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JAPANESE MANAGEMENT METHODS

SEE *Management/Leadership Styles*

JOB ANALYSIS AND DESIGN

Job analysis is the term used to describe the process of analyzing a job or occupation into its various components, that is, organizational structure, occupational role, knowledge of occupation, and finally, the process of training and evaluation. According to the U.S. Office of Personnel Management, job analysis provides a method to understand a job by examining the tasks performed in a job, the competencies required to perform those tasks, and the connection between the tasks and competencies (U.S. Office of Personnel Management, 2014).

The process results in a relevant, current, and specific database of job-related information that can be used in a variety of ways. Some of the uses are to develop conventional, individualized, computer-based and/or critical incident education and training programs and supporting materials; to create and classify job titles; to write job descriptions; to prepare organizational charts; to conduct time and motion studies; to determine quality-assurance standards; to select employees for the best match for a specific position; to provide a source of legal defensibility of selection and assessment procedures; and to write both knowledge- and performance-related employee evaluation measures (see Figure 1).

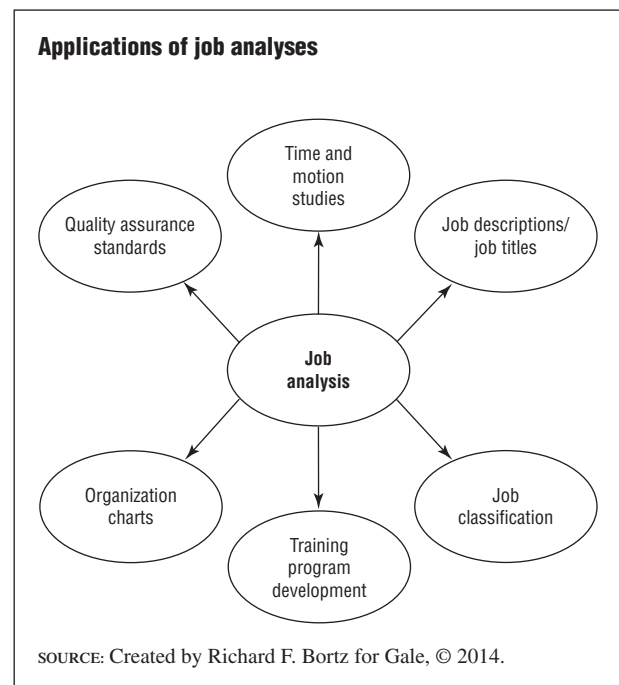


Figure 1

Job analyses are typically conducted by human resources professionals or industrial and organizational psychologists. Also, job analyses are basic to the preparation of such government sources as the Occupational Information Network (O*Net), Standard Industrial Classification (SIC), Standard Occupational Classification (SOC), *Occupational Outlook Handbook*, and other informational resources describing positions and their roles in an organization.

TERMINOLOGY

Two terms often used interchangeably with *job analysis* are *occupational analysis* and *task analysis*. In the literature, job and occupational analysis most often are viewed as the same. The process focuses on the analysis of a job into its occupational structure, work activities, and informational content. Later, the data provided by the analysis guide the organization and development of the occupational training program.

Task analysis is an integral part of the job analysis process. More specifically, task analysis addresses the process of analyzing a particular task into its various elements, that is, performance steps; performance step details; technical information topics; career and occupational guidance information topics; standards of performance; frequency, importance, and complexity; and tools, equipment, materials, supplies, and technical references. The information resulting from the task analysis provides a basis for developing the knowledge- and performance-based learning activities of the training program.

APPROACHES TO JOB ANALYSIS

Many authors and organizations have detailed the process of conducting job analyses, often in different organizational and procedural methods. Nonetheless, each analyzes a job or occupation with the intent of identifying its components and incorporating the findings into the development of related “products,” that is, training programs and materials, job descriptions, job classifications, and so forth.

There are many approaches to job analysis described in the literature (Sanchez & Levine, 2012). The job analysis process can be described as an inductive or deductive process depending on the approach (Campion et al., 2011). Job analysis has been traditionally described in the literature as an inductive process, which starts by examining the knowledge, skills, abilities and other characteristics such as personality measures and experience level. The literature has also described the increased use of competency models to start with a more deductive process, which examines outcomes that then back to the specific skills of a role. This approach to job analysis may complement more traditional job analysis techniques. In providing support for legal defensibility of human resource systems, which can be a concern among larger organizations, competency models may provide strong ties to organizational structures and provide more comprehensive relevance of a specific job to the organization (Campion et al., 2011).

