, know the difference between red and green, and know how to use a screw nut to join the two ends together. The knowledge needed by a surgeon is far more complex and would include an intimate understanding of the anatomy and physiology of the human body, how to monitor the patient's vital signs, choosing the correct scalpel for the procedure, and so on. In both cases, however, each set of knowledge forms the basis of the success of executing the job action.

Skill, the second necessary component for the successful execution of the job action, is defined as the proficiency in the manual, verbal, or mental manipulation of people, ideas, or things. A skill is always directly observable and a certain level of skill is typically set as a standard or baseline for the successful performance of the action.

In our continuing example, the assembler must have sufficient eye-hand coordination to pick up the two ends of the wire and the screw nut and adequate finger dexterity to twist the wires together either by hand or mechanically and insert the twisted ends into the wire nut. The skill set of the surgeon includes a high level of eye-hand coordination, sufficient hand steadiness to manipulate the scalpel without untoward injury to the patient, sufficient finger dexterity to suture major bleeding, and so on. Thus, every job action involves an identification of the required skills and the necessary level of those skills.

Ability is defined as the present capacity to execute a job action, to perform a job function by applying an underlying

knowledge base and the necessary skills simultaneously. Knowledge, like ability, is not observable directly but rather is an inferred, higher-order construct, such as problem solving, spatial ability, intelligence, and so on. For lower-level jobs, it is relatively easy to describe the KSA required in terms of just K and S. Abilities are typically invoked in describing higher-level technical, professional, and managerial jobs as the WAs become more conceptual, abstract, and complex, despite the fact that they do not meet the requirements of the Uniform Guidelines of being observable.

Thus, the assembler job could be described readily in terms of the limited knowledge and skill required, while we might invoke such characteristics as systems-orientation, decisiveness, meticulousness, and awareness of the operating room environment as necessary characteristics of a successful surgeon. While most observers would agree that these characteristics are important to surgical success, a number would question whether these characteristics are best understood as abilities.

As a result of such questions, many experts in job analysis (e.g., Harvey, 1991) add a fourth factor, O for Other, to the KSA paradigm, leading to a KSAO approach to job requirements. We believe that both the KSA and the KSAO labels are rather awkward and difficult to apply. Rather, we have chosen to use the term *competencies* as a substitute for these other labels.

We have further proposed an approach (Goodstein & Prien, 2006) in which we separate the technical requirements necessary for job success from the personal/interpersonal requirements. We insist that the more work-related characteristics can and should be included in the job requirements analysis, while the more basic, underlying personality characteristics should be treated separately. Thus, in the case of the surgeon, being systems-oriented and being aware of the OR environment would be regarded as abilities, while being decisive and meticulous would be categorized as more long-standing personal/interpersonal characteristics, ones that would be evidenced more generally in that person's life.

Until recently it was very difficult to identify the personal/interpersonal requirements of job success. The development of the Big Five approach to describing these psychological factors and its widespread adoption, especially in selection, has made this task much easier. The Big Five, also known as the five-factor approach, is based on over a half-century of empirical research that has conclusively shown that five basic factors describe the spectrum of human behavior, and that these characteristics are quite stable over time and are, in various combinations, predictive of on-the-job performance (Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001; Costa, & McCrae, 1992; Digman, 1990).

These five factors are: (1) Neuroticism; (2) Extroversion; (3) Openness to New Experience; (4) Agreeableness; and (5) Conscientiousness, typically abbreviated as NEOAC. Because of the awkwardness of this acronym, we have renamed the five factors as CLUES[®]—Conscientiousness, Likeableness, Unconventional Thinking, Extroversion, and Stability Goodstein & Lanyon, 2007), an easier label to recall.

For example, it is difficult to think of a successful accountant who is not highly conscientious or a successful sales representative who is not extroverted. Using the Big Five provides job analysts with a uniform vocabulary for describing these intangible but critically important job requirements.

Levels of Job Performance

After developing clarity of the WA involved in a job and the necessary competencies, a job analysis must identify the necessary range of adequate job performance. Most job analyses focus on identifying what constitutes a high level of job performance in order to identify the competencies that separate stars from the rest of the pack. When we are trying to understand these factors to meet promotion or training and development requirements,

this is an appropriate approach; but what if we intend to use the job analysis for candidate selection?

Here, a very different dynamic is in play. When we examine the job performance of incumbents, we typically learn what an experienced job holder can accomplish. But few, if any, new hires are likely to be as productive or as competent as the typical incumbent. Thus, in establishing the job performance requirements, we must set more modest initial levels for new hires, a process that requires a fair degree of judgment. One additional point, in selecting supervisors and managers from an existing workforce, it is often the case that a top performer is chosen without recognizing that supervisory and managerial tasks require different skills than performing the tasks being supervised do, so such selections often do not work out satisfactorily. From this discussion it should be clear that job performance levels need to be set as a function of the use to which they are to be put, and that there is no substitute for common sense in setting those limits.

Workplace Characteristics

Workplaces vary enormously in their norms, climate, and culture, in the level of discomfort that workers can experience, the inherent risks posed by working there, and other noteworthy factors. A competent and thorough job analysis identifies the important workplace characteristics. Many approaches to job analyses pay scant attention to describing the workplace setting unless it varies significantly from the typical factory, office, or warehouse. We, on the other hand, strongly believe that an in-depth understanding of the characteristics of the workplace should be an integral part of a competent job analysis. On the basis of this belief, we have included a template for assessing the workplace characteristics as part of this volume in Appendix K.

Once the four elements of the job analysis—the work activities (WA), the job competencies (previously KSAs), the range of job performance, and the workplace characteristics—have been identified, they can be combined in a thematic fashion into a job description. We now turn our attention to the various methods of actually conducting a job analysis.

3

HOW TO CONDUCT A JOB ANALYSIS

The end-product of a job analysis is a job description, a written statement that describes: (1) the important tasks that need to be performed to successfully hold this job; (2) the requirements necessary to perform these tasks; (3) the levels of job performance that can be expected at various levels of experience and expertise; and (4) those characteristics of the work setting that impact work performance. The job description in all cases must be data-based, and clearly the creation of such a document is a time-consuming and labor-intensive process. This chapter provides a road map for creating such a data-based job description.

Methods of Job Analysis

Generally speaking, it is possible to collect data on the first three components of the job analysis simultaneously, while data on the characteristics of the work setting requires a separate, independent assessment. Those doing job analyses should always remember the purpose for which the information is to be used, as this purpose provides the context for both collecting the data and for writing the job description. This is especially true, for example, when collecting job performance data to be used for selection of job applicants. These levels obviously would be different for entry-level or trainee positions than it would be for selecting experienced, high-level operators.

There are five different methods of collecting job analysis data. They are (1) self-reports; (2) direct observations; (3) interviews;

(4) document reviews: and (5) questionnaires and surveys. Each of these is discussed in some detail below. It should be noted that any of these methods can be used either by internal HR staff members or by external consultants with expertise in conducting job analyses who have been engaged for this specific purpose.

Self-Reports

The most obvious and readily available sources of information about a job are the incumbents currently holding that job. All too often, however, incumbent reports are the only source used to analyze a job, because this approach is subject to attempts to inflate the importance of one's job and a variety of other contaminating influences. This is especially the case when incumbents are asked to prepare in writing their own job description with few guidelines and little supervision.

One variation on the self-report approach is to have the job analyst, typically an HR specialist, attempt to fill the job for a brief period and report on his or her experience in filling the job. Obviously, this approach is only appropriate for rather simple jobs that do not require a set of specific skills or much training, and there is always a question of how useful these self-reports are in understanding the job.

Direct Observations

Many jobs can be studied by observing an incumbent actually performing the job. In order to reduce the "audience effect" of having an intrusive observer involved, a video camera can be used to record an incumbent doing the job. Using a camera over a period of time both eliminates the observer effect and provides an opportunity to observe the job over a longer period of time and to take time samples of job behavior from the recording as the database.

Direct observation, however, is most useful with jobs that involve obvious physical activity, activities that are the core of the job. For jobs that are primarily cognitive in nature, direct observation provides little useful data. Observing a market analyst or a theoretical physicist at work would provide us with little information about the nature of their work. Further, neither self-reports nor direct observations provide much information about the requirements necessary to perform these jobs nor about the level of job performance.

Interviews

The limitations of self-report and direct observation have led to the use of interviews as the most widely used approach to job analysis. These interviews must be conducted by a skilled, trained interviewer who has both some understanding of the job being analyzed and the nature of work in general, as these provide the necessary background for asking questions and probing answers for more detailed and complete answers from those being interviewed.

Individual Interviews. There are several sources of information about a job, all of whom can be interviewed, either singly or in small groups. These include current incumbents of the job, supervisors of the job, and others who are often referred to as subject-matter experts (SMEs). SMEs are those individuals, other than incumbents, who have knowledge about the job being analyzed, such as former incumbents, managers with oversight of the job, academic specialists, and anyone in the organization who has any specialized knowledge of the job in question. One useful way of identifying SMEs about a particular job is to ask incumbents, "If you're stuck with a job problem that you're having trouble with, who are you most likely to ask for help?" These are the true SMEs, the ones who help those on the job get out of trouble.

In the early, exploratory phase of the job analysis, the initial interviews, which usually should be one-on-one, can be rather unstructured and open-ended as the interviewer starts to learn about the job, the tasks involved, the necessary requirements, and the levels of job performance. As the interviewer gains an understanding of the job and its requirements, he or she should develop an interview protocol that provides a structure for the ensuing interviews, one that enables the interviewer to obtain information about specific aspects of the job under scrutiny and compare the data obtained from different sources.

Group Interviews. These follow-up interviews, usually using the focus group method, are best conducted in a group setting with a mixed group of five or six individuals, incumbents, supervisors, and SMEs. It is imperative that at least two of the group be incumbents—individuals who know the job best—and more than one to ensure surfacing differing points of view. In conducting a focus group, the facilitator should not attempt to push for unanimity of viewpoints, but rather should understand that jobs, even what appear to be simple jobs, are seen and performed differently and that these differences need to be woven into the final job description.

The way these group interviews are introduced to the organization, the manner in which individuals are invited to participate, and the way in which the interviews are initiated and conducted are critical to the quality of the information collected. It must be made clear that the purpose of these group interview(s) is to gain a better understanding of a particular job or class of jobs, that no one will lose his or her job as a result of this process, and that what is said in the interview is confidential in that no statement will be attributed to a particular participant. The interviewer must be non-judgmental, listen carefully, play back what was heard, ask questions to clarify points, and take notes on a flip chart in the front of the room.

In conducting these groups, the HR professional should initiate the process with a description of its purpose, together with some discussion about how the results will be used when the process is complete. Next, the group should be prompted to begin discussion of the job or job family to define the tasks involved—the content of the job. It is good practice to have either a flip chart on which this data can be recorded, with the HR professional continuing to probe until the content and structure of the job are adequately addressed. In developing an understanding of the work involved, the interviewer can ask incumbents to describe a typical day, what needs to be done on a regular basis, and what the occasional exceptional requirements are. An alternative approach is to focus attention on either the work flow or organization of individual workers and how their tasks overlap and flow to produce work products. These approaches typically are sufficient to produce a description of the content of the job. The intent here is to generate content while the group has its ideas clearly in mind and then go back and edit that content to conform to acceptable standards.

Having developed an in-depth understanding of the various tasks involved in the job, the next step to identify the necessary requirements to perform the work and then to describe the various levels of job performance. To identify the requirements, the interviewer should ask about what people doing this job need to know and when they need to know it; for example, what tools or equipment are ordinarily used on this job and how skillful does the worker need to be in using them. Further, the interview needs to facilitate the group to identify the requirements for success on this job. Similarly, the group needs to establish in fairly concrete terms the various levels of job performance that can be expected in this job. How many widgets should an expert be able to produce in a typical day, and how many should a relative newcomer to the job be expected to produce. At the end of an interview procedure, the interviewers should feel confident that he or she has gained an understanding of the job being analyzed and can now describe the typical tasks involved in the job, the requirements to perform that job, and the various levels of job performance.

One useful technique to use in the group interview is the critical incident technique (Flanagan, 1954) in which the group is asked to describe critical incidents that have occurred on this job that have involved either highly effective or highly ineffective performance. This process has three parts: (1) describe the circumstances in which the job behavior occurred; (2) describe in detail the job behavior itself; and (3) identify the positive or negative consequences of that behavior. These reports of critical incidents often highlight instances of poor judgment, of safety hazards, and of outstanding performance, as well as the role of a variety of personal characteristics on job performance. Inquiring about critical incidents is especially useful when the job seems routine and many of the elements of the job seem obscure to others. Our experience has informed us that SMEs and managers are the most useful sources of critical incident data, which is why including them in these interviews is so important.

Document Reviews

The archives of most organizations contain a variety of documents that are useful in conducting job analyses. These include analyses of output, performance appraisals, reports by both internal auditors and external consultants about workplace issues, and prior job descriptions. Customer complaint records are another highly useful source about employee job behaviors that are of particular importance to customers. Internal memoranda about unusual events, difficulties encountered by workers on a job, or problems in recruiting applicants for a particular job, among many such issues, can provide worthwhile insights into a job. Reports of accidents and medical records are useful in identifying health and safety issues in jobs. Time and attendance records are important sources of information about the importance that workers place on doing that job.

For many years the U.S. military has used a procedure called after-action reports, a process for debriefing participants in any important incident to determine what went well and what went poorly, in order to improve future performance in similar situations. The value of such a process in identifying how to improve performance is obvious and thus has been adopted by many non-military organizations as a way to identify issues that need to be addressed in order to improve the organization's performance. The records of such after-action reports, when they exist, are a unique and extraordinary source of information about important elements of job behavior and their impact on organizational outcomes.

Questionnaires and Surveys

Using a job analysis questionnaire can substantially reduce the burden on incumbents and SMEs for developing the information needed for a job analysis. Instead of starting from scratch, those involved in providing information about the job answer a series of questions about the job. The job analyst typically asks the respondents individually to rate the importance of a variety of tasks in the job under scrutiny. The next step is to pick out from a list the requirements necessary to perform, and, finally, to identify the range of job performance using a rating scale. Not only does such a procedure simplify the task for those involved in providing job information, but it also simplifies the job analyst's task of collating and synthesizing the information about the job, easing the task of drafting the job description.

Basically, there are two different approaches to using a job analysis questionnaire. The HR specialist can produce a custom-designed questionnaire especially for this job or he or she can use a commercially available questionnaire.

Custom-Designed Questionnaires. In producing a custom-designed questionnaire, the HR professional responsible for the job analysis must develop the questionnaire using information

typically obtained individually from the job incumbent, his or her supervisor, other SMEs, and whatever other data sets are available to the responsible professional. Then small groups of other SMEs make the judgments required by the questionnaire and a computer analyzes the data and provides the necessary descriptions. While using such a custom-designed questionnaire clearly targets the job under investigation, the savings in time and effort of using a questionnaire rather than conducting individual interviews are modest, and a good deal of skill and understanding are required to produce a high-quality custom-designed, job-analysis questionnaire.

Commercially Available Questionnaires. The alternative to a custom-designed job-analysis questionnaire is to use one that has been developed by job-analysis experts and is commercially available. These instruments tend to be well-designed, are fairly reliable, and eliminate the need for an HR professional to develop his or her own instrument. These commercially developed instruments can simply be presented to a group of incumbents and SMEs to complete after providing the group with a relatively straightforward set of instructions about how to proceed. Examples of such questionnaires include the Fleishman Job Analysis Survey (Fleishman, 1996) and the Position Analysis Questionnaire (McCormick, Mehcam, & Jeanneret, 1977.)

This approach, however, tends to have one major disadvantage, namely that the developers of these job-analysis questionnaires have chosen to produce a single questionnaire that covers a wide variety of jobs, from entry-level to managerial. As can well be understood, such a one-size-fits-all approach requires that many of the items are scored as "not part of this job" and so the process of answering the wide range of items required quickly becomes a tedious one, losing the interest of the respondents.

There is an alternative approach, one that we have adopted for this workbook. Our approach provides a set of questionnaires from which the most appropriate one can be selected to analysis a particular job. In Appendices B through I are templates for eight different job-analysis questionnaires, ranging from entry-level jobs involving rather simple tasks and requiring only the most basic requirements to managerial/executive jobs that involve quite complex tasks and requiring a high level of requirements. These eight questionnaires have been developed by us based on our many years of experience in working in a wide range of industries and businesses. Each of these questionnaires is directly based on one or more actual job analyses that we have created with one or more of our client systems.

An HR professional, after a relatively brief study, can select and directly utilize one of these questionnaires to identify the tasks involved in the job and the job requirements for that job, a much less time-consuming and labor-intensive job than developing one from scratch. We need to point out that the use of a job-analysis questionnaire does not obviate the need to augment the information from a questionnaire with data obtained from a discussion of the job with incumbents, observing the job, consulting a variety of records, or doing whatever is possible to develop a fuller understanding of a job and all that it entails.

In summary, in this section we have provided an overview of the various approaches to conducting the critically important HR management tasks of actually doing a job analysis. It should be clear from the above that the process of developing a comprehensive, data-based job analysis is a demanding one, one that requires a high degree of professionalism and competence on the part of the HR professionals who attempt to do job analysis. One of the unfortunate aspects of today's HR management is that this critically important process does not receive the recognition it deserves. We now turn our attention to some of the cautions and caveats that need to be observed in doing job analyses.

Caveats and Cautions

There are a variety of inherent problems in using job descriptions and the underlying job analyses on which these descriptions are based that tend to be overlooked but which, if disregarded, seriously reduce their usefulness. These problems are a function of changes in the nature of work and how work is performed and include changes over time, the low accuracy of the data obtained, and the general stability of job performance.

Changes Over Time

Job descriptions have a half-life, one that varies from job to job, from employer to employer, and from industry to industry. There are a number of reasons for such changes in the way jobs are performed which, in turn, affect the job analysis. One important reason is the ways in which technology has developed and will continue to modify the ways in which work is done. It is difficult for us to think of any job that has not been altered substantially in the past few years as a function of technology. These are not one-time events but are continuous adjustments that reflect the ever-increasing pace of technological advancement.

Jobs change for other reasons, including modifications in supply chain management, the product or service mix offered by the organization, customer requirements, and so on. Some of these changes are by-products of technological change and others are not. But regardless of their origin, such changes mean that job descriptions rapidly become out-of-date and require a new job analysis to make them current.

Low Accuracy

There is ample evidence to support the conclusion that the ratings that constitute the core of any job analysis are less than reliable (e.g., Hughes & Prien, 1989). Incumbents and supervisors

may not provide valid ratings and other data about the nature of the job. They may attempt to inflate (or deflate) the importance of the job or of elements of the job, and they often have quite different experience of the job under review. Furthermore, data may be distorted for personal or political reasons, for example, over-emphasizing the similarity of this job to other jobs, rather than its uniqueness. Or the job may not be being performed adequately or may be misunderstood, and so on.

These factors, among others, simply mean that a competent job analysis must involve multiple raters with a range of backgrounds and experience. The HR professional conducting the job analysis should closely examine the data, particularly the ratings on job analysis inventories, for gross differences and follow up with individual discussions to resolve these differences. Here is yet another reason for professionalism on the part of those engaged in job analysis.

Lack of Stability

Finally, in many jobs there is an inherent instability in the work performed, such as those jobs that have a seasonal variation in the tasks involved. In the most obvious example, farmers regularly go through the cycle of preparing the fields, planting, fertilizing and weeding, and harvesting. A competent job analysis must involve the entire cycle. But such seasonality influences other jobs as well. The work of accountants is intensified during the tax preparation season, as is that of retail-store clerks during the Christmas rush. Those engaged in conducting job analyses need to be aware of such seasonal trends and factor these in when planning their data collection.

Another reason for the lack of stability of jobs is the tendency over time of incumbents to *improve* the ways in which tasks are performed, whether or not such improvements are known to supervisors and managers, or even if these modifications really

improve either the process or the product. If a job analysis is not current, such changes in how work is accomplished will not be part of the job description.

In this section we have focused on why job analyses and job descriptions may not be as accurate as expected. These concerns simply highlight the need for keeping job descriptions very current and for having competent HR professionals conduct job analyses. We now turn our attention to our eight job analysis templates, their development, and how they should be used.

4

THE JOB ANALYSIS TEMPLATES

We have long been interested in the nature of work, of what various jobs entail, the characteristics required for success on jobs, and how these factors interact with the characteristics of the workplace. These interests have facilitated our careers as consultants to a broad range of organizations, ranging from small, start-up operations to massive, global conglomerates. Our experience includes a variety of organizations in the United States, Europe, and Asia, including manufacturing and service businesses; municipal, state, and federal government agencies; and nonprofit organizations of all types.

The Development of the Templates

One recurring theme of our work with organizations has been in developing and improving their procedures, both for conducting job analyses and for linking these job analyses to a variety of human capital applications. We estimate that, over our years of professional practice and research, we and our associates have conducted job analysis studies for over five thousand different jobs. While we readily admit that there is a large degree of overlap among these many jobs, we nevertheless believe that this experience has given us an in-depth understanding of the nature of work and how it is organized in jobs, job families, and careers.

On the basis of these experiences, we have developed a series of eight templates, each for a different job or family of jobs. That is, we have created eight different, generic job descriptions that can be used as the starting point in developing the analysis of a specific job. This approach, in contrast to the *one-size-fits-all* approach of most other available job analysis templates, allows for beginning the process with a more restricted and better targeted set of questions, ones aimed at the *job family* in which the job to be studied readily fits. A job family is simply a group of jobs involving more-or-less the same tasks and similar competencies.

We faced a dilemma in determining how many templates to develop. On the one hand, we wanted enough templates to cover the many thousands of job titles that exist in our economy, while on the other hand, too many templates would be unwieldy and choosing among them might be problematic. On the basis of both our experience and some field testing, we distilled the many jobs into eight general job families and developed a template for each of these.

Thus, rather than starting with a questionnaire intended to cover all jobs in the workplace, our approach narrows the field to questions that we know are by and large appropriate for most jobs in that job family. For example, to begin an analysis the job for a file clerk, we would begin by selecting the Clerical template, where all of the questions are directly concerned with clerical and minor administrative tasks, rather than dealing with a variety of job tasks that clearly do not fit into that rubric.

We recognize that, in some cases, it may be difficult to decide which template is appropriate to use. However, our experience has shown that it is easier to choose a more-or-less appropriate template and edit that, rather than begin the process from scratch. While it may take some time to edit the template chosen, the editing time and effort will be quite different from that involved when using a single-purpose generic model. Further, the fact that these templates can be downloaded from a website simplifies such editing.

Eight Templates for Job Analysis

The eight job family templates, arranged in order of complexity, are as follows with the appendix in which each can be found in parentheses:

- Entry Level (Appendix B)
- Production/Operations (Appendix C)
- Clerical (Appendix D)
- Sales and Sales Management (Appendix E)
- Clerical/Administrative Services (Appendix F)
- Professional Administrative (Appendix G)
- Supervisory/First-Line Manager (Appendix H)
- Senior Management/Executive (Appendix I)

Each template includes two parts, the first of which provides the rater with a list of *work activities* (WA). Each WA is to be rated as to how important this WA is in doing this job, with a rating of "0" indicating that this activity is not involved in this particular job while a rating of "5" indicates that this WA is one of the most essential activities performed on this job.

The second part of the template is concerned with the competencies necessary to be successful on these jobs. In the preceding chapter we pointed out that we will be using the term competencies instead of the earlier KSAO rubric. This consists of rating a variety of job-related competencies on how important each is for doing this job, with a rating of "0" indicating that this is not a requirement for doing the this job while a rating of "5" indicates that this requirement is one of the most essential to being fully effective in doing this job.

Let us now turn to a brief description of each of these templates and the types of jobs that typically can the studied by applying that template.

Entry-Level Job Analysis Template (Appendix B)

These generic entry-level jobs are typically considered an extra pair of hands, the skill requirements are minimal, and the jobs are menial. Job titles at this level include, for example, laborer, janitor, security guard, materials handler, and loader. In the skilled trades, these workers are seen as helpers to electricians, plumbers, and the like, while service jobs include such titles as orderly, valet parker, dishwasher, and maintenance worker. These jobs typically require an ability to follow directions, the willingness to exert effort, and a conscientious nature. In industrial settings, some degree of physical strength or agility often is also required. Typically, no specific level of education is required and the training time is minimal. While at one time these jobs did not require literacy, it is now expected, at least implicitly.