Four questions seem to be basic to the majority of the authors. These questions address the issues of organization, occupational structure and role, knowledge of occupation, and training and evaluation:

1. What is the structure of the organization?
2. What is the structure of the occupation?

3. What does the worker do?
4. What does the worker need to know?

ORGANIZATIONAL STRUCTURE

The first question concerns the structure or framework of the occupation being analyzed (Bortz, 1981). If the data derived from the job analysis are used in a situation in which organizational structure is important to the product being developed, then the structure of the occupation can serve as a basis from which the organizational structure of the product is developed. For example, the hierarchical order of occupational titles in a functionally related family of occupations can serve as a basis for ordering and naming the units and courses of the training program resulting from the job analysis.

Organization charts visually depict the line/staff relationships and responsibilities of departments/units and individuals working in an organization. The information gleaned from a job description, together with that found in the accompanying job classification, serves as the basis for determining the final configuration and content of a completed organization chart.

OCCUPATIONAL STRUCTURE AND ROLE

The second and third questions address the activities of the worker in terms of tasks, performance steps, and how the role is structured. Once identified, the tasks, or completed units of work, serve in various capacities ranging from the writing of learning objectives of a developed competency-based training program to the classification of job titles and writing of job descriptions. The result of this process will affect how the position fits in the organizational structure, the reporting line, and compensation level.

The performance steps for completing each task also will be used in the development of a variety of related materials. Whenever procedure is an issue, the performance steps of the tasks come into play. To use an example from the training of employees in psychomotor skills, the sequence of performance steps guides the instructor through a demonstration of the steps of the learning objective, to the student’s practice of the procedural steps, to a final determination of the student’s ability to perform the process on a performance test. In each of the three performance-related learning activities, procedure is fundamental to identification and development.

Job classification. A job classification is used to group occupations by function level or ability. To classify jobs by function means to categorize them by similarity of function or activity. For example, categories such as marketing, accounting, production, management, and human resources development imply that all people working in

the one of these defined areas are performing a similar type of activity. Functional job classifications are regularly used in organizational development and in the preparation of organization charts.

In contrast, to classify occupations by ability level involves using terms that designate amount of on-the-job experience, skill level, and types of education and training. Terms such as *apprentice*, *journeyman*, *master*, *entry-level*, *technician*, and *specialist* all reflect a classification of jobs by ability level. The classification of employees by ability levels also guides organizational management in establishing the wage and salary schedules of employees.

Job description. A job description is a narrative statement defining a job, that is, what the employer expects of the employee in terms of on-the-job performance. Job descriptions or position descriptions list the responsibilities and functions required in a particular position. A job description categorizes and defines the activities of a worker in more general terms than those used in a job analysis. The description is intended to provide a profile of the job rather than describe the occupation in the detail found in most job analyses. The entries in a well-written job description are introduced by a descriptive verb and closed by a noun defining the activity, for example, “maintains bank records.”

Complementing the job description is the job title. Job titles are general in nature, in that they reflect all the activities contained in a job description. In one sense, a job title is more an extension of the job description. Job titles can take on tremendous importance in organizations as they may signal reporting line and level within the organization, as well as determine compensation level.

With the 21st century’s increased reliance on technological skills, job descriptions and titles are evolving quickly to respond to the changing nature of the organization. Other factors that are influencing the design of positions include market pressures, political shifts, and new organizational ideas (Osterman, 2010).

KNOWLEDGE OF OCCUPATION

The fourth question involves identifying the knowledge or informational component of the occupation. Depending on the author, the three types of information most often referred to are technical information, general information, and career and occupational guidance information.

Technical information is the information workers must know to perform a specific task or group of tasks. Technical information gives workers the judgment-forming, decision-making ability to perform tasks in a safe and correct manner. It is the knowledge base from which workers can make informed decisions affecting and controlling their on-the-job performance.