Production Operations Job Analysis Template (Appendix C)

Production operators are found in virtually all light-industrial settings and in many heavy industries. Included are such jobs as assemblers, machine operators, quality-control inspectors, and the like. These jobs require both a level of literacy and a higher level of knowledge and skill than those at the entry level. The tasks may include reading gauges, adjusting machinery and equipment, reading diagrams, instruments, manuals, and the like, planning and organizing work, and so on. A high school diploma, trade school certificate, or the equivalent is usually the minimum requirement for these jobs, and there can be fairly extensive training involved. Hiring for these jobs can be quite selective and there is considerable variety in the tasks in this job family.

Clerical Job Analysis Template (Appendix D)

In contrast to the production operations, these jobs are performed in an office setting rather than an industrial one, although many such jobs exist in factories. The emphasis in such jobs is primarily on mental rather than physical activities, although some slight physical activities may be involved. Among the tasks involved in this job family are filing and retrieving records, transcribing reports and letters, basic formatting and editing of written documents, scheduling, computing and verifying data, preparing reports, and so on. Job titles include file clerk, call center representative, transcriber, data entry clerk, and so on. These jobs involve a wide range of tasks and often require independent functioning. They usually require a high school diploma or the equivalent, and some on-the-job training may be involved. Finally, there is an ever-increasing emphasis on interpersonal skills, since such work often requires collaboration with others.

Sales and Sales Management Job Analysis Template (Appendix E)

Success in sales is far more a function of the individual's personal/interpersonal skills than of any technical know-how. One exception is technical sales, where product knowledge often requires some in-depth understanding of scientific and technical data. Beyond this important exception, the many types of sales jobs involve other differences, for example, between inside and outside sales, between selling tangibles (goods) and intangibles (services), so the WA analysis should identify the tasks involved and the requirements.

We have included sales management in this template rather than in the Senior Management/Executive Job Analysis Template, as sales personnel are often required to fulfill some sales management responsibilities and sales managers are almost always drawn from the ranks of the sales force. Thus the work activities and the competencies involved in sales management have much in common with those of sales personnel. For high-level sales management jobs, it may be necessary to combine this template with the Senior Management/Executive Job Analysis Template

to fully describe both the Work Activities and the necessary Competencies.

Most retail sales jobs, on the other hand, ordinarily should be evaluated by using the clerical template, as there is little actually selling involved. The job titles always include the word "sales" and we typically include customer-service representative in this category, especially when they have problem-solving authority. For higher-level sales positions, a college degree is usually required and some on-the-job training is typical.

Clerical/Administrative Services Job Analysis Template (Appendix F)

Professional and technical service jobs include such jobs as senior technical consultant, graphic designer, professional writer or editor, systems engineer, marketing specialist, senior programmer, and so on. Given the wide variety of these jobs, producing a single generic template that will fit all is more difficult than for any of the other job families. Therefore, to provide a suitable model our template emphasizes technical jobs in information systems. This example should serve as a useful tool for customizing other jobs in this wide-ranging job family. Moreover, many high-level professional jobs such as physician, attorney, research scientist, and the like are so unique and specialized that none of our templates fit. This means that, beyond a very basic level of description, this template may be of limited use and conventional HR procedures may not be useful or applicable. Invariably, these jobs require a college and frequently an advanced degree.

Professional Administrative Job Analysis Template (Appendix G)

In contrast to the Clerical Job Analysis Template, here we are concerned with high-level administrative tasks, such as scheduling meetings, interacting with senior executives, arranging travel, coordinating work flow, and managing office procedures. While there may be some supervisory responsibilities, usually of other office workers, this is not a supervisory position. Job titles include administrative assistant, administrative specialist, staff assistant, executive assistant, and office manager. These jobs invariably require a high degree of tact and good judgment, and often some technical skills are required, such as budgeting, applying software, and managing travel. These jobs usually require a college degree, although experience can often be substituted.

Supervisory/First-Line Manager Job Analysis Template (Appendix H)

These jobs all involve the direct supervision of other employees, including giving directions, setting priorities, scheduling, securing the required resources for task completion, and providing guidance, coaching, and performance feedback. Conflict resolution and problem solving are import areas for these jobs. Job titles include foreperson, supervisor, and manager. These jobs require good communication skills, a good deal of interpersonal sensitivity, and a willingness to confront difficult situations. The model template presented emphasizes manufacturing/industrial jobs. Therefore, using it for jobs in other settings, such as in services organizations, will require some modification of the specific activities and competencies. A college degree is usually preferred, although years of experience in similar organizations often can be a substitute.

Senior Management/Executive Job Analysis Template (Appendix I)

At the top of the occupational pyramid are the management and executive jobs. Jobs at this level typically involve abstract and conceptual thinking and require the incumbent to consider the impact of decisions over an extended time frame. A high level of communication skills, strategic thinking, a good grasp of finances, and superior interpersonal skills are usually necessary. Job titles include president, chief executive officer, managing director, chief financial officer, vice president of marketing, and the like. A minimum of a college degree is usually required and advanced degrees, such as an MBA, are often preferred. Prior experience in a related industry at a senior level is usually expected.

Using the Templates

These instructions are intended to take the user through the sequence of steps involved in the proper use of the templates.

- 1. Clearly identify the job that you wish to analyze. Learn as much as you can about that job by observing people in the job, interviewing incumbents, reading existing job descriptions, surfing the web for information, and checking out what your colleagues know about this job.
- 2. On the basis of your knowledge of the job, review the eight templates and select the template that is the best fit for that job.
- 3. With the target job in mind, review the general instructions for that template and both the sets of activities and the competencies. Feel free to edit either or both of the data sets to ease the task that you are about to assign.
- 4. Identify the several raters whom you will ask to complete the template for this job. Those you invite to be raters should be subject-matter experts, that is, they should have recent, extensive knowledge of the job. These could be incumbents, supervisors, managers, or external experts. When requesting their assistance in completing this task you should stress the importance to you of this work, explain how it is to be used, and work collaboratively to set a certain date for completing the task.

- 5. It is important to stress to each of these experts the need for a careful, thorough, and systematic approach to completing the template. Remember the old adage, "Garbage in, garbage out!" Following agreement to complete a template, it is usually appropriate to send an email or a note of appreciation to each expert rater for accepting this responsibility and a reminder of the agreed-on date for completion.
- 6. When you receive the completed template, you should review the data for completeness and for any suggestion that the task was not taken seriously. Indications of this include using the same response throughout the template, responding randomly or regularly using a pattern, such as "1," "2," "3," "4," and "5." Do not assume that each expert responded professionally, even though this is what you would hope for. Any template that has indications of lack of commitment or carelessness should be discarded. This is one of the reasons why you need multiple raters.
- 7. Once you have assured yourself that you have done your quality control and that you have a sufficient number of valid ratings, then you can move on to enter the data into the template summary spreadsheets and calculate your results. At this point you are halfway home.
- 8. We typically use an rating of "3" or greater to define initially both the WA and the competencies. After identifying those items with such ratings, you need to review the actual items and determine whether they meet a test of reasonableness. One of the reasons that you initially invested your time and effort is to develop sufficient understanding of the job to make such judgments. Among the questions you might ask are: Did I select the right template? Did the SME seem to do a competent job? Are there any reasons to be skeptical about these results? If the data seem logical and reasonable, you move to the next step.

9. The next step, the final review, involves completing the Summary of Importance of Work Activities and Competencies that is provided as Appendix J.

After reviewing these procedures, if you feel that you need a more in-depth understanding of this process, we recommend that you do a trial run, using one of the less complex jobs—a job with which you are familiar.

Completing the Summary Forms

The form below provides a convenient way to summarize the importance that selected raters give to the various work activities and to the related competencies. The detailed instructions for using these forms are provided in Appendix J and we have reproduced these instructions below and provided a sample of a partially completed Work Activity Importance Ratings form to illustrate its use.

Summary of Work Activity Importance Ratings

Target Job Title:	
Location:	Date:

This form provides a convenient way to summarize the ratings of the importance of the various work activities that have been identified by the selected raters as important on this particular job. In rating the importance of each work activity, the raters used the following rating scale:

Rating Meaning of the Rating

O This rating indicates that the work activity is never done and is not part of the job.

- This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.

Ordinarily we are concerned only with importance ratings of "3" or higher. Any rating lower than "3" is unlikely to be an important descriptor of the job and can be safely ignored. Therefore we have provided summary forms for only the top three ratings—3, 4, and 5.

Each of the forms in Appendix J contains a column for each item in the template, plus columns for recording each rater's assessment of that item. For example, using the summary form for Work Activities rated "5," the person completing the summary should simply go through the template completed by the first rater and place a check mark in the box for every item that received a "5" rating—one that indicated that this Work Activity was essential to performing this job. The summarizer should then do the same for those items rated "4" and then "3," using the appropriate summary form. The summary forms provided list

Sample Completed Form: Essential Work Activities Rated 5

Item					Rater	s			
	1	2	3	4	5	6	7	8	9
1	√			\checkmark					N/A
2							\checkmark	\checkmark	
3									
4	\checkmark								
5				\checkmark	\checkmark				
6		\checkmark							
7	\checkmark								
8									
9									
10		\checkmark				\checkmark			
11									
12				\checkmark		\checkmark		\checkmark	
13									
14	\checkmark	\checkmark			\checkmark				
15	\checkmark		\checkmark			\checkmark			
16									
17									
18				\checkmark		\checkmark			
19	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	

the maximum number of items that can be rated in any of the standard templates. If any additional items have been added or more than eight raters are involved, additional copies of these forms can be duplicated.

After the Work Activities ratings are entered on the three summary forms, a similar process should be used to enter the competency ratings, using the provided summary forms. These ratings of both the work activities and job competencies can then be used in the writing of the job description.

In this sample, you will notice that each rater judged only four to six of the nineteen activities reported as essential. They were unanimous only on Item 4, and nearly unanimous on Items 6 and 19, so these three items should be regarded as essential to doing this job. Eight other work activities received two or three ratings of "5," one activity received one 5, and seven items received none. When summaries of the ratings of "4" and "3" are completed, it will be important to note whether any of the eight receiving two or three ratings of "5" received a significant number of these ratings, which would suggest that they may indeed be either essential or extremely important to performing this job. Moreover, any activities or competencies judged "4" or "5" by at least half the raters should be highlighted in the final job description.

Once you have completed your summary analysis of the work activities and competencies, it is time to turn your attention to determining the workplace characteristics that affect this job using the Workplace Characteristics Profile in Appendix K.

5

THE WORKPLACE CHARACTERISTICS PROFILE

While the work activities and the competencies necessary to perform these activities are critical elements in defining a job, no job is performed in a vacuum. Every job is performed in a workplace and thus the characteristics of that workplace are critical elements to be identified in defining and understanding that job. In the most obvious examples, workplaces that pose a clear danger to workers—such as police, fire fighting, and the military—or that involve dealing with hazardous or toxic materials are workplace characteristics that are of great importance in defining those jobs. But every workplace has important characteristics that need to be identified and quantified in a job analysis.

While workplace danger or the handling of hazardous materials have clear impact on how work is done, many other workplace conditions that impact work and workers. These include long hours, shift work, toxic managers, harassment for any number of reasons, job insecurity, and the fear of downsizing, to mention just a few. While the importance of most of these more obvious negative workplace characteristics should be clear to anyone doing a job analysis, it is less clear how to define and assess the more subtle workplace characteristics that also can have a significant impact on workers.

Organizational Culture and Climate

While industrial/organizational psychologists have long been interested in understanding the nature of the workplace, they have tended to focus on defining and understanding the *culture*

of the organization as a way of understanding human systems and how they operate. Typically, definitions of organizational culture are based on an "open systems" approach to organizations where each aspect of an organization's culture interacts with some or all of the other aspects to guide organizational behavior. The Burke-Litwin model is but one example of such an open-systems model (Burke, 2002).

Organizational Culture

Since no single, universally accepted definition of organizational culture exists, our definition attempts to capture the principal elements of most popular definitions. We define organizational culture as the pattern of shared basic assumptions that an organization has developed as it has addressed and resolved issues in its dealings with the external environment and its internal operations. As organizations develop over time, these assumptions are tested and those that continue to help the organization thrive coalesce into a culture, one that is taught to new members as the right way to perceive, think about, and resolve these external and internal issues.

Among the several authors who have provided definitions of organizational culture and provided models of such cultures are Deal and Kennedy (2000), Burke (2002), Schein (2004), Hofstede and Hofstede (2005), and Morgan (2006), among others. Because the Hofstede and Hofstede model is both the most comprehensive and the only one based on a large database, it is useful as an illustration of such models. Their model involves five dimensions:

- Power distance—the degree of hierarchy and lack of equality in the distribution of power
- Uncertainty avoidance—degree of comfort or discomfort with uncertainty and lack of structure
- Individualism—focus on individualism on the one hand versus collectivity on the other

- Masculinity versus femininity—toughness versus tenderness
- Long-term versus short-term orientation—focus on longterm versus short-term goals and payoffs

While such models of organizational culture are useful tools for describing and understanding organizations on a conceptual level, especially at the executive and managerial level and how strategy and decision making occur at that level, such models lack the comprehensiveness and specificity to describe the workplace as it is experienced by rank-and-file employees.

Organizational Climate

Although organizational culture is generally seen as deep, stable, and organization-wide; organizational climate, on the other hand, according to Burke (1993) is "the collective impressions, expectations, and feelings of the members of local work units" (p. 131). Burke goes on to point out that, in his view, organization climate changes day-to-day as a function of the many transactions in which the work unit engages, both internally and between the work unit and the rest of the organization as well as with the external environment. This suggests that the workplace characteristics that are part of most job descriptions are not simply a matter of organizational culture.

While there is general agreement in the professional literature that both organizational climate and organization culture are important aspects in understanding how organizations function, there is less agreement about how to define and measure each of these aspects, especially organizational climate. Moreover, the various instruments that are available to measure both organizational culture and climate appear to have rather different foci, as suggested by their different approaches and content. On the basis of these considerations, we concluded that, for the purposes of this book, we needed to develop a measure of workplace characteristics, one that was useful to persons conducting job analyses.

The Workplace Characteristics Profile

We begin by defining workplace characteristics as those relatively stable characteristics of workplaces that impact—positively or negatively—the manner in which work is done. In developing our Profile, we decided not to include those special workplace characteristics that set a workplace clearly apart from workplaces in general, that is, high risk, danger, the handling of toxic or hazardous material, or other features of the workplace that are not present in the overwhelming majority of jobs. Obviously, we do not mean to underplay the importance of such workplace characteristics, but we believe that they are so obvious on the one hand, and so unusual on the other, that including them would simply overcomplicate the task of describing the characteristics of most workplaces.

Developing the WCP

We decided to base the Workplace Characteristic Profile (WCP) on some of our earlier research in this area (Prien, 1989). In developing that earlier version, then called the Work Setting Characteristics Inventory, we did an initial, careful review of the research literature that identified a large number of factors that had been used to characterize workplaces. From this long list of characteristics, we were able to develop a preliminary taxonomy, essentially based on recurring elements usually included in organizational self-descriptions. The following fourteen dimensions emerged from this sorting process:

- 1. Conformity and propriety
- 2. Responsibility
- 3. Feedback and reward
- 4. Task identity
- 5. Effectiveness
- 6. Managing change

- 7. Crisis management
- 8. Communication
- 9. Formalized job roles
- 10. Standardization of tasks
- 11. Role specialization
- 12. Management control
- 13. Centralization of authority
- 14. Technology

This taxonomy served as the basis for developing the initial version of the new Workplace Characteristics Profile (WCP). Using a variety of different sources, including our earlier literature review, fifty-six items were developed, four for each of the fourteen dimensions. Each item was written to tap a different facet of that dimension to produce a comprehensive inventory.

As we have detailed in our earlier research report (Prien, 1989), the WCP was used in a series of three separate studies, each involving over one hundred individuals in sales/marketing, finance/accounting, and manufacturing organizations, to determine the factorial structure of the instrument and to eliminate any items that did not fit that structure. On the basis of this research, the WCP was reduced to a thirty-five-item inventory that tapped seven major, relatively independent dimensions. Each scale was comprised of five items. The scales were

- 1. Efficiency—Focus on being productive continually;
- 2. Communication—Emphasis on communicating with others, especially to seek job-related information;
- 3. Standardization of roles—Emphasis on standardized work roles and on following the established rules;
- 4. *Task standardization*—Focus on performing job tasks in a prescribed, standard fashion;

- 5. Change management—Focus on effectiveness in dealing with changes required by the external environment;
- 6. Specialization of role—Emphasis on becoming expert on one's job and following the chain of command; and
- 7. *Independence of action*—Focus on exercising initiative and making a contribution.

These initial seven factor-based scales have been shown to be useful indices on how organizations are perceived by those working there. Further, these scales have been shown (Prien, 1989) to be valid indicators of changes in those perceptions as a function of a variety of organizational development (OD) interventions, including the introduction of an extensive training and development program, the implementation of a total quality management program, and a supervisory training program. But their major use has proven to be as part of the job analysis process.

Continuing use of the WCP has led us to make adjustments to match the major changes in important characteristics of the workplace. Our informal research has led us to include five additional factors to the original seven, making twelve in all. Four of the five new scales address the dramatic increase in workforce diversity:

- 8. Accommodating to persons with disabilities—Focus on facilitating the entry and success of persons with disabilities in the workplace;
- 9. Accommodating to persons from diverse backgrounds—Focus on integrating persons not from mainstream backgrounds;
- 10. Promoting gender equality—Emphasis providing equal treatment for men and women throughout the workplace; and
- 11. Controlling harassment—Focus is on actively discouraging harassment of others for any reason.

These four factors are not only an important aspect of current HR management, but they are also necessary as an important way of reducing the risk of litigation for violations of the many federal, state, and local laws outlawing such workplace behavior. These four new scales reflect the implications of workforce changes. But the workforce is not the only element that is changing. Virtually everything is changing. Hence, we have added a fifth new scale:

12. Managing change—Focus is on providing information about change and support in managing change.

We have identified this new, twelve-factor scale as the Workplace Characteristics Profile, a copy of which can be found in Appendix K.

Administering the WCP

The WCP should be used to identify those characteristics of the workplace that can either help or hinder most employees from successfully doing their jobs. The WCP should be completed by a cross-section of persons who have had the opportunity to experience this workplace and who can be expected to provide a valid picture of that workplace. At least six to eight persons at various levels of the organization should complete the WCP, and their responses should be used to create a mean profile, one that highlights the major issues that a worker must contend with on a regular basis.

Additionally, any unusual workplace characteristic that merit inclusion, such as physical risk or any of the others mentioned above, should be identified by interviewing each individual who completed the WCP. The mean profile and the interview data thus become the basis for describing the important characteristics of the workplace in the final job description.

Interpreting the WCP

Each of the twelve scales of the WCP can be further understood based on the nature of the items that comprise the scales, which are summarized below and also described in Appendix K.

Managing Work Efficiently. Emphasis is on the efficient management of work in an increasingly dynamic and complex environment. Effectiveness of work performed is evidenced by the quality and quantity of output, and individuals are expected to adapt and orchestrate their activities on a relatively continuous basis in order to maintain efficiency. High scores on this factor indicate a strong focus on efficiency throughout the workplace.

Accommodating to Persons with Disabilities. Emphasis is on accommodating persons with disabilities. There is a focus on assisting individuals to overcome limitations and on facilitating individuals' efforts to overcome workplace obstacles. High scores indicate a focus on what individuals can do, how they can do it, and the adaptations and accommodations required by others for effective workplace functioning.

Communicating with Others. Emphasis is on communicating with others and seeking job-related information to increase both efficiency and effectiveness. Such information may come from a variety of sources—the work or work products, formal or informal contact—and is generally easily accessible. High scores indicate that individuals are expected to coordinate and communicate with others in order to obtain information for improving the quality and quantity of output.

Accommodating to Persons from Different Backgrounds. The emphasis is on adapting to people who do not come from the mainstream, but rather from the evolving heterogeneity of the workplace. Such persons come from different cultures and are different in their appearance, dress, attitudes, speech, and so on,

and they often need acceptance and support to be successful in the workplace. High scores on this factor indicate a commitment to providing such acceptance and support.

Standardization of Work Roles and Procedures. Emphasis is on standardization of work roles and procedures. It exemplifies the classical bureaucratic characteristic of role standardization in which individuals know what they should do and know what is expected of them, and thus produce a continuity of activities. Individuals can predict accurately what is going to happen and how they are expected to react. High scores on this factor suggest a commitment to a bureaucratic approach to management.

Promoting Gender Equality. Emphasis is on providing equal treatment of men and women in the workplace—in job assignments, promotional opportunities, access to training, equality in pay and benefits, and all other important aspects of work. High scores on this factor indicate that there is clear support by management for a zero-tolerance policy of discrimination on the basis of gender.

Standardizing Tasks and Performance. Emphasis is on standardizing tasks and standardized performance of these job tasks. High scores on this factor indicate that tasks must be performed in a specified manner and that standardized approaches are required. High scores indicate that these are significant characteristics of the workplace and the individual has little discretion about managing his or her performance.

Managing Change. Emphasis is on providing support for employees in understanding the need for change, in coping with change, and in embarking on the many transitions required by changing conditions in the workplace. High scores indicate a generalized understanding that the environment is in a state of

constant flux and that everyone needs to be prepared to adapt to these changes.

Managing Work for Effectiveness. Emphasis is on responding effectively to external forces. This approach is characterized by a focus on responding promptly to market changes, including customer wants and needs, other market shifts, competition, changing technology, laws and regulations. High scores on this scale suggest that persons are empowered to act without precedent and without guidance from others.

Controlling Harassment. Emphasis is on active discouragement of workplace harassment, intentional or unintentional, harassment based on race, age, gender, sexual orientation, physical limitation, or religion. There is clear support by management of a zero-tolerance policy against any form of workplace harassment.

Promoting Specialization. Emphasis is on developing and using a specialized skill that is regularly used on the job. This promotion of specialization precludes members of a work group from being cross-trained or alternating task assignments. High scores indicate that this bureaucratic approach prevents taking independent action to solve problems.

Promoting Independence of Action. Emphasis is on exercising independence of action. Individuals are expected to perform relatively independently and are held accountable through meeting output expectations and maintaining a high level of expertise. High scores indicate that individuals are encouraged to exercise initiative and take risks.

Finally, having identified the important workplace characteristics, we turn our attention to the procedures for establishing the various levels of job performance in our final chapter.

6

ESTABLISHING JOB PERFORMANCE LEVELS

A comprehensive job analysis consists of three components: (a) the specific competencies required for successful job performance; (b) the important characteristics of the workplace that might impact job performance; and (c) the level of job performance required for success. The focus of this chapter is on identifying and specifying the processes involved in determining the specific level of job performance required for a given job.

It is important to recognize that the measurement of job performance is one of the most vexing problems in the management of human resources. It is a complex issue because performance can be measured in so many different ways. There the standard or set of final criteria against which any performance measure can be compared must include consideration of the purpose for the application. At the same time, the issue of measuring job performance is critical, as it underlies virtually all HR decisions from recruitment, to hiring, promotion, compensation, and retention.

Competencies and Jobs

The first thing to recognize when establishing performance levels of a job is that different competencies relate to effective performance of many different jobs. The requirements for success may vary widely depending on the requirements of a specific job. Two such competencies are oral communication and problem solving. The high-level jobs heavily dependent on high levels of oral

communication competency are easy to reel off—executives in large organizations, attorneys, and journalists, to name but a few. Other high-level jobs, such as research scientists or novelists, may have only modest needs for this competency. At the opposite end of the labor market similar differences exist. Receptionists and call center staff are examples of jobs requiring strong oral communication competency. Most basic labor jobs, whether in construction sites, factory floors, or agricultural fields, do not need workers with this competency.

Problem-solving competency presents a similar picture. This competency is central to the work of both research scientists and most technical-service representatives, while it is not needed by food preparation workers, word processors, and/or typists.

In establishing performance levels we are concerned with the levels within a specific job in a specific organization, not with differences in performance levels between jobs. Determining the minimal level of acceptable job performance, the range of expected performance, and what constitutes truly superior performance is a critical part of any job analysis. While we are primarily concerned with establishing job performance levels as part of conducting a job analysis, we should note that there are several other important uses of data on job performance.

The Uses of Job Performance Data

Among the several uses of job performance data are in (a) recruitment, (b) creating career ladders, (c) evaluating organizational performance, and (d) improving organizational performance. Let us briefly examine each of these in turn.

Recruitment

As we noted earlier in Chapter 2, the performance data obtained as part of the job analysis play a critical role in any recruitment effort. These performance data help establish the level of each competency being sought. But this is not a straightforward process. When there is high unemployment and thus a large applicant pool, setting high performance standards is an appropriate strategy. On the other hand, when a tight labor market yields a small pool of applicants, setting a lower level of minimum performance is often necessary in order to secure an adequate pool of applicants. Knowing the range of the acceptable level of the required job competencies is essential for making these assumptions.

Creating Career Ladders

When an organization must hire individuals below the optimal level of a critical job competency, establishing a career ladder is crucial. A *career ladder* consists of a series of steps from the lowest acceptable level of competence at which an employee can be hired up to what is typically referred to as the full-performance level. Such a career ladder enables an employee to pass through a progression of increasing responsibility linked to some acknowledgement or recognition.

The establishment of such career ladders has many benefits for both employees and the organization. Career ladders broaden the pool of applicants and provide greater flexibility in hiring. They may also enhance employee job satisfaction and employee motivation and thus increase job retention. Providing internal job opportunities and reducing the cost of acquiring human capital is another advantage.

However, once career ladders are established it is incumbent on the employer to ensure that such ladders truly enable employees to advance upward. This typically involves making available any necessary training and development programs. The company must also provide employees with assignments of increasing difficulty, and provide the mentoring and coaching necessary to ensure satisfactory job performance. What is critical to this

situation is clearly understood, definitive information about job performance.

Evaluating Organizational Performance

Organizations, especially high-performing ones, regard performance data as empirical information about the quality of the operations and how well they are meeting their customer or stakeholder requirements. Whether applied over the longer term or for short-term corrective actions, performance information is required for the evaluation and used as an underpinning for the continuous improvement of overall management and strategic planning processes.

Specifically, job performance data provides various levels of management and employees with performance information. These data enable them to determine when corrective action is necessary and when changes are necessary, in the performance measurement system. When it is clear that changes in the organization's actual level of job performance are required, an organization must then develop an action plan for improving that performance.

Improving Organizational Performance

Reasons for low levels of job performance are many and complex. Paramount issues include employee limitations, poor supervision, lack of appropriate training and development, inadequate recognition and reward systems, organizational structural issues, poor internal communication, and organizational culture, to name but a few of the more obvious ones. Once it is determined that job performance is placing the organization in a non-competitive position, the organization should move swiftly to identify and address the underlying reasons for this problem. Obviously, accurate and dependable job performance data are necessary for any of this to occur.

Methods for Measuring Job Performance

In general there are two approaches to measuring job performance —objective and subjective. An *objective measure* is based directly on quantitative performance assessments, while subjective measures involve the judgment of an external observer, presumably on the basis of first-hand data.

Objective Measures

In virtually all organizations, objective data on individual performance are available, even if not regularly collated, analyzed, and used. Specific measures depend on the nature of the business and include such data points as dollar value of sales, key strokes or words per minute, number of customer minutes on hold, amount of rework, or number of errors over a specified period of time. Other objective measures include number of days tardy or absent, job longevity, accidents, and other indices of performance.

Given the easy availability of such data, the question arises as to why these measures are not used more often as indices of performance. While clearly some, such as accidents, rework, tardiness, and absences, are used regularly, most are not. A variety of reasons explain why. Let us use the example of objective measures of sales performance to highlight at least two of the major problems that arise when using such measures. These problems are deficient criterion measures and unequal opportunities.

When we use the dollar value of sales as *the* criterion of success, we ignore other critical elements involved in successful sales, such as customer satisfaction, reorders, and so on. Thus, in most cases, relying on the dollar value of sales is an example of a *deficient criterion measure*.

Further, the dollar value of sales is a function of factors other than the actions of the sales person. These other factors beyond the control of the employee may include the size or spread of the territory, the quality of available leads, the nature of the customer base, and so on. These *unequal opportunity* factors reduce the utility of the sales volume as the sole criterion of success. It would be easy to find other examples, but we believe that we have made our point: objective measures are not all that they have been cracked up to be. Although these objective measures, collated over an entire organization, are highly useful for comparisons with competitors or changes over time, they are of limited use for understanding individual job performance. The major inherent problem with using a single objective measure of performance is that it cannot take into account the complexity of factors that impact an employee's job performance.

Subjective Measures

Typical solutions to this problem rely on using rating scales that allow one or more external observers to report their observations of an individual's job performance in one or more measures. Since these ratings involve the judgment of the observer(s), they are regarded as *subjective measures*.

Over time a variety of different rating scales have been developed for evaluating individual job performance. The most commonly used form is the *graphic rating scale*, an example of which is shown in Figure 6.1.

As can be seen in Figure 6.1, the form asks the rater to evaluate the quality of the individual's work along a continuum from low to high, using a five-point scale. Such rating scales often provide a definition of the performance characteristic to

Figure 6.1 A Simple Graphic Rating Scale

RATING	of Work Qua	LITY			
Neatness	s and accuracy	as well as vol	ume and timeli	ness in comple	eting work
			1		
High					Low

be evaluated. For example, in rating the quality of work for an office assistant, work quality might be defined as "Neatness and accuracy as well as volume and timeliness in completing work." This type of graphic rating scale is of limited usefulness because it provides only quantitative end points that are not well defined, even with the description provided.

Figure 6.2 presents another version of a graphic rating scale that attempts to provide more specific verbal anchors for the two end-points and the middle, as well as numerical anchors, is an improvement over the one in Figure 6.1. However, the lack of adequate behavioral definitions of the various levels of performance remains a limitation. Raters may have very different notions of what constitutes competent performance and, therefore, of what constitutes greater or less than competent performance. Consequently, their ratings depend to a large extent on personal values, breadth of experience, and so on.

An example of arguably the most frequently used graphic rating scale is shown in Table 6.1, which attempts to flesh out the five performance levels. This generic form asks the rater to consider how well the individual being rated has met expectations about the job responsibilities. A principal concern is that the form assumes that both the employee and the rater(s) have understood and share a clear set of expectations about performance standards. While most performance appraisal systems are based on this assumption, in our experience all too often this is not the case.

Figure 6.2 An Anchored Graphic Rating Scale

RATING OF TEAMWORK

Works effectively with others in activities where collaboration is essential for task completion..



Table 6.1 A Graphic Rating Scale Focused on Meeting Expectations

Rating	Level	Verbal Anchors
1	Expectations not met	 Does not meet expectations in at least four major job responsibilities. Has received at least one disciplinary action. Retention of this employee detrimental to organization morale. Must show clear signs of improvement to avoid termination.
2	Minimal expectation met; needs improve- ment	 Does not meet expectations in at least two major job responsibilities. Has received at least one formal, documented verbal or written warning. Subject to formal disciplinary action if no obvious improvement demonstrated.
3	Expectations met	 Meets expectations in all job responsibilities. Any prior performance concerns resolved. Maintenance of present level of performance is expected. Overall adequate performance.
4	Exceeds expecta- tions	 Exceeds expectations on most job requirements. Is an informal or formal leader in work unit. Performance level is a model for other employees in work unit. Likely candidate for promotion.
5	Far exceeds expecta- tions	 Consistently exceeds expectations for all major job responsibilities. Demonstrates a high degree of initiation in work-unit and organization-wide activities. Strong candidate for early promotion or career-enhancing role.

Rarely does an employee have a clear picture of what is expected, and even more rarely do employees and those rating that employee's performance share a common understanding. Further, using such a form requires that the rater(s) are familiar with the employee's performance record before conducting the rating.

An important concern of this type of rating is that the observer will specify which of the major job responsibilities should be considered. Thus, different raters may decide to use different job responsibilities in their evaluations. Despite the increased specificity of this type of rating, this approach too leaves a good bit to be desired.

Problems with Performance Ratings

Given the critical importance of job performance data on both the individual and organizational level, it is not surprising that the establishment of job performance levels is a highly political act in most organizations. On the one hand, senior management is always eager to control costs and increase margins by establishing high levels of job performance while, on the other hand, rank-and-file employees are concerned about setting sweat-shop levels. The HR function charged with setting these standards often finds itself caught in the cross-fire of these competing expectations.

Resolving such conflicts requires developing standards of job performance, taking into account that the standards set are both reasonable and sustainable. In the long run, standards that are set too low breed a complacency, placing the organization at a competitive disadvantage. Developing a realistic set of job performance standards requires both a high level of thoughtfulness and a seriousness of purpose, together with clearly articulated and transparent procedures for achieving them.

Among the various other problems involved in developing performance ratings, we will discuss only a couple of the major ones. One such problem occurs when the individual being rated is well known by the rater(s) for a particular behavior, positive or negative. This knowledge has a generalized impact, coloring the ratings for that individual, even on behaviors that are not relevant to that specific behavior. For example, an employee known throughout the organization for being sociable and gregarious may be rated as highly productive, safety-minded, and extremely conscientious despite there being a lack of evidence to support such ratings. This phenomenon is known as the *halo effect* and can be either positive (when the known behavior is seen as positive) or negative (when the reverse is true).

Another persistent problem with rating scales is the *distributional errors* that result from the raters generally being too lenient or too tough in their judgments. These errors occur when raters have inaccurate frames of reference regarding the markers of different levels of performance. While such errors can be reduced by careful training, providing the raters with clear behavioral anchors for various levels of performance is a more reliable method.

A brief example of the other issues includes, first, the similar-to-me error, where the rater assumes the person being rated shares the same values and attitudes and thus exhibits the same behavior as the rater. Second, the first-impression error occurs when the rater places too much reliance on his or her first impression of the person being rated. And in a classic review of the research literature on performance ratings Landy and Farr (1988) concluded that a variety of other psycho-social factors played a significant role in the quality of the rating process: the personal characteristics of the rater; the gender, race, and age of both the rater and the persons being evaluated, the status of the rater—peer versus supervisor; and the rater's previous experience with the individual being rated. These conclusions have largely been supported in a more recent review by Latham and Mann (2006).

The many problems with rating scales cited above and others have led to search for an approach that transcends these problems,

one that provides reliable and valid measures of performance. Behaviorally anchored ratings scales have provided us with such a tool.

Behaviorally Anchored Rating Scales (BARS)

Behaviorally anchored rating scales (BARS) based on critical incident descriptors were initially developed by Flanagan (1954). Similarly, graphic rating scales produce an evaluation process that yields greater employee acceptance as they are based on behaviors exhibited on the specific job being evaluated. That is, job performance is evaluated in terms of specific behaviors critical to success on this job rather than general traits or abstractions. Anchoring the ratings with specific job behaviors also reduces rater bias and errors. While developing BARS is a time-consuming and labor-intensive process, the benefits from using the method clearly justify the necessary investment,

The BARS method was initially developed by Smith and Kendall (1963) who used behavioral descriptors as a way to construct unambiguous anchors for rating scales. Constructing BARS initially requires collecting critical incidents by direct observation as a way of identifying specific behavioral examples of successful performance and failures. Our current understanding, however, is that critical incidents recalled by others are as valid and useful as those directly observed. The following is a partial list of behavioral incidents collected from supervisors in developing BARS for an administrative assistant:

- Made last-minute travel arrangements enabling an executive to attend critical meeting.
- Opened a letter clearly marked "Confidential. Eyes Only!"
- Corrected typographic and grammatical errors in important document.
- Filed documents in wrong folder and was unable to retrieve them promptly.

These are but of a few of the types of critical incidents that are obtainable from supervisors about job performance that provide anecdotal evidence supporting Sashkin's (1981) conclusion that supervisors are arguably the best source of such information, although other subject-matter experts (SMEs) can provide useful data as well.

How to Implement the BARS Method

The obvious first step is to convene an SME panel of eight to ten persons familiar with this specific job, guided by an experienced facilitator who should explain the purpose of the meeting and then initially ask them to develop individually a list of those behaviors that they have seen over the years that have clearly led to either success or failure on this job. Each of these items should be posted by the facilitator on a flip chart and, when all the individual items have been posted, the group should be encouraged to add others that have occurred to them during the posting.

An HR professional should then take these items and review them for clarity, grammar, and consistency of style and to eliminate redundancies. Additional behavioral incident descriptors should be written as necessary to fill in the obvious gaps, especially incidents that represent borderline behaviors at both ends of the continuum. It is important that the behavioral incidents reported be objective, neutral, and free from an evaluative language such as "poor," "less than," "superior," and so on that would telegraph a conclusion regarding the organizational impact.

The next step is to have the individual members of a new SME panel sort these incidents into categories that are to be used to establish a set of performance dimensions, each with illustrative examples drawn from the collected critical incidents. These dimensions must be edited and examined for clarity and consistency. Sashkin (1981) suggests that these dimensions must be reviewed with four questions in mind:

- 1. Does this dimension clearly describe an aspect of job performance?
- 2. Is this an important aspect of job performance?
- 3. Are these job dimensions independent of each other with little or no overlap?
- 4. Have any important dimensions of job performance been omitted?

While the answers to these questions are always subjective, they nevertheless are important and must be answered before proceeding. The list of job performance dimensions needs to be edited and refined until appropriate answers emerge.

The third step involves testing the reliability of the sorting of the behaviors into dimensions. A new, third, SME panel is asked to individually take each of the incidents and sort them into one of the newly established dimensions. A 70 percent agreement on the dimension to which an incident belongs is necessary for the process to proceed. When this level of agreement has not been reached, a discussion among the members of the SME panel usually resolves the matter.

Finally, within each of these new dimensions, the SME panel needs to place each of the behaviors along a nine-point (stanine) continuum from outstanding to inadequate performance. Since the process may focus on behaviors at the ends of a continuum of performance, the SME panel may need to develop incidents that describe the middle ranges of job performance.

An example of behaviorally anchored rating scale for teamwork is presented in Figure 6.3. The behavioral incidents are arranged along a nine-point continuum with a rating of "9" indicating outstanding performance and a rating of "1" indicating deficient performance. And, as is usually the case, there are more critical incidents at the two extremes than at the mid-point and, in this case, there may be fewer incidents provided between the mid-point and the two extremes. If these are regarded as necessary, they would need to be developed by the SME panel.

Figure 6.3 A Behaviorally Anchored Ratings Scale

	TEAMWORK	
		Regularly helps co-workers who are behind in their work.
9		Generally provides assistance to co-workers, even when it involves extra time and effort. $\hspace{0.5cm}$
		Shows new employee where to go for lunch, where to find supplies, and generally establishes and maintains good relationships with co-workers.
		Volunteers for difficult or time-consuming team assignments, such as team leader, steering committee member, or team representative.
8		
7		
6		
5		Introduces new employees to co-workers. Has generally positive relationships with co-workers. Participates in team discussions. Avoids people with whom he or she has had previous conflicts, in order to avoid future disagreements.
4		
3		
2		
		Usually behaves as a sole producer rather than a team member.
		Regularly complains about co-workers.
		Will pair up with a co-worker or person against another and pass on critical rumors to stir up controversy.
1		Often ignores requests for assistance.
		After completing special training, does not share new knowledge with co-workers, even if asked.
		Does not participate in team discussions.

A Recommended Shortcut

When the results of a job analysis are available, the process of establishing job performance levels can be shortened. While the process of collecting the behavioral incidents in Step 1 is unchanged, the steps identified above can be eliminated. Instead, the competencies identified during the job analysis should be used for sorting the behaviors.

The importance ratings should be used to choose which of the competencies to include in the job performance. For most jobs it will only be necessary to use performance level 4 or 5 competencies and their identified behaviors to establish levels of performance.

Thus, the SME panel is provided with a list of the predetermined important job competencies and asked individually to place each of the items into one of the competencies. The facilitator should then post these individual results and resolve differences by having the panel come to a consensus about in which category the behavior belongs.

Once each of the critical incidents has been assigned to an appropriate competency, then each item can be assigned a numerical rank as described above. The final step is for the HR professional to edit the document for clarity, appropriate language, and elimination of redundancies and then have the resulting product critiqued by potential qualified users. Obviously, a formal document with appropriate instructions then needs to be developed.

Applying the BARS Method

Using the BARS method for performance evaluation typically involves independent raters comparing the known behaviors of the individual being rated with the incidents anchoring the points along the BARS. In other words, where along this nine-point scale would this individual's behaviors lead him or her to be placed?

The BARS approach to setting performance standards can be expected to result in a fairer, more accurate, and more defensible performance management system, but only if that system is well implemented. Thus, we have moved in our discussion from a rating scale with no anchoring points, other than a single word, to one that provides a variety of specific behaviors that illustrate the competencies that should guide an evaluation of that individual's

job performance. No single method will resolve the problems inherent in an inadequate, biased system. But there can be little question that BARS ratings are a significant improvement over the types ratings that were described earlier in this chapter.

When installing BARS as a new process for establishing performance levels, it is important to begin by gaining organizational acceptance of this method. HR professionals should identify the existing data sources to be used, as well as whatever new sources need to be developed. All data sources that will be used need to be credible and cost-effective. While the benefits to be derived from installing BARS should be highlighted, the time and costs should not be minimized.

BARS and the Hierarchy of Jobs

It is important to recognize that, as one moves along the job hierarchy from entry level to senior management, the number of dimensions important to successful job performance increases, as do the number and complexity of the critical incidents usually involved in each of the dimensions. In Figures 6.4 through 6.7, we present four sets of performance levels for the Problem Solving competency, together with the relevant behavioral items for each. Problem solving is important for each of these job levels—entry, production operations, first-line supervision, and senior management—but how it is expressed varies. These four samples illustrate these differences, how both number and the complexity of behaviors increases as we move from rather simple to more complex jobs. These examples should also provide some additional useful examples of critical incidents that should help sharpen the reader's understanding of this methodology.

Looking at each of these figures shows that those behavioral items at the top end of the list are more problem focused, more likely to produce solutions to problems, and that such solutions are more likely to produce long-lasting, systemic solutions than those at the bottom. As we move from the entry-level jobs to

Figure 6.4 Entry-Level Performance Levels

	PROBLEM S	OLVING
		Uses trial and error systematically to identify and solve problems.
9		Checks various possible problem solutions.
		Calls technical services promptly only when unable to personally solve problem.
		Uses examples to illustrate ideas and assist in identifying problems.
8		
7		
6		
		Uses past experience to verify an approach to troubleshooting.
5		Follows standard procedures to solve problem, then calls technical services when he or she cannot find a solution.
4		
3		
2		
		Uses trial-and-error approach, but has difficulty separating problems from symptoms.
1		Neglects to gather important information to assist others when troubleshooting equipment.
		Makes few attempts to perform routine adjustments to solve problems.

those of senior management, it is also clear that the nature of the behavioral items change from the fairly concrete and specific to the more complex and abstract reflecting the differences in the tasks confronting individuals at these different levels.

Concerns About BARS

Our experience, coupled with many years of research, clearly supports the conclusion that a competently developed set of BARS will provide reliable, readily acceptable levels of job performance and will result in fairer and more accurate understanding of what constitutes job success. But, as we noted earlier, developing such scales is both time-consuming and labor-intensive. And equally

Figure 6.5 Production Operations Performance Levels

	PROBLEM SOLVING					
		Observes and listens to a piece of new equipment to get a feel for normal operation.				
		Recognizes early warning signs of equipment malfunction.				
9		Quickly detects maintenance problems.				
		Checks equipment operation after a repair activity has been completed.				
		Isolates possible causes of a problem and checks each possibility until problem is solved.				
		Troubleshoots equipment and puzzles out how a piece of equipment was assembled before attempting repair.				
8						
7						
-						
6						
5		Recognizes when equipment malfunction is an indication of materials rather than equipment problems.				
		Recognizes a potential machine breakdown only after observing obvious signs of malfunctioning.				
4						
3						
_						
2						
		Overlooks that machine parts are wearing badly and neglects to check the operation of a critical piece of equipment while making rounds.				
		Has difficulty in separating problems from symptoms and, as a result, leaves the real problem unsolved.				
1		Repeatedly makes same adjustments to correct a problem and, after failing to correct the problem, is at a loss as to what else to do.				
		Generally tries to solve problems by trial and error and will disassemble a machine in the process of troubleshooting, rather than thinking through the possibilities beforehand.				

importantly, despite the quality of the BARS themselves, the fact remains that BARS are rating scales. Raters can still ignore the behavioral anchors in making their rating and produce biased and unfair ratings.

But some of these issues can be addressed by training raters to concentrate on the anchors and then to document their ratings

Figure 6.6 Supervisory Performance Levels

Immediately confronts a subordinate on an action for which had received a written reprimand. Solicits views of hourly employees to determine possible solut production problems. Acts as mediator to resolve conflict between two subordinates Systematically investigates each step of an operation to determ source of the problem.	tions to
production problems. Acts as mediator to resolve conflict between two subordinates Systematically investigates each step of an operation to determ source of the problem.	S.
Systematically investigates each step of an operation to determ source of the problem.	
source of the problem.	nine the
7 ——	
6	
Starts a safety team to improve the safety record and eliminate safety hazards.	e potential
Drafts report of work group performance in response by direc	et manager.
Prepares a detailed recommendation that an extra employee be	e hired.
Promptly warns an employee about deficient performance; the risk of continuing problem.	us reducing
4 ——	
3	
2	
Physically attacks an hourly employee who was not paying att work.	tention to the
Ignores a request to help a subordinate solve a problem when temporarily working for another supervisor.	employee is
Rejects a suggestion from a subordinate without hearing any e	explanation.
Reverses a subordinate's handling of a problem without explain her reasons.	ining his or

by including brief, narrative examples of behaviors exhibited by the person being rated that justify that rating. Such a requirement means that raters must have an in-depth knowledge of the person being rated, take their task seriously, and be granted sufficient time to conduct the necessary observations and prepare their ratings. Both the raters and the organization must take this responsibility seriously and, once that is understood throughout the organization, the reputation of the performance management

Figure 6.7 Senior Management Performance Levels

	PROBLEM	SOLVING
		Constantly monitors events and activities to identify problem situations as they arise.
		Aware of potential consequences of unresolved problems.
9		Analyzes the magnitude of situations and appropriately decide who should become involved.
		Identifies problems in related areas and notifies key individuals to alert them to problems.
		Distinguishes between symptoms and causes.
		Identifies and secures relevant information from different sources to solve problems.
8		
7		
6		
		Identifies problems or situations but responds in an ad hoc fashion.
5		Defers action until problems reach a critical threshold before taking action.
5		Attends to crisis situations but overlooks problems that could be solved earlier with less effort.
4		
•		
3		
2		
		Overlooks problem situations.
1		Focuses on symptoms rather than on identifying causal factors.
1		Fails to obtain important pieces of information that would lead to a permanent solution.

system will be greatly enhanced. The successful use of BARS depends on the quality of its implementation; the same can be said of most efforts at organizational innovation or change.

A SUMMARY OF THE JOB ANALYSIS PROCESS

A thorough, competent job analysis is the keystone of the entire human resource management process. Without understanding the nature of each specific job in an organization, it is not possible to recruit, select, evaluate, train, develop, and promote or terminate an employee competently. In the preceding pages we have described a process that, if followed, will produce a job analysis that provides this critically important information.

The process that we have described includes four necessary elements: (1) recognize the work activities involved in a job; (2) identify the necessary competencies—the knowledge, skills, and abilities—necessary to perform those work activities; and (3) determine the characteristics of the workplace that are likely to impact job performance; and (4) establish several, objectively determined levels of job performance. The necessary steps to carry out each of these processes are spelled out and a set of materials is provided in the Appendices to this book to facilitate the work of the HR professional in doing so.

We strongly believe that following these steps will produce job analyses that will stand up to review, both by employees within the organization and by those responsible for ensuring that an organization engages in fair, objective human capital management practices.

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Appendix A



SAMPLE JOB DESCRIPTION

Position Description

Executive Secretary

Summary. The Executive Secretary works under the general supervision of the Executive Vice President. The individual in this position enters data and processes written material; files and retrieves materials; performs administrative secretarial duties; performs reception activities; receives, ships, and distributes mail and supplies; analyzes, interprets, and reports business data; performs other duties as assigned.

Duties

 Types and processes written material: enters data from copy, long-hand notes, or dictation; composes routine correspondence or memoranda following standard operating procedures; composes letters, memos, or other documents for the executive vice president's signature; prepares tables, charts, graphs, or diagrams based on data provided by other sources.

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- 2. Files and retrieves materials: reviews, updates, or analyzes current status of subject; places forms, records, correspondence in the file; classifies or sorts correspondence, records, or other items following standard office procedure; searches indices, manuals, files, or records for desired information on specific subjects; locates and retrieves files.
- 3. Performs administrative duties: notifies or reminds the executive vice president or other department heads of meetings, scheduled dates, specific duties, or occurrences; maintains appointment schedule for the executive vice president; coordinates the scheduling of meetings, facilities, or events with other individuals; investigates the source of discrepancies in documentation; prepares travel authorization and or meeting arrangements for departmental personnel.
- 4. Performs reception activities: answers telephone and screens calls for the executive vice president; greets visitors to the executive vice president's office; answers questions or provides information directly or by telephone.
- 5. Receives, ships, and distributes mail and supplies: certifies, registers, insures or completes forms associated with special mail services such as overnight courier or registered mail; prepares confidential documents for shipment via courier, distributes mail bulletins, memos, and reports to other employees.
- 6. Analyzes, interprets, and reports business data: prepares reports, based on information at hand, following standard departmental procedures; prepares analysis or summaries of programs, reports, specific operational items, or other data.
- 7. Performs other duties as assigned.