General information, although related to the job itself or to the individual tasks that make up the job, does not have direct bearing on the performance of either the job or its component tasks. General information complements the activities of the workers but is not crucial to the outcome of the tasks. For example, detailed knowledge about the manufacture of computer chips has no direct bearing on the performance of a computer programmer or systems analyst.

Career and occupational guidance information allows workers to make decisions about themselves and the workplace. It includes information on such topics as the short-, intermediate-, and long-range employment needs of the community; the career interests and abilities of individuals; work, work roles, and responsibilities; job-seeking skills; the employment outlook; and local, state, national, and global economic trends. Job analysis can also be critical the individual as they seek satisfaction with their roles. Given the global environment of the 21st century, research has shown that job satisfaction can vary across different countries and the economic health of the country may also play a role in job satisfaction (Westover, 2013).

TRAINING AND EVALUATION

Each of the following is a specific application of the information gained from a completed job analysis. In some cases, most or all of the information is used in the development of the final product; in other cases, only a portion of the job analysis data is used. (See Figure 1.)

The organizational structure, work activities, and informational content identified in a job analysis serve as the basis for developing the structure and content of a training program. The structure of the occupation determines the organization of the curricular components of the training program. The content of the training program depends on the activities and information needed to perform in the occupation. In a competency-based training program, the titles of the tasks become the titles of the corresponding learning objectives. The technical information topics and performance steps of the tasks, respectively, serve as the basis for identifying and organizing the knowledge and performance-related learning activities of the learning objectives.

Critical incident training is the result of applying the activities and content of a job analysis in a specific training situation. As discussed by Ivor Davies (1981), the critical incident method of instruction “focuses upon collecting information on key tasks, particularly on those where problems occur” (p. 131). For these tasks, special training can be devised using the activities and informational content first identified in the job analysis and, later, be translated into learning objectives, curricula, and instructional materials.

Time and motion studies address the issues of industrial production and efficiency because they attempt to

measure time on task, product quality, and worker safety. These studies are conducted in the workplace under normal working conditions. A completed job analysis provides the researcher with the necessary list of tasks and performance steps, that is, work activities performed by employees in the completion of their jobs. The focus of a time and motion study is to eliminate wasted motion and determine the most efficient way of performing a particular task.

Quality assurance. Quality assurance, which aims to maintain the desired level of quality in a product or service, includes the systematic monitoring of all steps and activities within the quality system. A job description provides the quality assurance professional with the list of tasks performed in a particular job and the performance steps (procedures) required to perform each of the tasks. Also, in a comprehensive job analysis, standards of performance for both the tasks and performance steps are included. The two sets of criteria assist in determining the quality outcomes of both the task (product) and procedural steps (process).

The same two sets of quality standards are also applicable in the education and training of people for the workplace. Again, the content of the completed job analysis would provide instructors with the standards used in preparing students for employment, and for employers to provide continued training and development as the organization changes and develops over time.

SEE ALSO *Job Enrichment; Job Satisfaction; Quality Assurance and Quality Control*

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JOB ENRICHMENT

Job enrichment is a way to motivate employees by giving them increased responsibility and variety in their jobs. Traditionally, many employers believed that money was the only true motivating factor for employees and that to get more work out of employees, offering them more money was the only way to do it.

Although this may be true for a small group of people, the majority of workers like to work and to be appreciated for the work they do. By allowing employees to have more control in planning their work and deciding how the work should be accomplished, job enrichment is one way to tap into the natural desire most employees have to do a good job, be appreciated for their contributions to the company, and feel more a part of the company team.

HERZBERG'S THEORY

Job enrichment has its roots in the two-factor theory of Frederick Herzberg (1923–2000). According to this concept, two separate dimensions contribute to an employee's behavior at work.

The first dimension, known as hygiene factors, involves the presence or absence of job dissatisfactors, such as wages, working environment, rules and regulations, and supervisors. When these factors are poor, work is dissatisfying and employees are not motivated. However, having positive hygiene factors does not cause employees to be motivated. Rather, positive factors simply keep them from being dissatisfied.

The second dimension of Herzberg's theory refers to motivators, which are factors that satisfy higher-level needs, such as recognition for doing a good job, achievement, and the opportunity for growth and responsibility. These motivators are what actually increase job satisfaction