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Competency Requirements

- 1. Communication Skills: Ability to organize and convey information orally and in documents.
- 2. Work and Organization Skills: Ability to follow through on assignments, adjust schedules, and set priorities.
- 3. Scheduling and Coordinating Skills: Skill in making arrangements, scheduling, coordinating, and orchestrating activities.
- 4. Processing Written Materials: Skill in data entry and proofing copy; knowledge of proper formats for various documents.
- 5. Clerical Research and Evaluation Skills: Knowledge of procedures to locate and obtain materials and to trace sources of errors.
- 6. Work and Organization Adaptation: Ability to pace work activities and to identify, accommodate, and adapt to the conditions or circumstances of the work and the organization and other people.

Minimum Qualifications. Completion of a two-year course of study in secretarial sciences at an accredited institution. A minimum of three years of full-time experience regularly involving at least four of the duty areas in the job description.

Appendix B



ENTRY-LEVEL JOB ANALYSIS TEMPLATES

l arget Job Title:
1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years): (months):
5. Time with company (years): (months):
This was a drop is decise ad to identify the assist a tirrities on

This procedure is designed to identify those job activities and competencies most important for entry-level jobs. The information from this template will be used to conduct a job-related selection assessment for this position.

There are two templates. Template B.1 contains a list of activities that may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template B.2 contains a list of competencies statements. The focus of that part is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these requirement statements appear following the instructions for rating the job activities.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

Importance Ratings: Work Activities

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

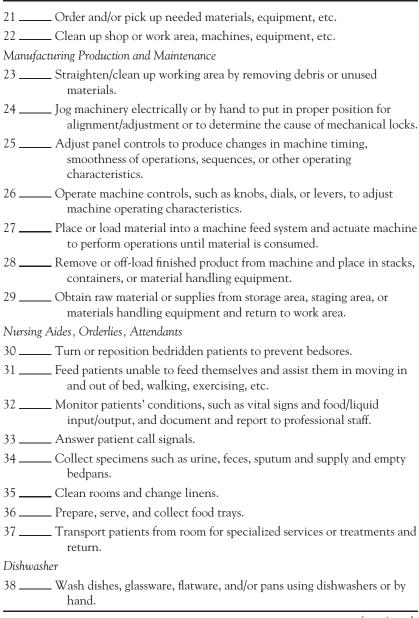
- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Template B.1 Entry-Level Importance Ratings: Work Activities

Plan and	Organize
1	Work with team members to organize assigned tasks.
2	 Determine the general nature of a job through discussion with others doing the same work.
3	 Break down work assignment into sequential steps to ensure accuracy and completeness.
Solve Pro	pblems
4	_ Work with team members to troubleshoot and solve problems.
5	 Seek assistance when standard procedures are not successful in solving problems.
Manage	Personal/Interpersonal Relations
6	_ Work cooperatively with others.
7	 Observe other workers on a team to learn and practice work tasks and skills.
8	Respond to requests for assistance from co-workers or customers/clients.
9	Empathize with others experiencing personal difficulty.
10	 Observe and anticipate needs of others without waiting for them to request assistance.
Understa	and Verbal Communications
11	_ Meet with supervisor(s) to receive and discuss work assignments.
12	 Greet customers/clients and respond to them accurately and appropriately.
13	Remain attentive when receiving instructions, and follow directions or seek clarification when necessary.
14	Respond to crew leader instructions to carry out assignments.
15	Discuss work assignments with co-workers to assess progress or status.
Construc	ction Helper
16	Provide general assistance to experienced craftsperson such as getting requested tools, holding materials in place for additional work, etc.
17	Disassemble and remove worn or damaged materials or structures.
18	Prepare new parts or materials for installation or construction.
19	Complete basic construction or installation.
20	_ Use basic tools and equipment.



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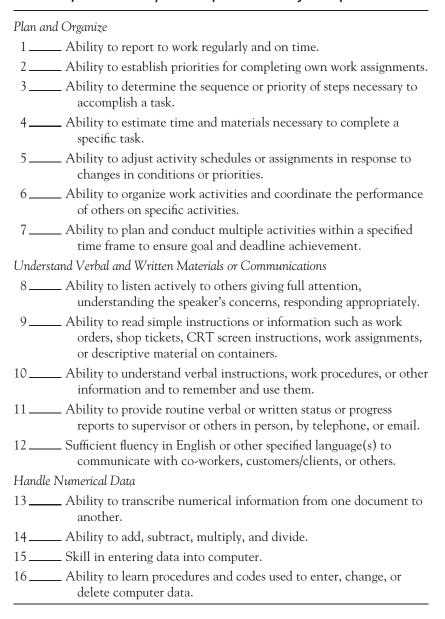
39 Store clean dishes, etc.
40 Maintain kitchen work areas and equipment in clean and orderly condition.
41 Sweep and scrub floors.
42 Sort and remove trash to designated containers/areas and keep garbage cans clean.
43 Transfer supplies and equipment between storage and work areas.
44 Set up banquet tables.
Clerical Assistant
45 Handle outgoing mail tasks: sort outgoing mail as required; prepare necessary forms for registered, insured, overnight, etc., mail and dispatch; arrange and dispatch courier mail.
46 Sort and distribute incoming and internal mail.
47 Greet visitors and answer telephone: provide information and/or direct callers and visitors appropriately.
48 Monitor security camera screens to inspect approaching visitors or detect and report suspicious activity.
49 Sort and file records, forms, correspondence, etc., following established system.
50 Locate, retrieve information from files and send to requestor, searching for missing information as necessary.
51 Maintain records of incoming/outgoing material according to established system and procedures.
52 Complete various standard forms such as checks, receipts, invoices, time or cash reports, etc. and process appropriately.
53 Code information from various sources and prepare for data entry.
54 Enter coded data into database, accounting program, or other.
Verify data entered into computer file and correct errors according to standard procedure.
Operate and/or maintain various types of office equipment such as printers, copy machines, packaging and mailing equipment, etc.
57 Prepare and process standard mailings to multiple addressees.
Prepare standard packages of materials including several items for various purposes such as attendees at a meeting or conference, information for a select list of recipients, etc.

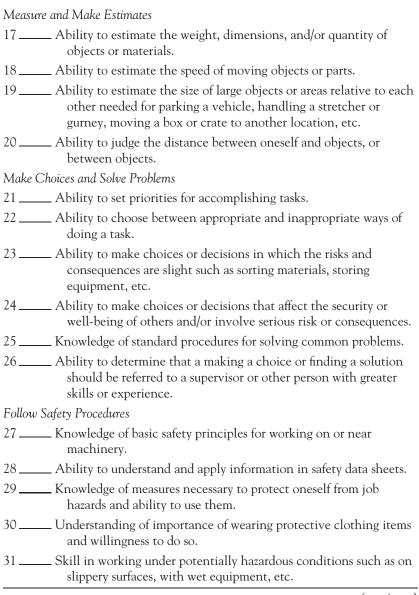
Importance Ratings: Competencies

On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency *is* required, then decide how important that competency is to fully effective job performance.
 - Use the following scale to make your judgments:
- O This rating indicates that this competency is not necessary for job performance.
- 1 This rating indicates that this competency has only minor or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- 2 This rating indicates that this competency is desirable and useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- This rating indicates that this competence is moderately important to successful job performance.
- 4 This rating indicates that this competence is very important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

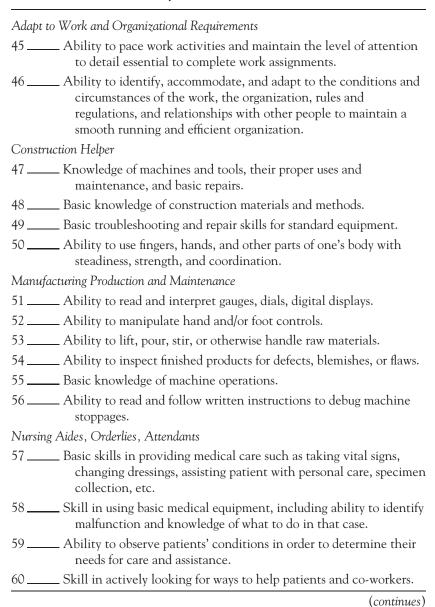
Template B.2 Entry-Level Importance Ratings: Competencies





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Use Tool	s and Measuring Instruments
32	Ability to use basic hand tools as required such as screwdrivers, dollies, pliers, etc.
33	Ability to perform operations not requiring great accuracy using hammer, wrench, trowel, putty knife, cleaning equipment, etc.
34	Ability to operate powered, hand-held tools or implements to perform operations requiring accuracy, such as pencil grinder, drill, or miniature soldering iron.
35	Ability to measure existing parts or conditions with a micrometer, blood pressure cuff, or other precision instruments and record or use results as appropriate.
Provide C	Eustomer Service
36	Ability to determine customer needs and preferences or requirements.
37	Ability to answer customer questions, suggestions, or complaints tactfully.
38	Ability to provide personal attention and service that enhance customer loyalty and maintain brand image.
39	Ability to recognize and capitalize on social and situational cues that affect customer relations.
Provide P	ersonal Service/Assistance/Support
40	Ability to recognize and respond to non-verbal cues or physical actions indicating a need for assistance.
41	Ability to recognize and respond to signs of personal distress of an individual being assisted.
42	Ability to hold, position, or move an individual who is incapacitated or immobile.
43	Knowledge and understanding of the dependency relationship between a service provider or care giver and the recipient.
44	Knowledge of the factors or conditions that interfere with the long-term health status of a non-communicative or comatose person.



equipment, etc.

Template B.2 (Continued) 61 ____ Capacity to sense and respond to needs and preferences of patients from different social, cultural, etc., backgrounds. 62 ____ Knowledge of privacy and confidentiality standards and requirements for medical care providers. Dishwasher 63 ____ Knowledge of correct use and maintenance of commercial washing, draining, and drying equipment and of trash compacters. 64 _____ Knowledge of correct use and maintenance of related tools and equipment such as various thermometers, dish-cleaning brushes, etc. 65 _____ Knowledge of proper storage for foods and ingredients. 66 _____ Ability to watch gauges, dials, etc. to make sure equipment is working properly. 67 ____ Knowledge of equipment maintenance requirements and ability to perform maintenance and basic repairs. Clerical Assistant 68 _____ Ability to use standard word processing, database, and/or accounting programs. 69 _____ Skill in sorting various types of information or materials into various categories. 70 _____ Skill in operating and maintaining standard office equipment such

as computers, copy machines, printers, packaging and mailing

Appendix C



PRODUCTION OPERATIONS JOB ANALYSIS TEMPLATES

Target Job Title:
1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years): (months):
5. Time with company (years): (months):
This procedure is designed to identify those job activities or

This procedure is designed to identify those job activities and competencies most important for a production operations jobs. The information from this template will be used to conduct a job-related selection assessment for this position.

There are two templates. Template C.1 consists of a list of activities that may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template C.2 contains a list of competencies statements. The focus of that part is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these requirement statements appear following the instructions for rating the job activities.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

Importance Ratings: Work Activities

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

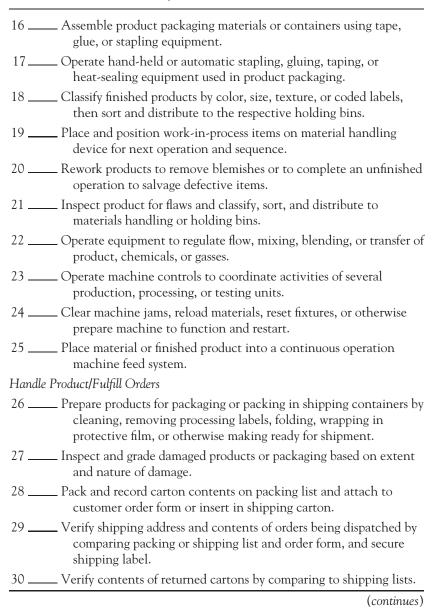
- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

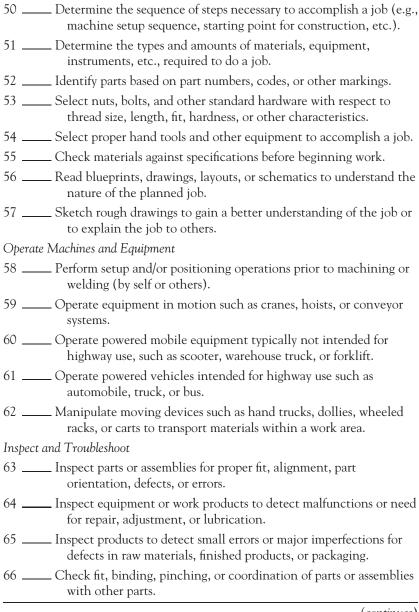
- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Template C.1 Production Operations Importance Ratings: Work Activities

Productio	on Operations
1	Operate machine controls such as knobs, dials, or levers by using one or both hands to perform a linear or rotary motion to adjust machine operations.
2	Operate while seated machine control levers requiring the use of one or both feet to adjust machine operation.
3	Use continuous variable control knobs, dials, or levers to control the process, speed of processing, or speed of material flow based on visual observation of the relevant machine operation.
4	Place or load material into a machine feed system and start machine performing operations until material is consumed.
5	Place material in manufacturing process equipment to a stop position where material is aligned and then actuate machine operation.
6	Place and align material in fixed position in manufacturing process machine using fixtures or visual cues, then begin machine operation.
7	Place material in the feed position and start machine operation while providing continuous feed of material to completion of operation.
8	Remove or off-load finish product from machine and place in stacks or container or material handling equipment.
9	Remove scrap from machine or separate from finished product and place in appropriate storage container.
10	Adjust machine speed based on skill level, product quality checks, or work pace.
11	Adjust machine operations to correct problems in product quality.
12	Move raw material or supplies from storage area, staging area, or materials handling equipment to work area.
13	Position materials and supplies for availability to production equipment operators or for in-process storage.
14	Place raw materials or partially finished products or supplies used by production employees using in-process storage or staging areas.
15	Off-load finished product from materials handling devices and place in appropriate containers.

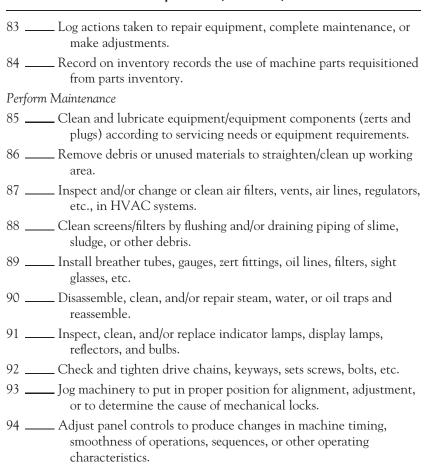


31	Record product information (type, size, location) on work order or inventory control form.
32	Match product information to work order or inventory control form.
33	Complete working forms or production documents containing information needed for subsequent operations or records.
34	Record customer quality complaints on returned merchandise.
35	Sort products by type, size, color, or other characteristics.
36	Select labels to be attached to products according to work orders and attach using sewing machine or bar tack machine.
37	Select product packages from inventory to match customer order and place in shipping carton.
38	Produce labels and maintain an inventory of customer/product labels used to identify items.
39	Inspect packaging materials for quality of print and assembly of package.
Plan, Or	ganize, Schedule, and Coordinate
40	Plan or schedule movement of material or products.
41	Plan or direct projects or major portions of projects.
42	Establish priorities for completing own work.
43	Establish procedures for others to follow in making repairs, maintenance, etc.
44	Assist in instruction of other workers on safe and proper work procedures.
45	Maintain or update logs/records of changes made to operating systems (e.g., control adjustments, parts replaced, time spent, etc.).
46	Inventory parts, tools, fittings, and maintenance stock materials.
47	Develop checklist detailing steps for corrective action on production equipment.
48	Maintain a file of building floor plans, utilities and production equipment, blueprints, and manufacturers' manuals and bulletins.
49	Determine the general nature of a job through discussion with others who have done similar work.



(continues)

67 _____ Inspect machine parts or components to detect excessive heat or vibration. 68 _____ Disassemble parts, components, tools, or assemblies, and reassemble according to sketches, schematics, blueprints, or parts prints. 69 _____ Add or remove production machine covers or assemblies, work aids, etc., according to the requirements of the operators. 70 _____ Determine minimum repairs or modifications necessary to maintain machine or equipment operations on a temporary or emergency basis. 71 ____ Question machine operators to determine possible causes of mechanical, electrical, or electronic failures in order to initiate troubleshooting. Handle Paperwork 72 ____ Classify or sort informational material, correspondence, records, business forms, merchandise, or other items following standard 73 ____ Maintain or update logs/records of changes made to operating systems, including control adjustments, parts replaced, time spent, and operating status. 74 _____ Search indices, manuals, files, records, or other sources for desired or missing information on specific subjects. 75 _____ Inventory production raw materials parts, tools, fittings, and maintenance stock materials. 76 _____ Look up and interpret numerical or alphabetical codes. 77 ____ Complete forms by filling in information such as part numbers, time spent, department identification, equipment and functioning status. 78 ____ Fill out records of meter or gauge readings. 79 _____ Prepare requisitions for parts, materials, tool room orders, or consumable supplies. 80 _____ Fill out schedules of regular and preventive maintenance performed. 81 _____ Prepare tags to indicate that equipment is out of service. 82 ____ Write notes or make records describing actions taken or providing other information for the benefit of the next person on the job.



Importance Ratings: Competencies

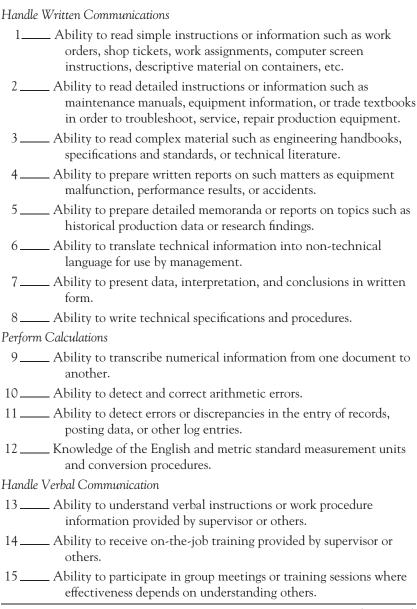
On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency *is* required, then decide how important that competency is to fully effective job performance.

Use the following scale to make your judgments:

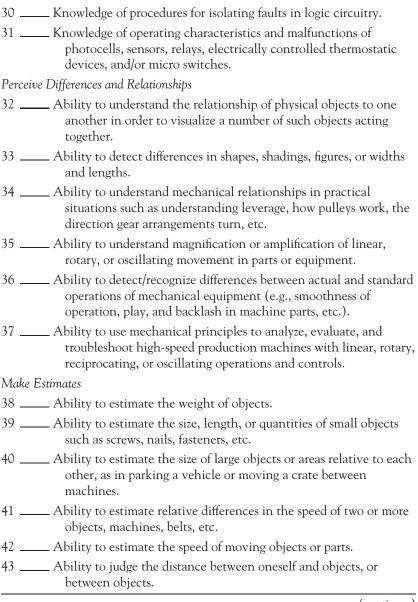
- O This rating indicates that this competency is not necessary for job performance.
- 1 This rating indicates that this competency has only minor or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- 2 This rating indicates that this competency is desirable and useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- 3 This rating indicates that this competence is moderately important to successful job performance.
- 4 This rating indicates that this competence is very important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

Template C.2 Production Operations Importance Ratings: Competencies



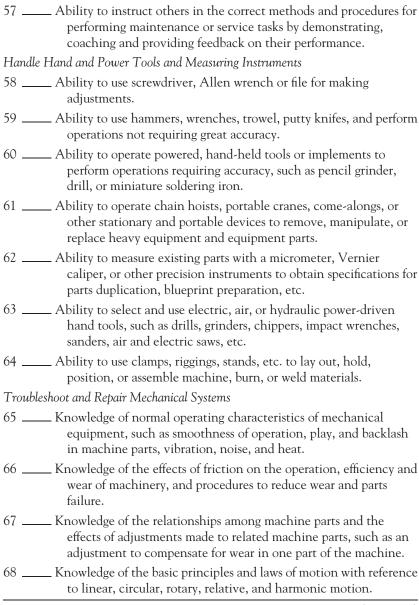
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16 ____ Ability to identify the important points of information from material presented orally. 17 ____ Ability to communicate with co-workers through conversation or discussion where effectiveness depends on making oneself understood. 18 ____ Ability to provide routine verbal status or progress reports to supervisor or others in person or by telephone. 19 _____ Ability to obtain information through personal interviews or personal conversations with others. 20 ____ Ability to persuade an operator that a machine is not functioning satisfactorily when all indicators are positive. Understand Graphic Information 21 ____ Ability to read and interpret blueprints or drawings such as detailed assembly or parts drawings. 22 ____ Ability to read solid state schematics or logic diagrams to determine input/output signal requirements, voltage references, etc. for troubleshooting activities. 23 _____ Ability to read pneumatic or hydraulic schematics to identify troubleshooting, repair, or assembly procedures. 24 _____ Ability to read an electrical schematic to identify a sequence of electrical troubleshooting activities. 25 ____ Ability to read a schematic or diagram to determine the proper sequence of equipment assembly and disassembly or for parts replacement. 26 ____ Ability to determine the relationship between physical symptoms of mechanical failure and corresponding points of reference in an electrical drawing or schematic. Use Computers 27 ____ Knowledge of the procedures used to access computer system programs, enter files, and edit or delete data or information. 28 _____ Skill in using software for diagnosing and repairing system malfunctions. 29 ____ Knowledge of software and techniques for testing equipment, simulating events, and/or isolating equipment malfunctions.



(continues)

Make (Choices and Solve Problems
44	— Ability to make choices or decisions in which the risks and consequences are slight, such as sorting material/parts or storing apparatus.
45 <u> </u>	_ Ability to make choices or decisions affecting the security or well being of others and/or which involve serious risks or consequences.
46	— Ability to solve problems involving a few relatively concrete principles or methods, such as troubleshooting malfunctions or breakdowns in familiar equipment.
47	Ability to solve problems involving a variety of abstract variables by applying scientific principles or logic to define the problem, assemble data, and/or draw valid conclusions.
48	 Ability to specify a sequence of activities to locate or retrieve lost or misplaced files, documents, etc.
49	— Ability to recognize what specific additional information about a problem or situation should be collected.
Plan, C	Organize, Schedule, Coordinate
50	_ Ability to assign priority or sequence to the steps for completing a job.
51	 Ability to coordinate the activities of other individuals or departments on joint projects.
52	Ability to schedule multiple projects which compete for limited resources (time, equipment, personnel, etc.).
53	 Ability to organize project activities and orchestrate the performance of helpers on specific activities.
Supervi	se
54	_ Ability to explain and demonstrate work procedures to others.
55	_ Ability to evaluate equipment operation in terms of operator time requirements, attention and skill requirements.
56	— Ability to recognize waste and loss in use of manpower, material, equipment, machines, etc. to identify or locate areas for potential improvements or savings.



(continues)

69	 Knowledge of types and uses of attachments or pieces of equipment used in individually operated production, materials handling, or packaging operations.
70	_ Knowledge of production machine capabilities (i.e., punch press, drill press, sewing and knitting, woodworking or finishing. equipment) in relation to productivity and quality improvement.
Follow S	afety Procedures
71	 Knowledge of basic safety principles for working on or near machinery.
72	_ Knowledge of equipment lockout and other safety procedures.
73	 Knowledge of requirements for shields, guards, and protective devices for stationary and portable equipment or machinery.
74	_ Knowledge of work space design and requirements in relation to worker safety requirements and operations efficiency.
75	Ability to understand and apply information in safety manuals and other sources.
Adapt to	Work and Organization Requirements
76	 Ability to pace work activities and maintain a sense of urgency and level of attention to detail essential to complete work assignments and achieve goals.
77	_ Knowledge of proprietary restrictions on discussing organizational operations, plans, problems or relationships with other organizations.
78	Ability to adapt to the conditions and circumstances of work, to adapt to the organization's rules and regulations in order to maintain a smoothly running and efficient organization.
79	Ability to recognize and capitalize on social cues that affect the outcome of business and personal dealings with other people.

Appendix D



CLERICAL JOB ANALYSIS TEMPLATES

1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years): (months):
5. Time with company (years): (months):

This procedure is designed to identify those job activities and competencies most important for clerical jobs. The information from this template will be used to conduct a job-related assessments for this position.

There are two templates. Template D.1 consists of a list of activities which may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template D.2 contains a list of competency statements. The focus of that part is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these competency statements appear following the instructions for rating the job activities.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

Importance Ratings: Work Activities

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- 2 This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Template D.1 Clerical Job Analysis Importance Ratings: Work Activities

Process V	Written Materials
1	Send standard letters, printed literature, or other materials in response to routine requests within predetermined limits.
2	Prepare tables, graphs, charts, etc., based on data from other sources
3	Proofread completed forms or correspondence for inaccuracies in spelling, punctuation, grammar, format, neatness, or general appearance.
4	 Produce copies of correspondence, reports, etc., and prepare them for distribution.
5	 Forward completed correspondence or business files to supervisor for final review and approval.
6	Prepare material for distribution using machine or by hand, copy, gather, fold, staple, or seal packets/envelopes.
File and	Retrieve Materials
7	Review, update, or revise file contents to reflect current status of subject.
8	 Place forms, records, correspondence, or other material in the correct location in a systematic file.
9	Classify or sort informational material, correspondence, records, business forms, merchandise, or other items following standard system.
10	Search indices, manuals, files, records, or other sources for desired or missing information on specific subjects.
11	Locate and retrieve filed or stored material.
12	_ Maintain records of incoming and outgoing materials through use of system and procedures.
13	Retrieve records and/or information from file and forward to others
Analyze	, Interpret, Report
14	 Prepare reports based on information at hand following standard procedures.
15	Maintain custody of evidence presented at meetings (including written memoranda, documents, etc.) for incorporation into transcripts and records.

17 Locate and retrieve data, records, or other information needed to conduct or complete projects, conducting a search or investigation if necessary. Transcribe Material 18 Take notes of information to be included in reports, letters, or documents. 19 Transcribe information from recording machine tapes or other material. 20 Take notes in meetings, conferences, or from phone calls to produce minutes, notes, or summary reports. Solve Problems 21 Work with team members to troubleshoot and solve problems. 22 Seek assistance when standard procedures are not successful in solving problems. 23 Use trial-and-error approach to solving problems when appropriate. Keep Books 24 Review accounting statements, expense reports, and standard forms for, accuracy, completeness, and conformity to procedures. 25 Allocate debits, credits, costs, charges, or other similar bookkeeping items to correct accounts or classification. 26 Post entries in financial journals, ledgers, or other financial records. 27 Make necessary entries or adjustments to reconcile out of balance account. 28 Verify and process invoices for payment. 29 Assist in internal and external audits of fiscal and financial operations. 30 Assist individuals with account problems by reviewing account information. 31 Produce a trial balance of accounts and locate and correct errors.	Prepare displays (tables, graphs, charts, or diagrams) summarizing numerical or statistical data (e.g., financial data or operating statistics).
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Со	de, Transcribe, Enter Data
32	Prepare summary or data entry/coding sheets for computer processing from information contained in other sources.
33	Allocate charges or payments to individual departments and accounts using accounting codes.
34	Verify accuracy of data coding and make necessary corrections.
35	Code materials using number or letter codes.
36	Complete various routine forms such as checks, receipts, invoices, form letter addresses, time or cash reports, etc., according to standard operating procedure.
37	Operate computer peripheral equipment (e.g., printer, scanner, etc.).
38	Verify the accuracy of data entered into computer file using printout or visual screen.
39	Analyze computer or computer equipment operation in relation to conditions displayed on screens, monitors, etc.
Red	ceive and Distribute Mail
40	Certify, register, insure, or complete forms associated with special mail services such as overnight, courier, or registered mail.
41	Arrange for the delivery of confidential documents via courier or special messenger.
42	Sort and deliver mail, materials, or supplies to appropriate individuals.
43	Distribute mail, bulletins, memos, and reports to employees and offices.
Per	form Reception Functions
44	Greet visitors and direct them to the appropriate individual.
45	Answer questions and give requested directions or other information directly or by telephone.
46	Verify or confirm the identity of phone callers prior to initiating actions.
47	Receive orders, requests, instructions, or information, personally or by telephone.
48	Sign or initial documents to acknowledge receipt of valuables.

49 _	Schedule use of facilities and/or equipment and assist individuals in their use.
50 _	Answer telephone, relay messages, and provide routine information.
51 _	Monitor remote security camera screens to inspect approaching visitors to detect atypical or suspicious vehicle, activity, or events that occur in a monitored region.
Con	nmunicate
52 _	Select, assemble, and arrange distribution of news articles or other materials (brochures, leaflets, etc.) of interest within the organization.
53 _	Assist in planning, coordinating, and administering sponsored activities for employees or visitors (e.g., meetings, banquets).
54 _	Maintain bulletin board or other displays of employee-relevant information.
55 _	Keep a log of all events occurring during shift and make entries to journal to inform next shift personnel.
56 _	Create and distribute a regular company newsletter for all staff.
Plan	, Organize, Schedule
57 _	Estimate materials, labor, and time requirements for specific projects.
58 _	Maintain up-to-date manuals of department/job practices and procedures to standardize the activities of subordinates.
59 _	Develop sequenced action plans to correct problems with equipment or work processes or procedures.
60 _	Coordinate multiple and/or competing activities and assignments for efficient use of time and resources.
61 _	Maintain and keep up-to-date database for financial data, inventory, personnel records, etc.
62 _	Prepare a roster of individuals' daily shift assignments by unit for use in tracking individuals by activity.
63 _	Review information from outgoing shift to determine priority items for attention.
	(continues)

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Opera	te and Maintain Equipment
64	Conduct scheduled inspections to determine need for equipment maintenance.
65	Arrange maintenance work for office equipment according to an established schedule or priority system.
66	Repair, adjust, clean, and otherwise service electrical and mechanical office machines.
67	Operate the various types of office equipment used by organization.
68	Prepare and distribute or assign work orders for maintenance and repair of facilities, utilities, equipment, or grounds.
Perfor	m Administrative Functions
69	Notify or remind certain individuals or departments of meetings, scheduled dates, specific duties, or occurrences.
70	Maintain an appointment book or schedule for one's supervisor.
71	Coordinate the scheduling of meetings, facilities (conference rooms, etc.), or events (tours, banquets, classes, etc.) with other individuals or groups.
72	Investigate the source of discrepancies in documentation or search for lost documents through coordination with others outside the department.
73	Prepare expense vouchers and travel authorization and complete travel or meeting arrangements for departmental personnel.

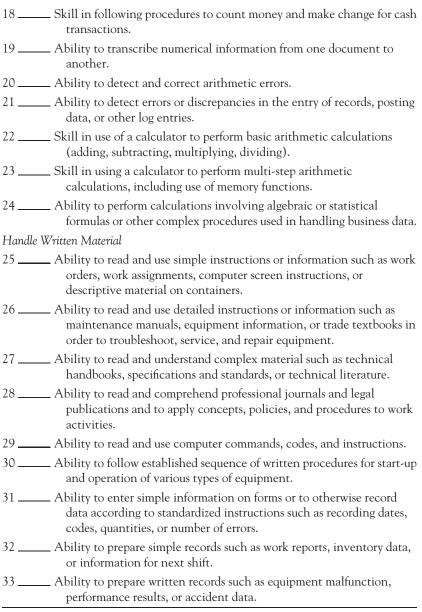
Importance Ratings: Competencies

On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

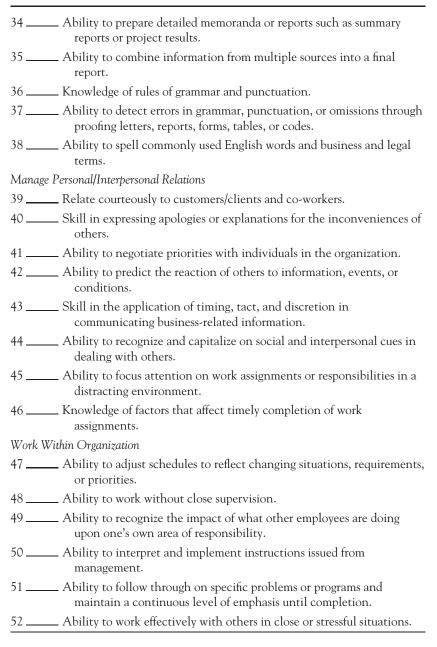
- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency *is* required, then decide how important that competency is to fully effective job performance.
 - Use the following scale to make your judgments:
- O This rating indicates that this competency is not necessary for job performance.
- 1 This rating indicates that this competency has only minor or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- 2 This rating indicates that this competency is desirable and useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- This rating indicates that this competence is moderately important to successful job performance.
- 4 This rating indicates that this competence is very important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

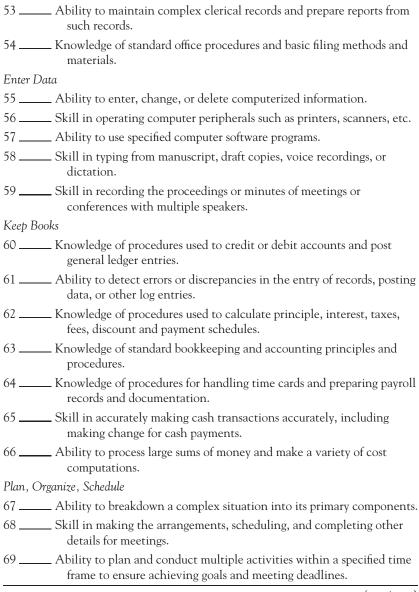
Template D.2 Clerical Job Analysis Importance Ratings: Competencies

Commu	nicate
1	Ability to explain and demonstrate work procedures to others.
2	Ability to use information coming from two or more sources simultaneously, such as listening to a customer's concern and paying attention to an intercom.
3	Sufficient fluency in English or other specified language to communicate with co-workers and customers or clients.
4	 Ability to coordinate work with co-workers through conversation/discussion where effectiveness depends on understanding others.
5	 Ability to understand spoken instructions or work procedures provided by supervisor or others.
6	Ability to participate in group meetings or training sessions where effectiveness depends on understanding others.
7	 Ability to provide routine verbal status or progress reports to supervisor or others in person.
8	_ Ability to make informal reports or presentations to small groups.
9	Ability to obtain information through personal interviews or personal conversations.
10	_ Knowledge of what information should be considered confidential.
11	Ability to convey information in a concise fashion without loss of necessary detail.
12	Ability to organize information in reports, correspondence, etc., in a logical and meaningful manner.
13	Ability to maintain or project a positive image in face-to-face conversations as well as in telephone conversations.
14	 Ability to calmly, politely, and firmly handle unsolicited communications from disturbed individuals.
15	 Ability to respond to multiple, simultaneous communications requiring quick reaction.
Handle (Quantitative Data
16	Ability to accurately recognize and recall a series of numbers (e.g., telephone numbers, zip codes, account codes).
17	Ability to compare objects, letters, symbols, and numbers to determine identity or degree of similarity.



(continues)





(continues)

70 _____ Ability to evaluate and choose between conflicting alternatives based on partial or incomplete information. 71 _____ Ability to adjust project schedules or work assignments in response to changes in conditions or priorities. Make Choices and Solve Problems 72 _____ Ability to set priorities for accomplishing tasks. 73 _____ Ability to choose between appropriate and inappropriate ways of doing a task. 74 _____ Ability to make choices or decisions in which the risks and consequences are slight such as sorting materials, storing equipment, 75 _____ Knowledge of standard procedures for solving common problems. 76 _____ Ability to determine that a making a choice or finding a solution should be referred to a supervisor or other person with greater skills or experience. Adapt to Work and Organization 77 _____ Knowledge of the protocol regarding meetings, conferences, events, appointments, and authority relationships. 78 _____ Knowledge of the restrictions and proprietary standards regarding discussion of organization operations, plans, problems, or relationships with other organizations. 79 _____ Knowledge of organizational standards regarding dress, language, personal hygiene, attendance, and expressed attitudes toward co-workers, customers/clients, or others. 80 _____ Ability to distinguish between problems that can be resolved through routine procedures from those that require specialized response or attention of other persons. 81 _____ Ability to identify, accommodate, and adapt to the conditions and circumstances of the work, the organization, rules and regulations, and relationships with other people to maintain a smooth-running and efficient organization. 82 _____ Ability to maintain attention and pace of work activities when performing repetitive tasks or when confronted by distractions, competing requirements, or persons.

Appendix E



SALES AND SALES MANAGEMENT JOB ANALYSIS TEMPLATES

1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years): (months):
5. Time with company (years): (months):

This procedure is designed to identify those job activities and competencies most important for sales and sales management jobs. The information from this template will be used to conduct a job-related assessment for this position.

There are two templates. Template E.1 consists of a list of activities that may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template E.2 contains a list of competency statements. The focus of that part is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these requirement statements appear following the instructions for rating the job activities.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

Importance Ratings: Work Activities

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

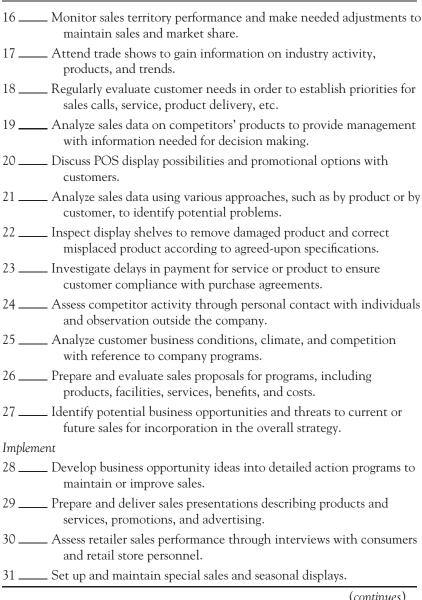
- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

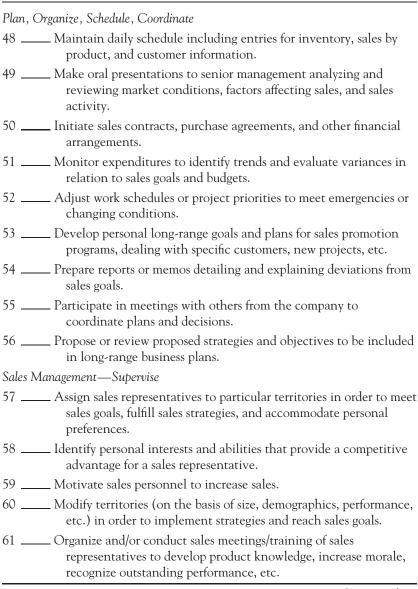
- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Template E.1 Sales and Sales Management Importance Ratings: Work Activities

Prospect	
1	Evaluate prospect potential, service requirements, and other factors to develop sales plans and goals.
2	Advise customers of the advantages of adding additional products based on sales and marketing information.
3	Estimate sales based on trends in sales or restocking product at various customers.
4	Assist customers in setting up new stores by conducting and coordinating promotional activities.
5	Determine adjustments, refunds, and discounts, then balance to reconcile sales records.
6	Evaluate and select advertising from options provided by agency and placement in media.
7	Establish boundaries of sales territories based on geographical area, customer base, accessibility, volume, sales strategy, or other factors.
8	Set-up and staff trade show booths or exhibits to present product information and make contact with prospective buyers or clients.
9	Set-up and maintain a schedule that provides adequate coverage of both existing customer base and new customer development.
10	Prepare prospecting strategies or action plans based on relevant information.
11	. Work with customers' employees on ways to promote and upsell products.
12	Analyze customer inventory and sales data and recommend changes and adjustments to purchasing patterns.
13	Explain benefits of products and services to prospective or actual customers.
Monitor a	ınd Analyze
14	Develop action plans for customers to achieve and maintain proper inventory levels of our products.
15	Recommend modifications in company sales and marketing to meet changing situations, such as the need for new products or responding to competitors' activities.



32		Maintain records of demand for products, sales aids, or other materials needed for meeting sales goals.
33		Develop advertising and promotional materials in accordance with marketing strategy and sales goals.
34		Contact individuals in customer organizations to answer questions or obtain information related to sales proposals, delivery, pricing, etc.
35		Identify customer objections to new product or service proposals.
36		Identify slow moving products to understand reasons and develop action plans, such improving or eliminating product, etc.
37		Evaluate physical layout of retail outlets for proper placement of POS.
38		Prepare status reports on sales, distribution, pricing, inventories, special programs, etc., for review by management.
39		Analyze customer requirements and market conditions to develop sales proposals.
Ου	ercom	e Objections
40		Establish business and personal contacts with decision makers and others in the customer organization and keep them informed of new or impending developments in product, pricing, etc.
41		Explain company strategy, its marketing and merchandising positions to customers to stimulate customer business development.
42		Monitor reports of industry activities from various sources to identify threats or opportunities that can impact the company.
43		Identify individuals within a customer organization who have responsibility and authority for purchasing or contracting decisions.
44		Forecast sales and market penetration based on historical data, sales strategy, and competitor activity in the sales territory.
45		Assist customers in their sales activities by keeping them informed of new products or price specials.
46		Analyze and interpret retailer performance reports and/or forecasts to identify trouble spots for future management action.
47	-	Negotiate and close sales.



(continues)

64 _____ Evaluate subordinates' performance against established guidelines, objectives, and performance standards and provide action-oriented feedback to correct deficiencies. 63 _____ Interview candidates for sales positions to determine their qualifications and suitability for employment. 64 _____ Establish sales territories based on workload, priorities, and capabilities of individual sales personnel. 65 _____ Develop and implement procedures for evaluating the performance of sales department to identify needed changes. 66 ____ Conduct exit interviews to determine causes for separation and to identify trends that have policy implications. 67 _____ Set performance objectives for sales force and monitor progress toward those objectives. Sales Management—Coordinate, Organize, Communicate 68 ____ Coordinate trade show/convention activities to ensure proper coverage and product exposure. 69 _____ Seek out assistance or guidance from superiors or peers when faced with unusual or unfamiliar situations without clear solutions. 70 _____ Develop and maintain up-to-date manuals of sales department policies and procedures. 71 _____ Investigate recurrent disputes among sales personnel to determine causes and resolve such disputes. 72 ____ Keep sales force up-to-date on sales and merchandising programs. 73 ____ Organize and coordinate team selling efforts. 74 ____ Coordinate multiple and/or competing activities and assignments for efficient use of time and resources. 75 ____ Conduct training programs for employees to develop their technical skills or to introduce new procedures. 76 ____ Obtain and clarify information from employees relevant to work procedures and standards. 77 _____ Assess and evaluate the adequacy of manpower resources, internal business controls, equipment, and facilities.

78	Review personnel data to discern trends in absenteeism, tardiness, or turnover to facilitate development of personnel policies.
79	Prepare or interpret personnel policies, procedures, rules, and regulations to employees.
80	Maintain a calendar of events relating to sales, promotional, or marketing activities.
Sales Ma	nagement—Plan Strategy
81	Develop marketing strategies including features that emphasize benefits, price points, product mix, etc.
82	Develop action plans to implement sales and marketing strategies.
83	Monitor company sales programs and operations to identify training needs and develop programs to meet these needs.
84	Conduct staff meetings to exchange information, define objectives, establish priorities, and develop solutions for emerging problems.
85	Analyze business operation or project requirements to determine individual roles and make work assignments.
86	Develop action plans containing costs, critical dates, and required activities for completion.
87	Develop budget projections and recommendations based on business plans and strategies.
88	Develop and implement modifications in sales procedures or approaches to correct or contain budget variances.
89	 Monitor and evaluate workload of subordinates to determine optimum allocation, priorities, and schedule for an organizational unit.
90	Prepare or review contracts, purchase agreements, and other financial arrangements.
91	Review and evaluate customer relations programs to determine their effectiveness.

Importance Ratings: Competencies

On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency *is* required, then decide how important that competency is to fully effective job performance.

Use the following scale to make your judgments:

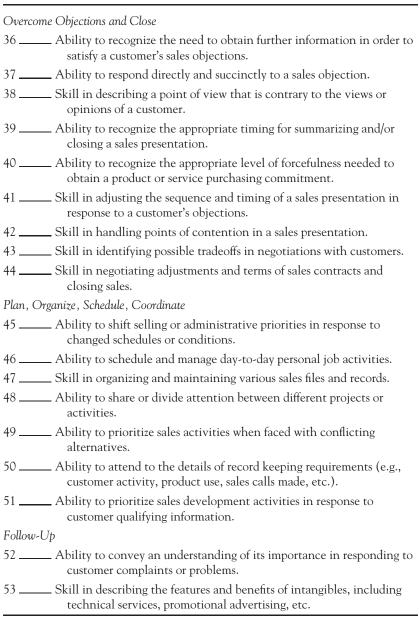
- O This rating indicates that this competency is not necessary for job performance.
- 1 This rating indicates that this competency has only minor or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- 2 This rating indicates that this competency is desirable and useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- 3 This rating indicates that this competence is moderately important to successful job performance.
- 4 This rating indicates that this competence is very important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

Template E.2 Sales and Sales Management Importance Ratings: Competencies

 Skill in developing information to identify and qualify sales prospects. Skill in developing information about new prospects. Skill in analyzing existing accounts to determine potential for additional sales. Skill in balancing and/or reconciling sales totals, inventory figures, etc. Ability to secure cold call appointments by telephone. Ability to analyze competitive product lines to determine appropriate competitive selling strategies. Ability to analyze the features and benefits of a competitor's product line to determine areas of vulnerability. Ability to stimulate interest in a product or service in a face-to-face cold call. Monitor and Analyze Skill in gathering information about a competitor's activity, products, or services. Ability to analyze a customer's sales and profit structure to obtain information for preparing sales calls. Skill in asking questions to identity issues or concerns that prevent closing a sale. Skill in asking questions to qualify a customer to identify needs. Ability to recognize subtle cues that suggest a customer's opinion or judgment regarding a product or service that is for sale. Make Presentations Ability to actively involve and interest prospective customers when making sales presentations. Ability to involve a group of potential customers when making a sales
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15 Ability to involve a group of potential customers when making a sales
presentation.
16 Ability to recognize when a change in focus or direction of a sales presentation is necessary.
17 Ability to stage or create events in sales presentations that capitalize on the commitment of one or more individuals to the recommended product or service.

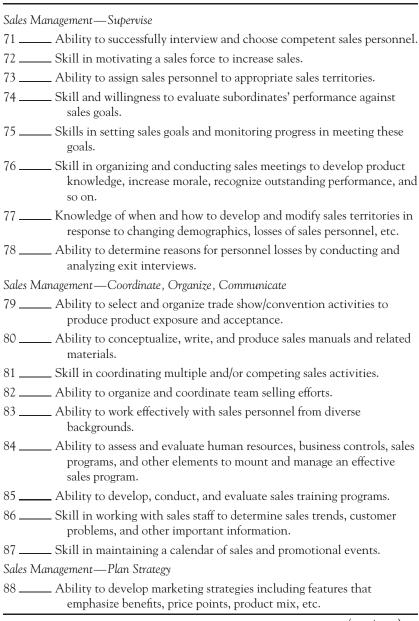
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18	_ Ability to evaluate and respond to the comments and/or cues of other sales representatives in team selling efforts.
19	— Ability to determine the degree of formality or propriety appropriate to a sales call.
20	— Ability in a sales call to stress the importance of personal attention and service in the future.
21	— Ability to project a positive image in telephone conversations with customers.
22	_ Ability to control the sequence and timing of events in a sales call.
23	 Ability to project an appearance of self-confidence in dealing with prospective or actual customer.
24	_ Skill in organizing information and materials needed for sales calls.
Integrat	e Information
25	_ Ability to evaluate the value and compatibility of products and/or services offered for a customer's business operations.
26	 Ability to evaluate the impact of competitive activity on future sales of product/services.
27	 Ability to identify individuals within a client organization who have the authority to make purchasing decisions.
28	 Ability to identify potential sales objections by evaluating customer qualifying information.
29	Skill in analyzing a customer's needs and preferences to determine the proper timing and frequency of sales calls.
30	Ability to identify the business and personal factors that influence a customer's purchasing decisions.
31	 Ability to determine the impact of changes in a client organization on current or future sales.
32	Ability to analyze the profit structure of competitive product lines to determine appropriate competitive selling strategies.
33	_ Ability to recognize the comments or other cues provided by a customer that indicate a competitor's efforts at displacement selling.
34	— Ability to evaluate sales potential, qualifying information, and level of resistance to sales efforts.
35	_ Ability to evaluate customer vulnerability to competitive selling.



(continues)

54	Ability to address or respond to customer's problems without compromising the company's position or creating liability.
55	Ability to determine the benefit of continued sales activity with a customer based on customer qualifying information, other selling opportunities, etc.
56	Skill in obtaining payments to resolve delinquent accounts or other customer credit problems.
57	Skill in addressing past service problems in a way that maintains customer confidence in company products or services.
58	Ability to respond to customer complaints and maintain composure in stressful circumstances.
Merchand	ise
59	Skill in designing visual aids for management and/or sales presentations.
60	Ability to design sales aids that demonstrate an understanding of a customer's business operation, resources, and concerns.
61	Skill in setting up and maintaining retail point of sale displays and merchandise.
62	Ability to evaluate brand representation and movement in retail store outlets.
63	Ability to recognize the usefulness of different sales materials, promotional devices, etc., for prospecting and sales activities.
64	Skill in evaluating the physical layout of retail outlets for proper placement of point of sale displays and merchandise.
65	Ability to estimate product or package sales for special events or seasonal activities.
Handle Ci	ustomer Relations/Sales Support
66	Skill in giving formal technical instructions to customers' employees.
	Ability to write technical specifications and procedures to be included in sales proposals.
68	Ability to describe the features and benefits of a technically complex product or service in a way that is appropriate to the technical knowledge and competence of the customer.
69	Ability to evaluate technical data to solve a customer's systems problems.
70	Ability to identify and resolve causes of technical problems in a customer's operations.



(continues)

89 _____ Skill in developing action plans to implement sales and marketing strategies. 90 _____ Ability to monitor company sales programs and operations to identify training needs and develop programs to meet these needs. 91 _____ Skills in conducting staff meetings to exchange information, define objectives, establish priorities, and develop solutions for emerging problems. 92 _____ Ability to develop action plans involving estimates of costs, setting critical dates, and identifying required activities. 93 _____ Skill in developing budget projections and recommendations based on business plans and strategies. 94 _____ Ability to develop and implement modifications in sales procedures or approaches to correct or contain budget variances. 95 _____ Skills in monitoring and evaluating workload of subordinates to determine optimum allocations, priorities, and schedule for sales units. 96 _____ Ability to prepare or review contracts, purchase agreements, and other financial arrangements. 97 _____ Ability to review and evaluate customer relations programs to determine their effectiveness. Adapt to Work and Organizational Requirements 60 _____ Knowledge of organizational practices and norms regarding meetings, events, appointments, authority relationships, and organizational structure. 61 _____ Knowledge of the relationships, dependencies, and contingencies among organizational units, key management positions, and other positions and functions. 62 _____ Knowledge of the proprietary standards regarding discussion of company operations, plans, problems, and professional relations with other organizations. 63 _____ Knowledge of the norms and practices regarding verbal expression and behavior in professional or social settings where the individual is identified with the organization. 64 _____ Knowledge of the formal and informal standards regarding dress, language, personal hygiene, attendance, and expressed attitudes when identified with the organization. 65 _____ Ability to differentiate settings, conditions, or circumstances that determine when the individual is identified with the organization or is functioning as a private citizen.

Appendix F



CLERICAL/ADMINISTRATIVE SERVICES JOB ANALYSIS TEMPLATES

1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years): (months):
5. Time with company (years): (months):

This procedure is designed to identify those job activities and competencies most important for clerical and administrative jobs. The information from this template will be used to conduct a job-related selection assessment for this position.

The template consists of two parts. Template F.1 consists of a list of activities which may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template F.2 contains a list of competencies statements. The focus of that template is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these requirement statements appear following the instructions for rating the job activities.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

Importance Ratings: Work Activities

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- 2 This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Template F.1 Clerical/Administrative Services Importance Ratings: Work Activities

Typewritten Materials Importance
1 Proofread reports or other correspondence for grammar or spelling.
2 Send standard letters, printed literature, or other materials in response to routine requests within predetermined limits.
Compose letters, memos, or other documents for the supervisor's signature from notes or following general instructions.
4 Type tables, graphs, charts, or diagrams, based on data supplied from other sources.
5 Type drafts and final copy of legal documents, contracts, letters, or records.
6 Type letters, memos, reports, or other documents from manuscript or rough draft, dictation tape, or shorthand notes.
File and Retrieve Materials
Review, update, or revise file contents to reflect current status of subject.
8 —— Place forms, records, correspondence, or other material in the correct location in a systematic file.
9 Classify or sort informational material, correspondence, records, business forms, merchandise, or other items following standard methods of systematized arrangement.
10 Search indices, manuals, files, records, or other sources for desired or missing information on specific subjects.
11 Locate and retrieve filed or stored material.
12 Maintain records of incoming and outgoing materials through use of cataloging system, computerized circulation system, and withdrawal file.
13 Retrieve records and/or information from file and submit to other agencies.
Take Dictation
14 Take shorthand notes of material to be included in reports, letters, or documents.
15 Transcribe information from recording tape or stenograph machin notes.

16 Take shorthand in meetings, conferences or from phone calls to produce minutes, notes, and summary reports.
17 Use shorthand to record dictation and work instructions given by supervisor.
18 Transcribe shorthand or stenotype notes using a typewriter or personal computer.
Process Written Materials
19 Check completed forms or correspondence for inaccuracies in spelling, punctuation, grammar, format, neatness, or general appearance.
20 Compose correspondence requiring specific knowledge of methods, procedures, policies, or other information.
21 Produce copies of correspondence, reports, or other numerical or verbal data using a computer, copier, or printing equipment and prepare them for distribution.
22 Forward completed correspondence or business files to supervisor for final review and approval.
Prepare material for distribution using machine or by hand, copy, gather, fold, staple, or seal packets/envelopes.
Compute, Verify, and Record
24 Maintain checklists, logs, worksheets, or other records used to monitor the status of a project or business activity.
25 Perform calculations following a multi-step formula or procedure.
26 Develop forms for the recording of numerical and statistical information.
27 Verify accuracy and completeness of forms or records by comparing against original documents, items, master forms, or other standards.
28 Compute statistics, such as means, medians, percentages, proportions, etc., using a calculator.
29 Monitor expenditures against budget and/or contract specifications.
30 Determine interest, adjustments, refunds, taxes, accrual figures, required balances, etc., or balance/reconcile records by performing calculations by hand or using a calculator.

An	alyze, Interpret, and Report
31	Prepare reports, based on information at hand, following standard procedures.
32	Prepare reports requiring the investigation of various sources of information and systematic organization and presentation.
33	Evaluate information requirements for financial report preparation.
34	Maintain custody of evidence presented at meetings (including written memoranda, documents, etc.) for incorporation into transcript and records.
35	Prepare analyses or summaries of programs, reports, specific operational items, or other data.
36	Prepare displays (tables, graphs, charts, or diagrams) summarizing numerical or statistical data (e.g., financial data or operating statistics).
37	Locate and retrieve data, records, or other information needed to conduct and/or complete work activities/transactions by conducting a search or investigation.
Вос	okkeeping
38	Review accounting statements, expense reports, and standard forms for accuracy, completeness, and conformity to procedures.
39	Locate sources of errors revealed through trial balance or failure to balance to an established control figure by comparing two or more sources.
40	—— Allocate debits, credits, costs, charges, or other similar bookkeeping items of operational procedures to correct accounts or classification.
41	Post entries in financial journals, ledgers, or other financial records.
42	Reconcile out of balance journal or ledger or correct numerical figures by making necessary entries or adjustments.
43	Verify and process invoices for payment.
44	Assist in internal and external audits of fiscal and financial operations.
45	Assist individuals with account problems by reviewing account information.

46	_ Take a trial balance of accounts and locate and correct errors.
Code and	d Transcribe Data
47	 Prepare summary or data-entry/coding sheets for computer processing from information contained in other sources.
48	Allocate charges or payments to individual departments and accounts using accounting codes.
49	_ Verify accuracy of data coding and make necessary corrections.
50	_ Code materials using number or letter codes.
51	Make out various routine forms such as checks, receipts, invoices, form letter addresses, tine or cash reports, etc., according to standard operating procedure.
Data En	try
52	 Operate computer peripheral equipment (e.g., printer, forms buster, or magnetic tape units).
53	 Verify the accuracy of data entered into computer file using printout or visual screen.
54	Select appropriate recording or transcribing programs based on the format of the coded data to be entered on data-keying terminal.
55	Operate computer or data-entry terminals to enter, change, or establish information files.
56	Analyze computer or computer equipment operation in relation to conditions displayed on screens, monitors, etc.
Receive a	and Distribute Mail
57	Certify, register, insure, or complete forms associated with special mail services such as overnight courier or registered mail.
58	Arrange for the delivery of confidential documents via courier or special messenger.
59	Deliver mail, materials, or supplies to appropriate individuals.
60	Distribute mail, bulletins, memos, and reports to employees and offices.
61	Sort incoming and outgoing mail.
Reception	n Functions
62	Greet visitors and direct them to the appropriate individual.

63 ____ Answer questions and give requested directions or other information directly or by telephone. 64 _____ Verify or confirm the identity of phone callers prior to initiating 65 _____ Receive orders, requests, instructions, or information, personally or by telephone. 66 ____ Sign or initial documents to acknowledge receipt of valuables. 67 ____ Schedule use of facilities and/or equipment and assist individuals in their use. 68 _____ Serve as switchboard operator and answer telephone, relay messages, and provide routine information. 69 _____ Monitor remote TV camera screens to inspect approaching visitors to detect atypical or suspicious vehicle, activity, or events that occur in a monitored region. Communications 70 _____ Select, assemble, and arrange distribution of news articles or other materials (brochures, leaflets, etc.) of interest within the organization. 71 _____ Assist in planning, coordinating and administering sponsored activities for employees or visitors (e.g., meetings, banquets). 72 _____ Provide information to employees on the availability and terms of company benefits and services. 73 _____ Assist employees in obtaining benefits or services. 74 ____ Maintain bulletin board or other displays of employee-relevant information. 75 ____ Keep a log of all events occurring during shift and make entries to journal to inform next shift personnel. 76 _____ Perform check of communications equipment and channels to ensure that they are in working order. 77 ____ Operate a dispatch radio to communicate with mobile units and personnel with hand-held radios. Organizing and Scheduling Work 78 _____ Assign individuals to specific duties and locations and direct individuals in the performance of their assigned duties.

79		Estimate materials, labor, and time requirements for specific projects.
80		Set completion dates for forms, records, or reports.
		Inform individuals about work methods, objectives, progress, and expected changes.
82		Distribute work assignments based on workload, work priorities, and worker capabilities.
83		Develop and maintain up-to-date manuals of department/job practices and procedures to standardize the activities of subordinates.
84		Develop sequenced action plans to correct problems with equipment or work processes or procedures.
85		Identify productivity or quality deviations and determine cause by analyzing work or production records and take corrective action.
86		Coordinate multiple and/or competing activities and assignments for efficient use of time and resources.
87		Maintain a data base on a computer for financial data, inventory, personnel records, or government activity/decisions by entering new data, updates, or corrections as received.
88		Prepare a roster of individuals' daily shift assignments by unit for use in tracking individuals by activity.
89		Review information from outgoing shift personnel to determine priority of items for attention.
90		Analyze information received from coworkers to determine the operations/work requirements, priority, and specific directions for assignments.
Οp	erate c	ınd Maintain Equipment
91		Determine need for equipment maintenance by conducting scheduled inspections.
92		Arrange maintenance work for office equipment according to an established schedule or priority system.
93		Repair, adjust, clean, and otherwise service electrical and mechanical office machines.
94		Operate printing and microfilming equipment.
95		Operate packaging and mailing equipment.
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96	Prepare and distribute/assign work orders for maintenance and repair of facility, utilities, equipment, or grounds.			
Administrative Functions				
97	Notify or remind certain individuals or departments of meetings, scheduled dates, specific duties, or occurrences.			
98	Maintain an appointment book or schedule for one's supervisor.			
99	— Coordinate the scheduling of meetings, facilities (conference rooms, etc.), or events (tours, banquets, classes, etc.) with other individuals or groups.			
100	— Investigate the source of discrepancies in documentation or search for lost documents through coordination with others outside the department.			
101	Prepare expense vouchers and travel authorization and complete travel or meeting arrangements for departmental personnel.			
102	Prepare reports requiring the investigation of various sources of information and systematic organization and presentation.			
103	Draw up contracts, specifications, or other forms requiring specific knowledge of methods, procedures, policies, or other information.			

Importance Ratings: Competencies

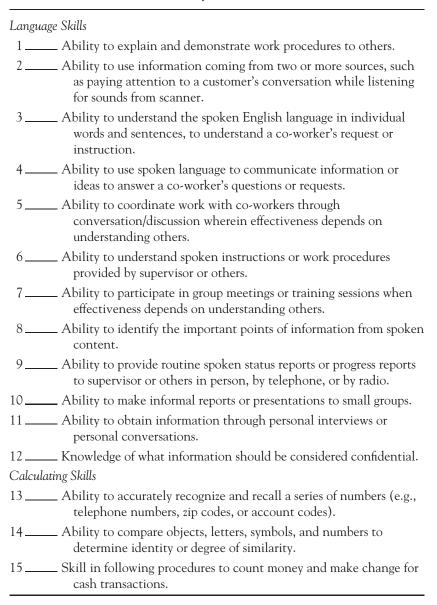
On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

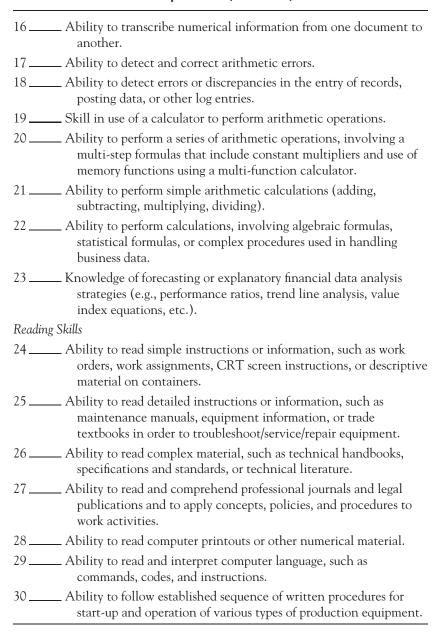
- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency *is* required, then decide how important that competency is to fully effective job performance.

Use the following scale to make your judgments:

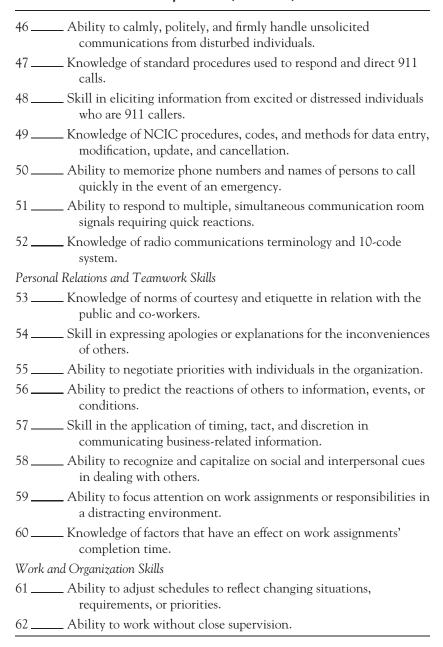
- O This rating indicates that this competency is not necessary for job performance.
- 1 This rating indicates that this competency has only minor or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- 2 This rating indicates that this competency is desirable and useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- This rating indicates that this competence is moderately important to successful job performance.
- 4 This rating indicates that this competence is very important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

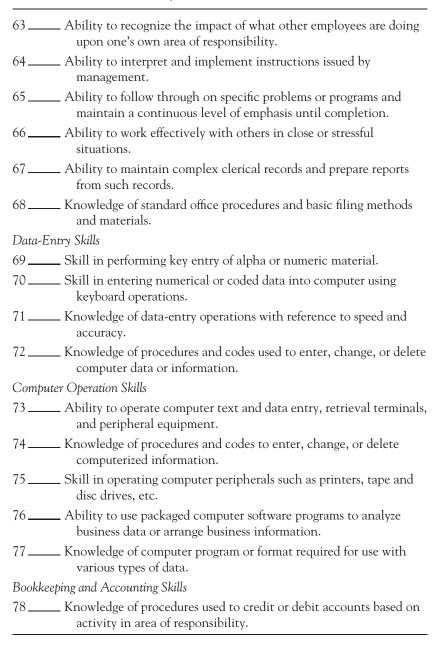
Template F.2 Clerical/Administrative Services Importance Ratings: Competencies

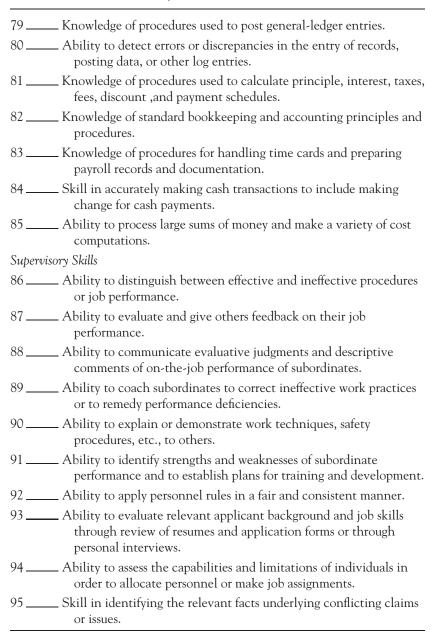


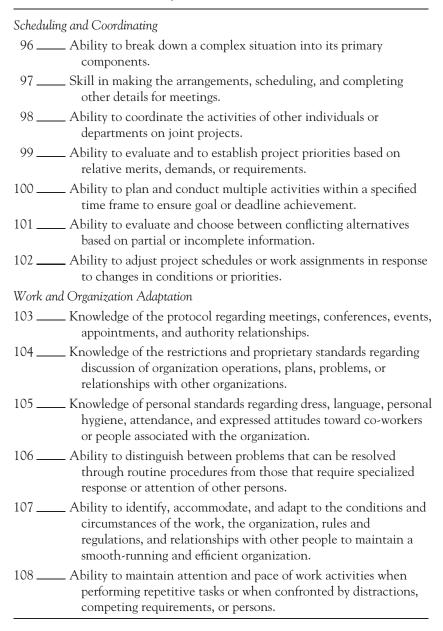


Write an	d Process Written Materials
31	Ability to enter simple information on forms or to otherwise record data according to standardized instructions, such as recording dates, codes, quantity, or number of errors.
32	Ability to prepare simple records, such as work reports, inventory data, or information for next shift.
33	Ability to prepare written records, such as equipment malfunction, performance results, or accident data.
34	 Ability to prepare detailed memoranda or reports, such as summary reports or project results.
35	Ability to combine information from multiple sources into a final report.
36	. Knowledge of rules of grammar and punctuation.
37	Ability to detect errors in grammar or punctuation or omissions through proofing letters, reports, forms, tables, or codes.
38	. Ability to spell commonly used English words and business and legal terms.
39	Skill in typing from manuscript, draft copies, voice recordings, or dictation.
40	Skill in operating word processing equipment (e.g., electric typewriter, or desk-top computer).
41	Skill in recording dictation of letters or memos using shorthand, speed writing, or stenographic machine.
42	Skill in recording the proceedings or minutes of meetings or conferences with multiple speakers using shorthand, speed writing, or stenotype machine.
Commur	sication Skills
43	. Ability to convey information in a concise fashion without loss of necessary detail.
44	Ability to organize information in reports, correspondence, etc., in a logical and meaningful manner.
45	Ability to maintain or project a positive image in face-to-face conversations as well as in telephone conversations.









Appendix G



PROFESSIONAL ADMINISTRATIVE JOB ANALYSIS TEMPLATES

1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years): (months):
5. Time with company (years): (months):

This procedure is designed to identify those job activities and competencies most important for professional administrative jobs. The information from these templates will be used to conduct a job-related selection assessment for this position.

There are two templates. Template G.1 consists of a list of activities that may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template G.2 contains a list of competencies statements. The focus of that template is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these requirement statements appear with the template.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

Importance Ratings: Work Activities

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

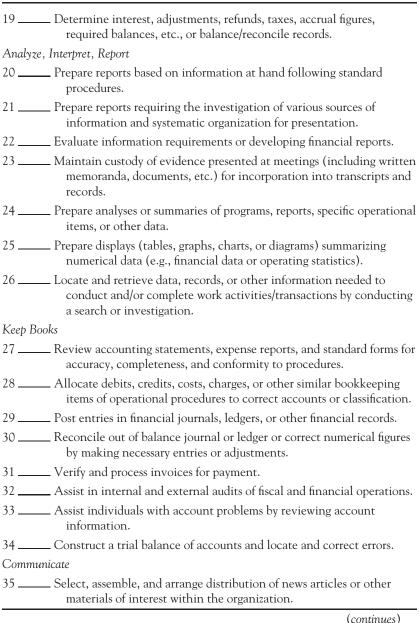
- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

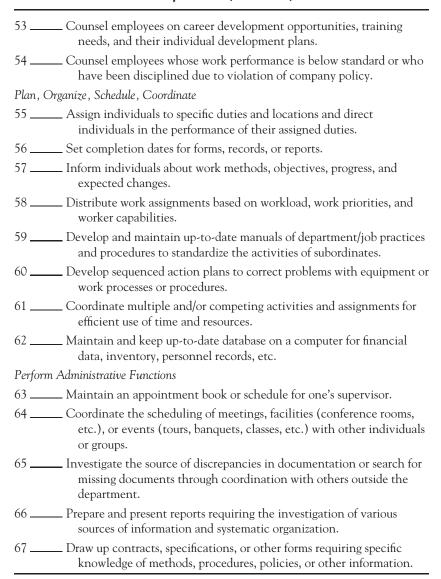
- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Template G.1 Professional Administrative Importance Ratings: **Work Activities**

Process W	ritten Materials
	Check completed forms or correspondence for inaccuracies in spelling,
1	punctuation, grammar, format, neatness, or general appearance.
2	Compose correspondence requiring specific knowledge of methods, procedures, policies, or other information.
3	Prepare tables, graphs, charts, etc., based on data from other sources.
4	Compose letters, memos, or other documents for the supervisor's signature from notes or following general instructions.
5	Prepare drafts and final copy of legal documents, contracts, letters, etc.
6	Prepare letters, memos, reports, or other documents from rough draft.
7	Forward completed correspondence or business files to supervisor for final review and approval.
8	Prepare packages of material for distribution.
File and R	etrieve Materials
9	Review, update, or revise file contents to reflect current status of subject.
10	Search indices, manuals, files, records, or other sources for desired or missing information on specific subjects.
11	Maintain records of incoming and outgoing materials through use of catalogues, computerized circulation system, or withdrawal file.
12	Retrieve records and/or information from file and forward to others.
Compute,	Verify, Record
13	Maintain checklists, logs, worksheets, or other records used to monitor the status of a project or business activity.
14	Develop forms for the recording of numerical and statistical information.
15	Take notes in meetings, conferences, or from phone calls to produce minutes, notes, or summary reports.
16	Verify accuracy and completeness of forms or records by comparing against original documents, items, master forms, or other standards.
17	Compute statistics, such as means, medians, percentages, proportions, etc.
18	Monitor expenditures against budget and/or contract specifications.



36	Assist in planning, coordinating, and administering sponsored activities for employees or visitors (e.g., meetings or banquets).
37	. Provide information to employees on the availability and terms of company benefits and services.
38	Research and write technical reports for others of comparable background and knowledge.
39	Research and write reports presenting technical information to an audience with less knowledge of the subject.
40	Represent the company to outside audiences.
41	Create and distribute a regular company newsletter for all staff.
42	Prepare formal policy statements or reports for either internal or external distribution.
Supervise	
43	Plan and coordinate the assignment or execution of duties performed by other individuals.
44	Evaluate the work performance of individuals according to established performance standards and give feedback to correct deficiencies.
45	. Intervene to resolve disagreements or interpersonal difficulties among employees.
46	Inform individuals about work methods, objectives, progress, and expected changes.
47	Distribute work assignments based on workload, work priorities, and worker capabilities.
48	Evaluate effects of employee training by observing and monitoring employee job behavior.
49	Establish and communicate performance goals and standards to subordinates to clarify job and organizational expectations and requirements.
50	Review staff assignments to ensure appropriate and equitable assignments are maintained.
51	Assign subordinates to projects based on project objectives, methods, or subject area and on the subordinates' interests, job skills, and developmental needs.
52	. Identify subordinates with personal problems that affect job performance and refer to resource agency.



Importance Ratings: Competencies

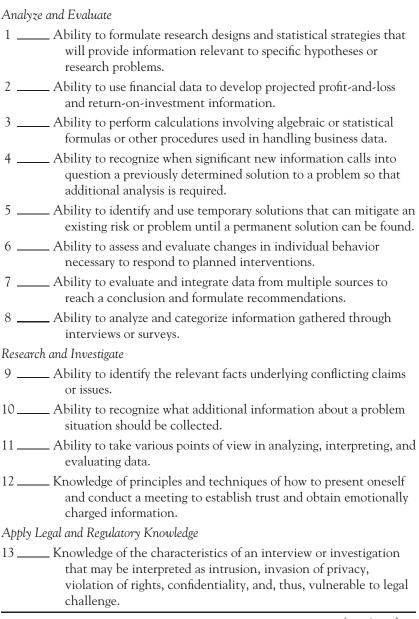
On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency *is* required, then decide how important that competency is to fully effective job performance.

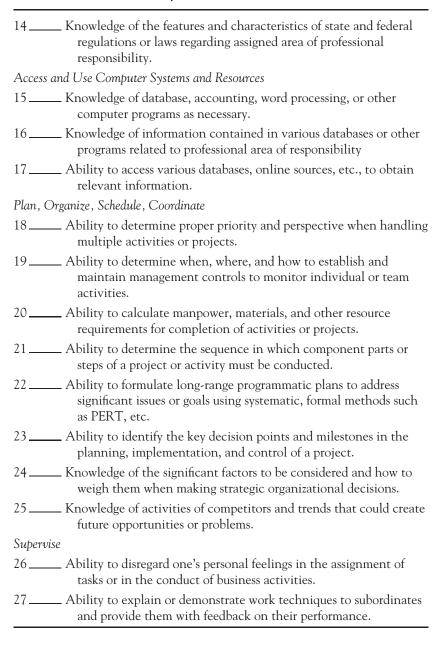
Use the following scale to make your judgments:

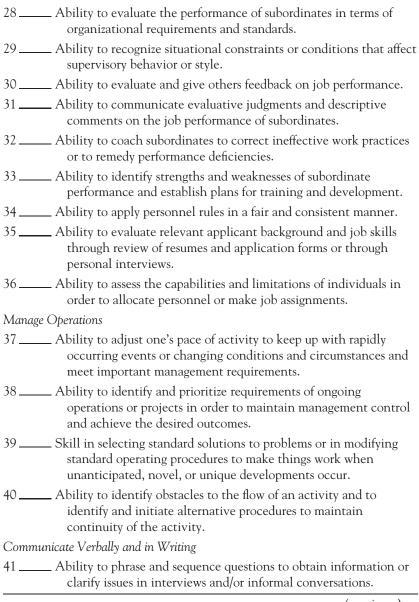
- O This rating indicates that this competency is not necessary for job performance.
- 1 This rating indicates that this competency has only minor or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- 2 This rating indicates that this competency is desirable and useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- 3 This rating indicates that this competence is moderately important to successful job performance.
- 4 This rating indicates that this competence is very important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

Template G.2 Professional Administrative Importance Ratings: Competencies



(continues)





(continues)

42	Skill in differentiating real and relevant information from false and irrelevant content.
43	Ability to design a presentation that addresses the interests of the listeners and takes into account their level of understanding of the subject.
44	Ability to prepare, present, and defend a proposal in a constructive and persuasive manner.
45	Ability to review reports for quality using standards of logic, clarity, and adequacy of recommendations and supporting arguments
46	Ability to prepare technical reports for use by others with comparable background.
47	Ability to communicate company policy or intent in contracts, letters, or other formal documents.
48	Ability to read and comprehend professional journals and legal publications and to apply concepts, policies, and procedures to work activities.
Manage I	Personal/Interpersonal Relations
49	Ability to ignore personal likes and dislikes in business dealings and focus on the desired outcomes.
50	Ability to recognize social and interpersonal cues in dealing with others and to utilize them to realize organizational goals.
51	Ability to build and maintain credibility in organizational relations with others.
52	Ability to provide criticism or objections to the views of another in a way that avoids personal accusations or acrimony.
Make Ch	oices and Solve Problems
53	Ability to recognize problems early and to take prompt action to resolve them while still small.
54	Ability to make choices or decisions affecting the security or well-being of others and/or which involve serious risks or consequences.
55	Ability to distinguish between symptoms and causes of problems.
56	Ability to recognize when and to specify what additional information is necessary to solve problems.

57 _____ Ability to specify a sequence of activities to locate or retrieve lost or misplaced files, documents, etc. 58 _____ Ability to recognize what specific additional information about a problem or situation should be collected. Adapt to Work and Organization Requirements 59 ____ Knowledge of organizational practices and norms regarding meetings, events, appointments, authority relationships, and organizational structure. 60 _____ Knowledge of the relationships, dependencies, and contingencies among organizational units, key management positions, and other positions and functions. 61 _____ Knowledge of the standards regarding discussion of company operations, plans, problems, and business and professional relations with other organizations. 62 ____ Knowledge of the standards regarding dress, language, personal hygiene, attendance, and expressed attitudes when identified with the organization.

Appendix H



SUPERVISOR/FIRST-LINE MANAGER JOB ANALYSIS TEMPLATE

1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years):(months):
5. Time with company (years): (months):

This procedure is designed to identify those job activities and competencies most important for supervisory and first-line management jobs. The information from this template will be used to conduct a job-related selection assessment for this position.

There are two templates. Template H.1 consists of a list of activities that may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template H.2 contains a list of competencies statements. The focus of that part is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these requirement statements appear following the instructions for rating the job activities.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

Importance Ratings: Work Activities

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

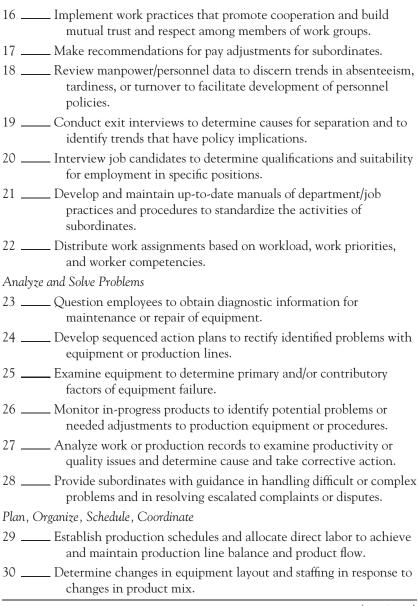
- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Template H.1 Supervisor/First-Line Manager Importance Ratings: Work Activities

Supervis	e and Manage Performance Quality
1	Review subordinates' work and provide action-oriented feedback and mentoring to improve performance and correct deficiencies.
2	Refer a subordinate whose personal problems affect job performance to EAP or other appropriate resource for assistance.
3	Conduct training programs and mentor to encourage employees to develop their technical, supervisory, or professional skills.
4	 Evaluate a subordinate's performance against established guidelines, objectives, and performance standards.
5	Lidentify employee training needs based on business activities and plans and evaluation of employee job skills.
6	Conduct and document employee disciplinary interviews.
7	 Inform subordinates about work methods, objectives, progress, and expected changes.
8	 Mentor subordinates and support their contributions and high-quality performance through words of encouragement, praise, direct assistance, etc.
9	_ Implement organizational policies and procedures and product or service standards as established by management.
10	 Discuss job performance problems with subordinates in order to identify issues and causes and to develop solutions.
11	Ensure that subordinates adhere to proper procedures and quality standards, meet deadlines, and correct errors or problems.
12	Ensure that subordinates understand and follow safety, sanitation, or other related regulations.
13	Observe work and monitor gauges, screens, or other indicators to ensure adherence to production or processing standards.
Manage	Human Resources
14	Encourage subordinates to work together to accomplish tasks.
15	 Develop training programs, personally or with HRD specialists, to introduce new technology or procedures.



(continues)

31	Adjust work schedules or project priorities to meet emergencies of changing conditions.	or
32	Coordinate multiple and/or competing activities and assignments for efficient use of time and resources.	S
33	Evaluate the production schedule in order to anticipate required changes in personnel assignments.	
34	Confer with other supervisors to coordinate operations and activities within or between departments.	
35	Consider relative costs and benefits of alternative options to choose the most appropriate one.	ose
Со	nmunicate	
36	Call and conduct staff meetings to exchange information, define objectives, establish priorities, and develop solutions for emerging problems.	
37	Obtain and/or clarify information from employees relevant to wo procedures and standards.	rk
38	Present work-related information (such as work or safety procedures, policy changes, etc.) clearly and concisely.	
39	Prepare and submit reports (e.g., problems encountered, downtin workload volume, maintenance activities, etc.) to managemen	
40	Review technical reports or manufacturer notices concerning changes in equipment, parts, or operating procedures.	
41	Confer with appropriate individuals to resolve worker problems, complaints, or grievances.	
42	Respond to customers' questions and/or complaints about produc services, or policies and procedures.	ts,
Μa	age Personal/Interpersonal Relations	
43	Maintain composure and a productive level of effort in stressful situations.	
44	Develop and maintain constructive and cooperative working relationships with others.	
45	Intervene to resolve disagreements or interpersonal difficulties among employees.	

46	Identify situations that, if unchanged, could lead to conflict among employees.
47	Investigate recurrent disputes among employees to determine causes and contributing factors.
48	Review and evaluate employee relations activities to determine their effectiveness.
49	Review local conditions or situations to predict labor relations problems.
Manage V	Work Unit
50	Use computer systems and programs as required to fulfill job responsibilities.
51	Inspect materials, equipment, products to detect malfunctions or defects.
52	Manage time effectively.
53	Read and analyze charts, work orders, production and shipping schedules, etc., to determine production requirements and to evaluate current production estimates and outputs.
54	Monitor subordinates' work activities and productivity to ensure targets are realistically set and consistently met.

Importance Ratings: Competencies

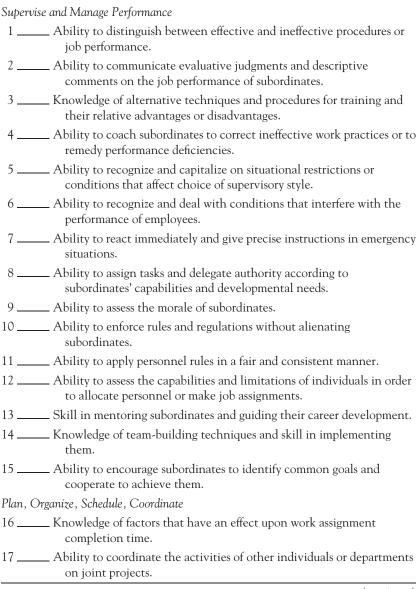
On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency is required, then decide how important that competency is to fully effective job performance.

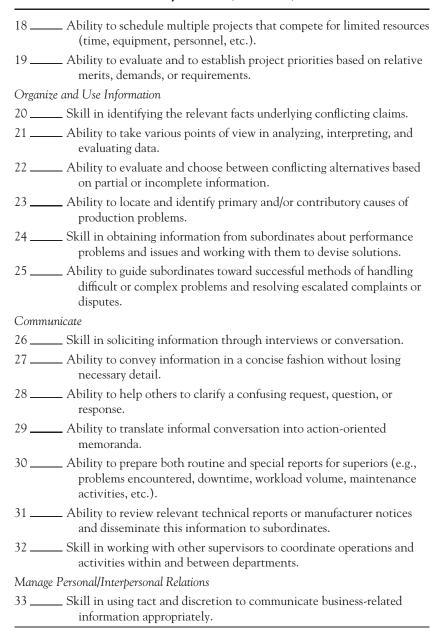
Use the following scale to make your judgments:

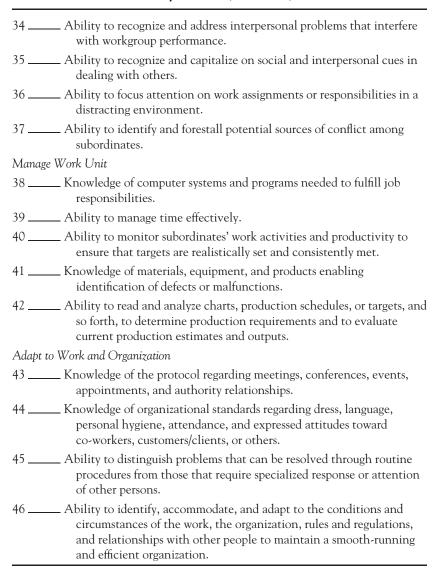
- This rating indicates that this competency is not necessary 0 for job performance.
- This rating indicates that this competency has only minor 1 or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- This rating indicates that this competency is desirable and 2 useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- This rating indicates that this competence is moderately 3 important to successful job performance.
- This rating indicates that this competence is very 4 important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

Template H.2 Supervisor/First-Line Manager Importance Ratings: Competencies



(continues)





Appendix I



SENIOR MANAGEMENT/EXECUTIVE JOB ANALYSIS TEMPLATES

1. Name of Analyst:
2. Location:
3. Analyst's Job Title:
4. Time in present position (years): (months):
5. Time with company (years): (months):
This procedure is designed to identify those job activities

This procedure is designed to identify those job activities and competencies most important for senior-level management and executive jobs. The information from this template will be used to conduct a job-related selection assessment for this position.

There are two templates. Template I.1 consists of a list of activities that may or may not be an important part of the target job. You will be asked to rate each statement as to that activity's importance for the job. On the next page there is a rating scale and a brief explanation of how to use it.

Template I.2 contains a list of competency statements. The focus of that part is to determine which competencies are necessary for doing this job successfully. Specific instructions for rating these requirement statements appear following the instructions for rating the job activities.

The key points you should keep in mind as you go through this template are

- 1. Your judgment and your ratings are to be based on the job as it is now actually performed, not as it might ideally be done.
- 2. Your judgment should be your own independent judgment. Do not ask anyone else how you should rate an item. Whether it is judged to be important or not is your decision, not anyone else's.
- 3. If you simply cannot make an honest, accurate rating, leave the item blank.

In this section, you are to rate the importance of different work activities with respect to this job. For each statement, proceed in two steps.

- 1. Consider whether a work activity is or is not part of the job. If it is not part of the job, rate the task "0."
- 2. If the activity is one that is done by an individual in the job, decide how important it is in that job. Consider the activity in terms of its importance for fully effective job performance.

Use the following scale to make your judgments:

- O This rating indicates that the work activity is never done and is not part of the job.
- 1 This rating indicates that the work activity has only minor importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
- This rating indicates that the work activity has a relatively low level of importance compared to other job activities.
- 3 This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.
- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Importance Ratings: Work Activities

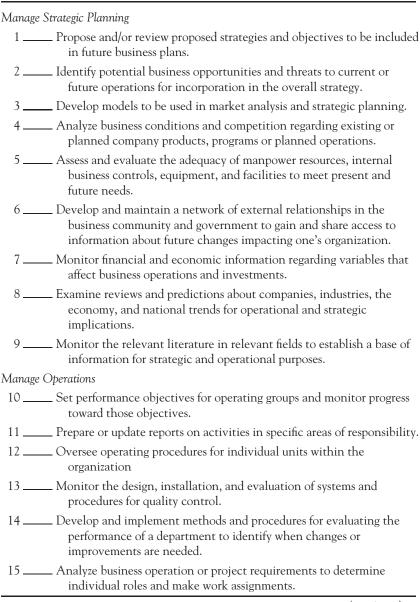
On the following pages you are to rate the importance of each job requirement. Importance should be judged in terms of how necessary this knowledge, skill, or ability is in order to do the job at a fully effective level of performance. For each requirement statement, proceed in two steps.

- 1. Consider whether or not the identified competency, that is, knowledge, skill, or ability, is necessary for effective performance of this job. If it is not required at all, you should rate the item a "0."
- 2. If the identified competency is required, then decide how important that competency is to fully effective job performance.

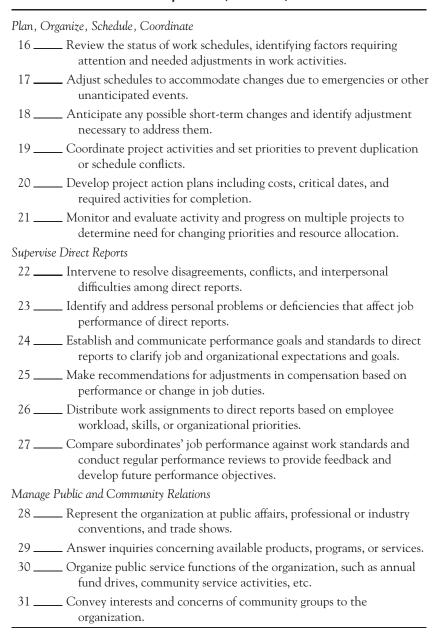
Use the following scale to make your judgments:

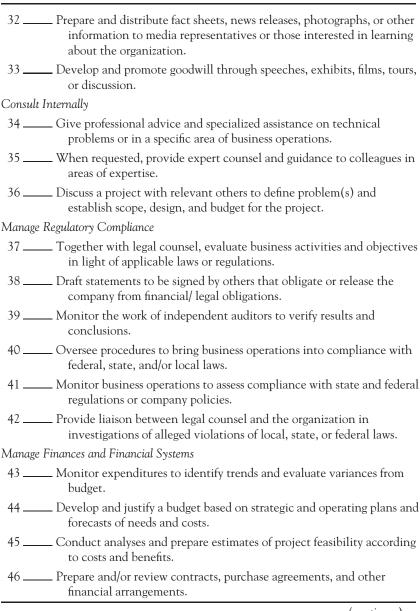
- This rating indicates that this competency is not necessary 0 for job performance.
- This rating indicates that this competency has only minor 1 or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- This rating indicates that this competency is desirable and 2 useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- This rating indicates that this competence is moderately 3 important to successful job performance.
- This rating indicates that this competence is very 4 important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

Template I.1 Senior Management/Executive Importance Ratings: Work Activities



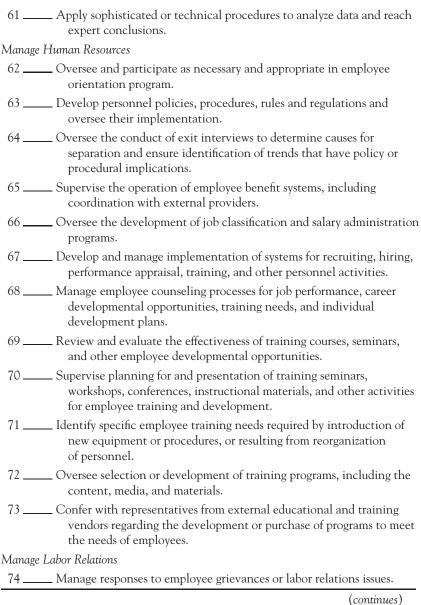
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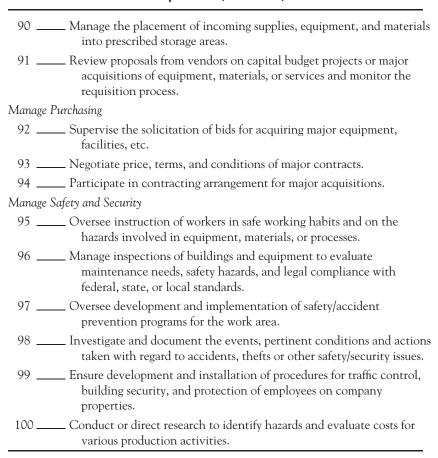


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47 _____ Develop and implement modifications in organizational procedures or work methods to correct or contain budget variances. 48 _____ Develop long-range budget projections and recommendations for financial management based on business plans and management directives. Manage Information Systems 49 ____ Manage the identification of the type and the source of information and formats required for reports for comprehensive, accurate analysis and reporting of operations data. 49 _____ Identify weaknesses, problems, or irregularities in collection or analysis of data for various aspects of business operations. 50 _____ Review interpretation of data to identify patterns, trends, and irregularities in company operations. 51 ____ Oversee the development of data processing systems to support company, divisional, or department functions. 52 ____ Manage existing computer systems and programs for evidence of problems. 53 _____ Provide input concerning purchase of new computer equipment and/or software to improve data processing capabilities. Manage Marketing 54 _____ Review analyses of customer requirements and market conditions to develop marketing strategies and plans. 55 _____ Supervise preparation of sales and marketing proposals. 56 _____ Oversee the design of advertising and promotional materials in accordance with marketing strategy and goals 57 _____ Review market penetration forecasts based on historical data, sales strategy, and competitor activity in each sales territory. 58 ____ Coordinate the development of programs to establish or increase branding, improve company or product image, product acceptance, etc. 59 — Oversee development of product marketing strategies including features to emphasize, benefits, price points, product mix, etc., based on market research and strategic goals. 60 _____ Review sales territories and market target areas to make any necessary adjustments.

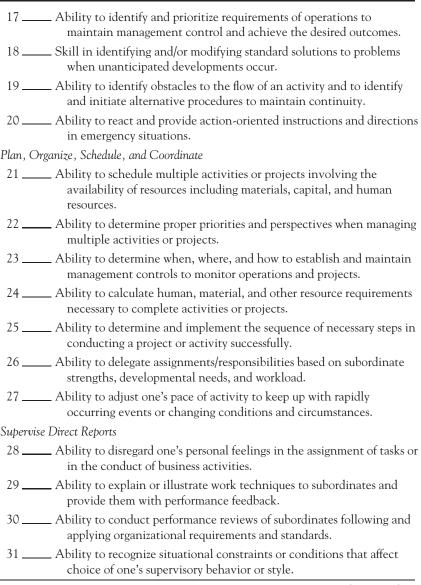


75	 Review personnel staffing policies and procedures to assess and evaluate compliance with federal, state, and local regulations.
76	 Oversee management representatives who meet to discuss and resolve employee issues, grievances, work assignments, working conditions, etc.
77	 Establish relationship with employee representatives (unions, professional associations, etc.).
78	_ Monitor organizational grievance activity to assess actions and disposition of incidents and ensure compliance with organizational policies.
79	 Represent management in management/labor relations activities and/or negotiations.
Manage	Facilities
80	Monitor inspections of installations, buildings, equipment, or facilities to determine their operational status.
81	Manage the maintenance, service, and repair of equipment and facilities.
82	 Recommend plant sites, scope, concept, and other characteristics of potential properties based on market analyses and business projections.
83	Monitor the design of construction plans to ensure the feasibility and practicality of projects.
84	 Oversee the handling of requests for maintenance or repair services to determine type, nature, and priority of requests.
85	Manage meetings with outside vendors, contractors, or consultants to discuss equipment needs, specifications, and capabilities.
Manage	Materials
86	 Oversee the reviewing of inventory, accounting, and/or shipping reports or records for possible discrepancies.
87	Monitor distribution system of supplies and equipment to determine whether materials are delivered when required.
88	Monitor requisitions and inventory levels to evaluate purchasing and supply practices.
89	Manage the inventory supplies/goods to determine operating costs and control stock shrinkage.



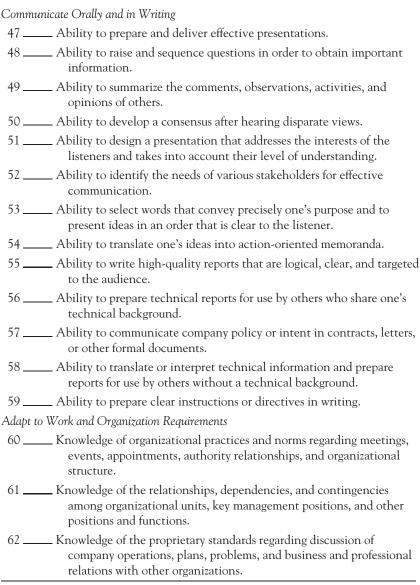
Template I.2 Senior Management/Executive Importance Ratings: Competencies

Manage	Strategic Planning
1	_ Ability to lead a strategic planning effort to plan an organization's future courses of action.
2	_ Knowledge of how to develop and implement a strategic plan.
3	 Ability to identify the important threats and opportunities confronting the organization.
4	— Ability to identify the key decision points and milestones in the implementation of the organization's strategic plan.
5	— Knowledge of the significant factors to be considered and how to weigh them when making strategic organizational decisions.
6	— Knowledge of pending or potential changes in external factors that may impact the fulfillment of the organization's mission.
7	_ Knowledge of competitors' actions and plans that could impact the organization.
8	Ability to identify the probable impact of current and pending federal, state, or local guidelines, regulations, and programs that may impact the organization's strategic plan.
Solve Pr	oblems
9	Ability to recognize when and to specify what additional information is necessary to solve problems.
10	_ Ability to evaluate data from multiple sources and integrate these data into recommendations.
11	— Ability to adapt data gathering approaches for solving different types of problems.
12	— Ability to recognize when significant new information questions an accepted solution to a problem so that additional analysis is required.
13	Ability to determine the point at which a deviation from the expected is significant and indicates the existence of a problem.
14	 Ability to determine the required characteristics of an effective solution to a given problem.
15	— Ability to anticipate potential problems and act promptly to solve them early, before they become more serious.
16	Ability to identify alternate solutions to scarcity in human or material resources that are necessary to sustain operations



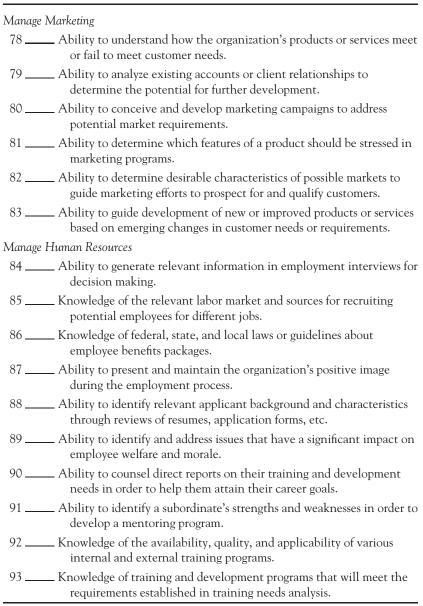
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32 ____ Ability to persuade others to perform and complete activities not within own order of priorities. 33 _____ Ability to recognize situations or conditions subordinates would find rewarding. Manage Public and Community Relations 34 _____ Ability to establish and maintain cordial relationships with media representatives. 35 _____ Skill in adapting presentations to audience requirements and the specific purposes of the presentation. 36 _____ Ability to identify and relate to key members of the community who represent or can influence different key stakeholders. 37 _____ Ability to develop and maintain sources of information in the community concerning the image of the organization. 38 _____ Skills in planning and conducting special events and employee activities. 39 _____ Skill in identifying topics, issues, or concerns with potential for conflict between the organization and various community or advocacy groups. Manage Personal/Interpersonal Relations 40 _____ Ability to ignore personal likes and dislikes in dealing with others and focus on the desired outcome. 41 _____ Sensitivity to social and interpersonal cues in dealing with others and ability to utilize them to achieve organizational goals. 42 ____ Ability to build and maintain credibility in professional relations with customers, vendors, and others. 43 ____ Ability to absorb criticism and negative feedback while maintaining a balanced perspective on issues. 44 ____ Ability to explain policy and procedures to dissatisfied customers, employees, and other stakeholders without compromising organizational policy. 45 ____ Ability to provide feedback or objections to the views of others without personal accusations or acrimony. 46 ____ Ability to negotiate priorities and "make deals" with individuals in various parts of the organization in order to gain their cooperation and support for a project or activity.



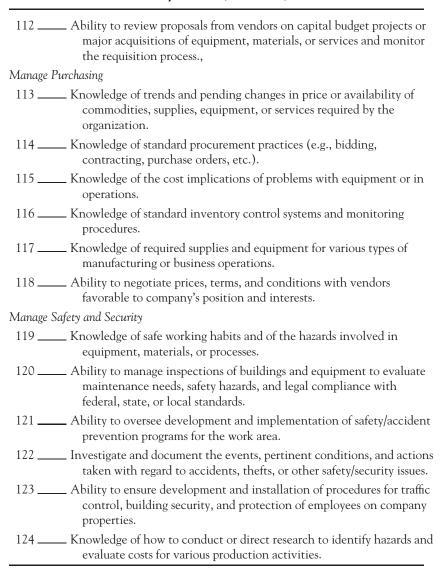
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63 ____ Knowledge of the norms and practices regarding verbal expression and behavior in professional or social settings in which the individual is identified with the organization. 64 ____ Knowledge of the formal and informal standards regarding dress, language, personal hygiene, attendance, and expressed attitudes when identified with the organization. 65 _____ Ability to differentiate settings, conditions, or circumstances that determine when the individual is identified with the organization or is functioning as a private citizen. Manage Finances and Financial Systems 66 _____ Ability to translate broad goals into required activities and identify cost estimates for labor, services, supplies, and equipment in order to develop a budget. 67 ____ Knowledge of interim reporting systems (e.g., monthly or year-to-date) to monitor compliance to budget. 68 _____ Knowledge of how accounting/financial information contributes to management understanding and decisions. 69 _____ Ability to analyze financial statements to locate the reasons for variances in specific operations. 70 ____ Knowledge of indicators used to assess the organization's operational effectiveness and financial condition. 71 _____ Ability to gather information obtained from economic indicators, trends, and business cycles and apply such information in forecasting. Manage Information Systems 72 _____ Ability to identify the type and the source of information and formats required for reports. 73 _____ Ability to identify weaknesses, problems, or irregularities in collection or analysis of data for various business operations. 74 _____ Ability to review interpretation of data to identify patterns, trends, and irregularities in company operations. 75 ____ Knowledge to oversee the development of data processing systems to support company, divisional, or department functions. 76 _____ Ability to manage existing computer systems and programs for evidence of problems. 77 ____ Knowledge to provide input concerning purchase of new computer equipment and/or software to improve data processing capabilities.



(continues)

94	Ability to review and interpret evaluations of training and development effectiveness.
Manage La	abor Relations
95	Ability to identify issues that have a significant impact on existing or prospective employee contractual issues.
96	_ Knowledge of procedures for handling and resolving grievances.
97	 Knowledge of federal, state, and local laws or regulations regarding employment practices and personnel actions.
98	Knowledge of labor law and of pending legislation or litigation having implications for the organization.
99	Ability to identify key issues for arbitration or contract negotiations.
100	 Ability to identify with management's point of view and to represent it in disagreements and in adversarial relationships.
Manage Fa	acilities
101	Ability to supervise the design of appropriate floor plans of physical plants for purposes of fire control, safety, and security.
102	_ Knowledge of standard security and loss-prevention programs.
103	 Knowledge of the space and facilities requirements of different departments and operations.
104	 Knowledge of maintenance requirements of different types of physical facilities.
105	 Knowledge of routine and preventive maintenance required to maintain the operational status of operating equipment.
106	_ Knowledge of standard safety and fire prevention programs.
Manage M	laterials
107	 Knowledge of how to review inventory, accounting, and/or shipping reports or records for possible discrepancies.
108	Ability to monitor distribution system of supplies and equipment to determine whether materials are delivered when required.
109	Skill in monitoring requisitions and inventory levels to evaluate purchasing and supply practices.
110	 Ability to manage the inventory supplies/goods to determine operating costs and control stock shrinkage.
111	 Ability to manage the placement of incoming supplies, equipment, and materials into prescribed storage areas.



Appendix J



SUMMARY OF IMPORTANCE OF WORK ACTIVITIES AND COMPETENCIES

Target Job Title:

- arget	
Locati	on: Date:
of the identif job. In	is form provides a convenient way to summarize the ratings importance of the various work activities that have been fied by the selected raters as important on this particular rating the importance of each work activity, the raters he following rating scale:
Rating	Meaning of the Rating
0	This rating indicates that the work activity is never done and is not part of the job.
1	This rating indicates that the work activity has only mino importance relative to other activities performed by individuals in this job. Considering all activities, it would have the lowest priority or importance.
2	This rating indicates that the work activity has a relatively low level of importance compared to other job activities
3	This rating indicates that the work activity is moderately important for fully effective job performance relative to other activities, and has about average priority among all activities performed.

- 4 This rating indicates that the work activity is very important to fully effective job performance. It has a higher degree of importance or priority than most other activities.
- This rating indicates that the work activity is one of the few most essential activities performed. It is one of the most critical aspects of the job.

Ordinarily we are concerned only with importance ratings of "3" or higher. Any rating lower than "3" is unlikely to be an important descriptor of the job and can be safely ignored. Therefore we have provided summary forms for only the top three ratings—3, 4, and 5.

Each of the forms in this appendix contains a column for each item in the template, plus columns for recording each rater's assessment of that item. For example, using the summary form for Work Activities rated "5," the person completing the summary should simply go through the template completed by the first rater and place a check mark in the box for every item that received a "5" rating—one that indicated that this Work Activity was essential to performing this job. The summarizer should then do the same for those items rated "4" and then "3," using the appropriate summary form. The summary forms provided list the maximum number of items that can be rated in any of the standard templates. If any additional items have been added or more than eight raters are involved, additional copies of these forms can be duplicated.

After the Work Activities ratings are entered on the three summary forms, a similar process should be used to enter the competency ratings, using the provided summary forms. These ratings of both the work activities and job competencies can then be used in the writing of the job description.

Essential Work Activities Rated 5

Item	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6	Rater 7	Rater 8
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Item	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6	Rater 7	Rater 8
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Very Important Work Activities Rated 4

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Item	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6	Rater 7	Rater 8
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Moderately Important Work Activities Rated 3

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Item	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6	Rater 7	Rater 8
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Summary of Competencies Importance Ratings

Target Job Title:	
Location:	Date:

This form provides a convenient way to summarize the ratings of the importance of the various competencies that have been identified by the selected raters as important on this particular job. In rating the importance of each work activity, the raters used the following rating scale:

Rating Meaning of the Rating

- O This rating indicates that this competency is not necessary for job performance.
- This rating indicates that this competency has only minor or incidental importance for effective job performance. It is not essential to doing the job, but may occasionally be useful for doing some minor part of the job.
- This rating indicates that this competency is desirable and useful for doing some minor part of the job but is not important to successfully meeting the major demands of the job.
- This rating indicates that this competence is moderately important to successful job performance.
- This rating indicates that this competence is very important to successful job performance.
 - This rating indicates that this competence is critically important for successful job performance.

Ordinarily we are concerned only with importance ratings of "3" or higher. Any rating lower than 3 is unlikely to be an important competence for success on this job and can be safely

ignored. Therefore we have provided summary forms for only the top three ratings—3, 4, and 5.

Each of these forms contains a column for each item in the template plus columns for recording each rater's assessment of that item. For example, using the summary form for competencies rated 5, the person completing the summary should simply go through the template completed by the first rater, and place a check mark in the box for every item that received a 5 rating—one that indicated that this competence was essential to performing this job. The summarizer should then do the same for those items rated 4 and then 3, using the appropriate summary form. The summary forms provided list the maximum number of items that can be rated in any of the standard templates. If any additional items have been added or more than eight raters are involved, additional copies of these forms can be duplicated.

Essential Competencies Rated 5

Item	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6	Rater 7	Rater 8
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Essential Competencies Rated 5 (Continued)

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Essential Competencies Rated 5 (Continued)

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Essential Competencies Rated 5 (Continued)

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Essential Competencies Rated 5 (Continued)

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Very Important Competencies Rated 4

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Moderately Important Competencies Rated 3

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Appendix K



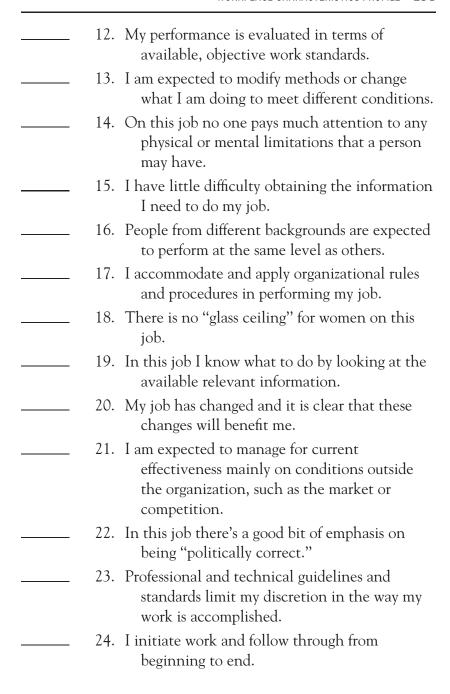
WORKPLACE CHARACTERISTICS PROFILE

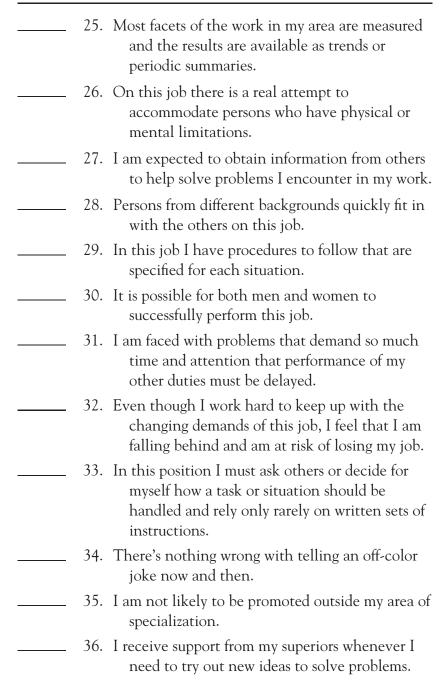
This profile has been designed to identify the priorities and the emphases that management places on doing work in this organization. The Workplace Characteristics Profile is intended for employees at all levels in the organization as a means for describing their views on how work is expected to be performed. As such, there are no right or wrong answers. Please follow the instructions for responding and be sure not to skip any of the questions.

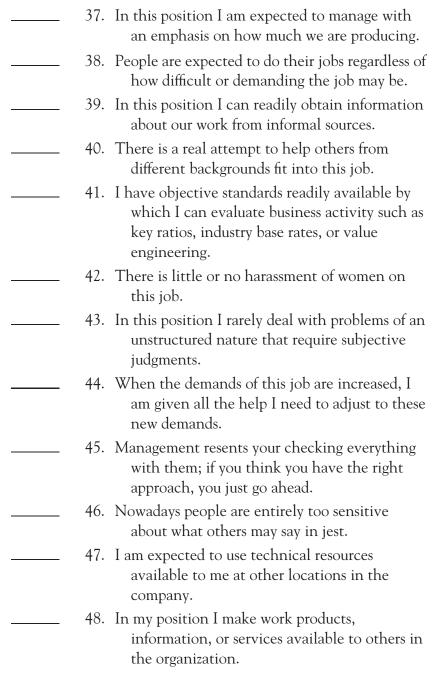
In this questionnaire you are asked to consider the following statements that may describe the conditions or characteristics of the setting in which you work. You may know or learn these things in various ways, such as through direct communication, experience on the job, observation, or even lack of response to something you do on the job.

Use the following code to indicate the emphasis or priority of each statement or the extent to which the condition exists or describes the work setting. Please indicate your response to each statement and record your answers in the space provided.

Never emphasized or is not a priority in this work setting. 0 1 Occasionally emphasized or is a priority in this work setting. 2 Sometimes emphasized or is a priority in this work setting. Quite often emphasized or is a priority in this work setting. 3 Frequently emphasized or is a priority in this work setting. 4 5 Always emphasized or is a priority in this work setting This job requires giving attention to many different problems or tasks each day. Work assignments on this job are made on the basis of a person's skills and abilities It doesn't take long before I find out how well or 3. poorly I've done something on my job. In this job persons from different backgrounds 4. can readily fit in. Written statements of procedures and policies are readily available to me in my job. In this job the gender of workers makes little or no difference. In this job I am expected to perform the same 7. tasks in the same way. It is difficult for me and others to keep up with 8. the changes in this job. 9. I am expected to maintain efficiency of operations while accommodating changing conditions. 10. It's inappropriate to make jokes at others' expense. 11. I am expected to send proposed actions and recommend decisions to management for approval.







Scoring for the Workplace Characteristics Profile

To score the WCP, transfer the ratings to the table below and compute a total score for each scale.

					Totals
1	13	25	37	49	
2	14	26	38	50	
3	15	27	39	51	
4	16	28	40	52	
5	17	29	41	53	
6	18	30	42	54	
7	19	31	43	55	
8	20	32	44	56	
9	21	33	45	57	
10	22	34	46	58	
11	23	35	47	59	
12	24	36	48	60	

Each of the Totals should then be entered in the graph below to provide a pictorial representation of the data.

Interpreting the Workplace Characteristics Profile Managing Work Efficiently

Emphasis is on the efficient management of work in an increasingly dynamic and complex environment. Effectiveness of work performed is evidenced by the quality and quantity of output, and individuals are expected to adapt and orchestrate their activities on a relatively continuous basis in order to maintain efficiency. High scores on this factor indicate a strong focus on efficiency throughout the workplace.

Accommodating to Persons with Disabilities

Emphasis is on accommodating persons with disabilities. There is a focus on assisting individuals to overcome limitations and on facilitating individuals' efforts to overcome workplace obstacles. High scores indicate a focus on what individuals can do, how they can do it, and the adaptations and accommodations required by others for effective workplace functioning.

Communicating with Others

Emphasis is on communicating with others and seeking jobrelated information to increase both efficiency and effectiveness. Such information may come from a variety of sources—the work or work products, formal or informal contact—and is generally easily accessible. High scores indicate that individuals are expected to coordinate and communicate with others in order to obtain information for improving the quality and quantity of output.

Accommodating to Persons from Different Backgrounds

The emphasis is on adapting to people who do not come from the mainstream, but rather from the evolving heterogeneity of the workplace. Such persons come from different cultures and are different in their appearance, dress, attitudes, speech, and so on, and they often need acceptance and support to be successful in the workplace. High scores on this factor indicate a commitment to providing such acceptance and support.

Standardization of Work Roles and Procedures

Emphasis is on standardization of work roles and procedures. It exemplifies the classical bureaucratic characteristic of role standardization in which individuals know what they should do and know what is expected of them, and thus produce a

continuity of activities. Individuals can predict accurately what is going to happen and how they are expected to react. High scores on this factor suggest a commitment to a bureaucratic approach to management.

Promoting Gender Equality

Emphasis is on providing equal treatment of men and women in the workplace—in job assignments, promotional opportunities, access to training, equality in pay and benefits, and all other important aspects of work. High scores on this factor indicate that there is clear support by management for a zero-tolerance policy of discrimination on the basis of gender.

Standardizing Tasks and Performance

Emphasis is on standardizing tasks and standardized performance of these job tasks. High scores on this factor indicate that tasks must be performed in a specified manner and that standardized approaches are required. High scores indicate that these are significant characteristics of the workplace and the individual has little discretion about managing his or her performance.

Managing Change

Emphasis is on providing support for employees in understanding the need for change, in coping with change, and in embarking on the many transitions required by changing conditions in the workplace. High scores indicate a generalized understanding that the environment is in a state of constant flux and that everyone needs to be prepared to adapt to these changes.

Managing Work for Effectiveness

Emphasis is on responding effectively to external forces. This approach is characterized by a focus on responding promptly

to market changes, including customer wants and needs, other market shifts, competition, changing technology, laws and regulations. High scores on this scale suggest that persons are empowered to act without precedent and without guidance from others.

Controlling Harassment

Emphasis is on active discouragement of workplace harassment, intentional or unintentional, harassment based on race, age, gender, sexual orientation, physical limitation, or religion. There is clear support by management of a zero-tolerance policy against any form of workplace harassment.

Promoting Specialization

Emphasis is on developing and using a specialized skill that is regularly used on the job. This promotion of specialization precludes members of a work group from being cross-trained or alternating task assignments. High scores indicate that this bureaucratic approach prevents taking independent action to solve problems.

Promoting Independence of Action

Emphasis is on exercising independence of action. Individuals are expected to perform relatively independently and are held accountable through meeting output expectations and maintaining a high level of expertise. High scores indicate that individuals are encouraged to exercise initiative and take risks.

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In addition to its extensive book-publishing program, Pfeiffer offers content in an array of formats, from fieldbooks for the practitioner to complete, ready-to-use training packages that support group learning.

FIELDBOOK Designed to provide information and guidance to practitioners in the midst of action. Most fieldbooks are companions to another, sometimes earlier, work, from which its ideas are derived; the fieldbook makes practical what was theoretical in the original text. Fieldbooks can certainly be read from cover to cover. More likely, though, you'll find yourself bouncing around following a particular theme, or dipping in as the mood, and the situation, dictate.

HANDBOOK A contributed volume of work on a single topic, comprising an eclectic mix of ideas, case studies, and best practices sourced by practitioners and experts in the field.

An editor or team of editors usually is appointed to seek out contributors and to evaluate content for relevance to the topic. Think of a handbook not as a ready-to-eat meal, but as a cookbook of ingredients that enables you to create the most fitting experience for the occasion.

RESOURCE Materials designed to support group learning. They come in many forms: a complete, ready-to-use exercise (such as a game); a comprehensive resource on one topic (such as conflict management) containing a variety of methods and approaches; or a collection of like-minded activities (such as icebreakers) on multiple subjects and situations.

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METHODOLOGIES

CASE STUDY A presentation, in narrative form, of an actual event that has occurred inside an organization. Case studies are not prescriptive, nor are they used to prove a point; they are designed to develop critical analysis and decision-making skills. A case study has a specific time frame, specifies a sequence of events, is narrative in structure, and contains a plot structure—an issue (what should be/have been done?). Use case studies when the goal is to enable participants to apply previously learned theories to the circumstances in the case, decide what is pertinent, identify the real issues, decide what should have been done, and develop a plan of action.

ENERGIZER A short activity that develops readiness for the next session or learning event. Energizers are most commonly used after a break or lunch to

stimulate or refocus the group. Many involve some form of physical activity, so they are a useful way to counter post-lunch lethargy. Other uses include transitioning from one topic to another, where "mental" distancing is important.

EXPERIENTIAL LEARNING ACTIVITY (ELA) A facilitator-led intervention that moves participants through the learning cycle from experience to application (also known as a Structured Experience). ELAs are carefully thought-out designs in which there is a definite learning purpose and intended outcome. Each step—everything that participants do during the activity—facilitates the accomplishment of the stated goal. Each ELA includes complete instructions for facilitating the intervention and a clear statement of goals, suggested group size and timing, materials required, an explanation of the process, and, where appropriate, possible variations to the activity. (For more detail on Experiential Learning Activities, see the Introduction to the *Reference Guide to Handbooks and Annuals*, 1999 edition, Pfeiffer, San Francisco.)

GAME A group activity that has the purpose of fostering team spirit and togetherness in addition to the achievement of a pre-stated goal. Usually contrived—undertaking a desert expedition, for example—this type of learning method offers an engaging means for participants to demonstrate and practice business and interpersonal skills. Games are effective for team building and personal development mainly because the goal is subordinate to the process—the means through which participants reach decisions, collaborate, communicate, and generate trust and understanding. Games often engage teams in "friendly" competition.

ICEBREAKER A (usually) short activity designed to help participants overcome initial anxiety in a training session and/or to acquaint the participants with one another. An icebreaker can be a fun activity or can be tied to specific topics or training goals. While a useful tool in itself, the icebreaker comes into its own in situations where tension or resistance exists within a group.

INSTRUMENT A device used to assess, appraise, evaluate, describe, classify, and summarize various aspects of human behavior. The term used to describe an instrument depends primarily on its format and purpose. These terms include survey, questionnaire, inventory, diagnostic, survey, and poll. Some uses of instruments include providing instrumental feedback to group

members, studying here-and-now processes or functioning within a group, manipulating group composition, and evaluating outcomes of training and other interventions.

Instruments are popular in the training and HR field because, in general, more growth can occur if an individual is provided with a method for focusing specifically on his or her own behavior. Instruments also are used to obtain information that will serve as a basis for change and to assist in workforce planning efforts.

Paper-and-pencil tests still dominate the instrument landscape with a typical package comprising a facilitator's guide, which offers advice on administering the instrument and interpreting the collected data, and an initial set of instruments. Additional instruments are available separately. Pfeiffer, though, is investing heavily in e-instruments. Electronic instrumentation provides effortless distribution and, for larger groups particularly, offers advantages over paper-and-pencil tests in the time it takes to analyze data and provide feedback.

LECTURETTE A short talk that provides an explanation of a principle, model, or process that is pertinent to the participants' current learning needs. A lecturette is intended to establish a common language bond between the trainer and the participants by providing a mutual frame of reference. Use a lecturette as an introduction to a group activity or event, as an interjection during an event, or as a handout.

MODEL A graphic depiction of a system or process and the relationship among its elements. Models provide a frame of reference and something more tangible, and more easily remembered, than a verbal explanation. They also give participants something to "go on," enabling them to track their own progress as they experience the dynamics, processes, and relationships being depicted in the model.

ROLE PLAY A technique in which people assume a role in a situation/ scenario: a customer service rep in an angry-customer exchange, for example. The way in which the role is approached is then discussed and feedback is offered. The role play is often repeated using a different approach and/or incorporating changes made based on feedback received. In other words, role playing is a spontaneous interaction involving realistic behavior under artificial (and safe) conditions.

SIMULATION A methodology for understanding the interrelationships among components of a system or process. Simulations differ from games in that they test or use a model that depicts or mirrors some aspect of reality in form, if not necessarily in content. Learning occurs by studying the effects of change on one or more factors of the model. Simulations are commonly used to test hypotheses about what happens in a system—often referred to as "what if?" analysis—or to examine best-case/worst-case scenarios.

THEORY A presentation of an idea from a conjectural perspective. Theories are useful because they encourage us to examine behavior and phenomena through a different lens.

TOPICS

The twin goals of providing effective and practical solutions for workforce training and organization development and meeting the educational needs of training and human resource professionals shape Pfeiffer's publishing program. Core topics include the following:

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