

A New Model for Systematic Competency Identification

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Identifying job competencies has traditionally used more art than science. The reason is that while people have tried to work methodically, there has not been a systematic process based on sound performance models.

Competencies are most often identified through a combination of “techniques” and “models” (Marrelli, 1998). Techniques include interviews, focus groups (including brainstorming), surveys, and observations. Models used include products or processes, job responsibilities and accountabilities, or differences between superior and other performers. Thus, one organization might use interviews focusing on superior versus other performers. Another might use brainstorming to identify competencies against job responsibilities, job profiles, or other combinations.



Neither method results in accurate or complete competency identification.

Problems With Current Models

None of these “models of performance” accurately defines the performance of a job or a process. Each of these is an approximation of the performance. While many might describe water eloquently, only the formula H_2O is a precise description, because it uses agreed-on language. In the same way, the closest method of defining performance is a process definition, because the process steps should reflect the performance involved in producing a job product or service. However, the steps of a process are but one of six elements of a complete performance definition of a job (Langdon, 2000).

Of the models being used to develop competencies, the most inaccurate is based on job responsibilities in traditional job descriptions. Job descriptions merely contain statements (labeled “responsibilities” or “accountabilities”) of outcomes intended for the job, which are rarely current. However, competencies need to be based on what it takes to produce the outcomes; therefore, it is more critical to know what produces the outcome than what the outcome itself should be. In other words, job descriptions were never designed to describe the actual performance needed to produce the outcomes. In addition, because job descriptions are used to define pay grades, job statements are often negotiated definitions, rather than actual work descriptions. They are frequently intentionally written to bloat the definition of the job for compensation motives.

The technique of comparing superior performers to other performers is more objective, as it is based on observation. Still, such comparisons are not necessarily complete or accurate, because the observation itself is not based on a performance model. Rather, the comparison is merely a series of observations. Using observation without a performance model could result in vodka being identified as water; after all, both are clear liquids.

A more complete model of performance, known as the Language of Work, can overcome these limitations in current performance models. The Language of Work provides the basis for defining jobs so that we can then build a system for identifying competencies. As Marrelli (unpublished commentary, 2001) has so accurately noted, “Competencies are the building blocks for high performance, but you first must have the blueprint for what high performance looks like for the particular job before you can select the correct building blocks.” Before looking at the Language of Work model, we need a brief review of the problems inherent in the methods (interviews, focus groups, surveys, observations, etc.) of analysis.

Competency menus and databases: Some organizations purchase generic databases of competencies. They select the competencies they believe are appropriate for the target job from a list of competencies organized by topic area such as relationship management or leadership, or project management. The competencies are selected on the basis of what seems to fit the job, but there is no thorough matching of the actual job requirements with the competencies.

Adopting models from other organizations: Some organizations simply adopt a competency model another organization uses. For example, a finance executive who moves from one company to another may implement the competency model developed by his former employer in his new department. No or little work is done to compare the target finance jobs in the former organization with the finance jobs in the new organization. One cannot assume that even jobs that appear similar in title and functions require the same competencies, because organizational conditions and processes, specific inputs and outputs of the jobs, and other factors can vary widely among organizations.

Brainstorming: A common approach to identifying the competencies required for a job is to conduct focus groups in which people familiar with the job are asked to develop a list of important competencies. When this is done without the benefit of first defining what high performance is through a careful study of the job, the danger is high that the resulting list of competencies will reflect the limited experiences and biases of the focus group members rather than an accurate summary of the competencies actually required for high performance.

Traditional job descriptions: Many organizations create job descriptions for compensation or evaluation purposes. These descriptions typically list the responsibilities or outcomes of the job. Often a group of people will work together to create a list of competencies by deciding which competencies are needed to produce each outcome. Because the job descriptions define only the job outcomes and not the actual performance or work needed to produce these outcomes, many important competencies will not be identified. Another serious problem is that job descriptions are often not accurate descriptions of the job because they are negotiated descriptions, sometimes intentionally written to upgrade the job for compensation purposes.

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Comparisons of superior and other performers: Comparisons of superior performers and other performers are a popular method of identifying competencies. Superior performers are observed on the job or interviewed, and differences between them and other performers in the competencies demonstrated are identified. Although this approach to identifying competencies can be useful, problems arise when it is used without first fully defining job performance. Observations and interviews can provide only a partial picture of job performance; it is likely that key components of performance will be missed.

While each approach has some merit, each suffers from a fundamental flaw—the lack of a blueprint for what performance looks like. It appears that most organizations rely on brainstorming, combined with the use of existing lists of competencies, to match their derived data against job responsibilities in a job description or other job profiles. The problem is that these models of work are incomplete to begin with; therefore, we are doomed to miss some of the critical competencies. Add to this the use of brainstorming, and the results are at best educated collective guessing. The same can be said in using focus groups (a version of brainstorming) and surveys. Observation is worthy, but again needs a model of performance against which to make the observations accurate and complete. The problems of method and model can be avoided by defining jobs using an accurate model of performance.

Identifying Competencies

As illustrated in Figure 1, four sources contribute to the development of performance-based competencies:

1. Behavior plus attributes
2. Standards
3. Support
4. Human relations

According to the Language of Work model (Langdon, 2000), these four layers constitute performance; competency identification must be based on performance to be accurate and complete. We will see how this is accomplished by building a sample manager job model, which is the behavior plus attributes level (#1 above), attaching competencies to its elements and then exploring the development of competencies for standards, support, and human relations.

What Is a Job Model?

A job model is a performance-based reflection of how an exemplary job performer does his or her work. It should be based on and aligned to the core processes of the business, which in turn should be aligned to the business unit's goals and strategies. You can, however, define job models without

anchoring them to core processes, but the organization and individual suffer exponentially from lack of alignment.

After much researching and testing, Langdon (1995) determined that the behavioral component of performance can be described using six words (see Figure 2). These elements of behavior are always present when there is performance, whether the performance is visible or not. Thus, describing individual work using these six related words creates a performance-based definition of the intended behavior needed from individuals as prescribed (or not) by the organization. These six integrated words are

1. Inputs
2. Conditions
3. Process steps
4. Outputs
5. Consequences
6. Feedback

A diagram or narrative of these six words for a job make up the foundation of a job model. Thus, each job produces certain outputs (deliverables) intended for clients or customers. These outputs will result in related consequences (desired results for the customer, organization, and individual). To produce the outputs and their resulting consequences, the individual will use certain inputs (resources,

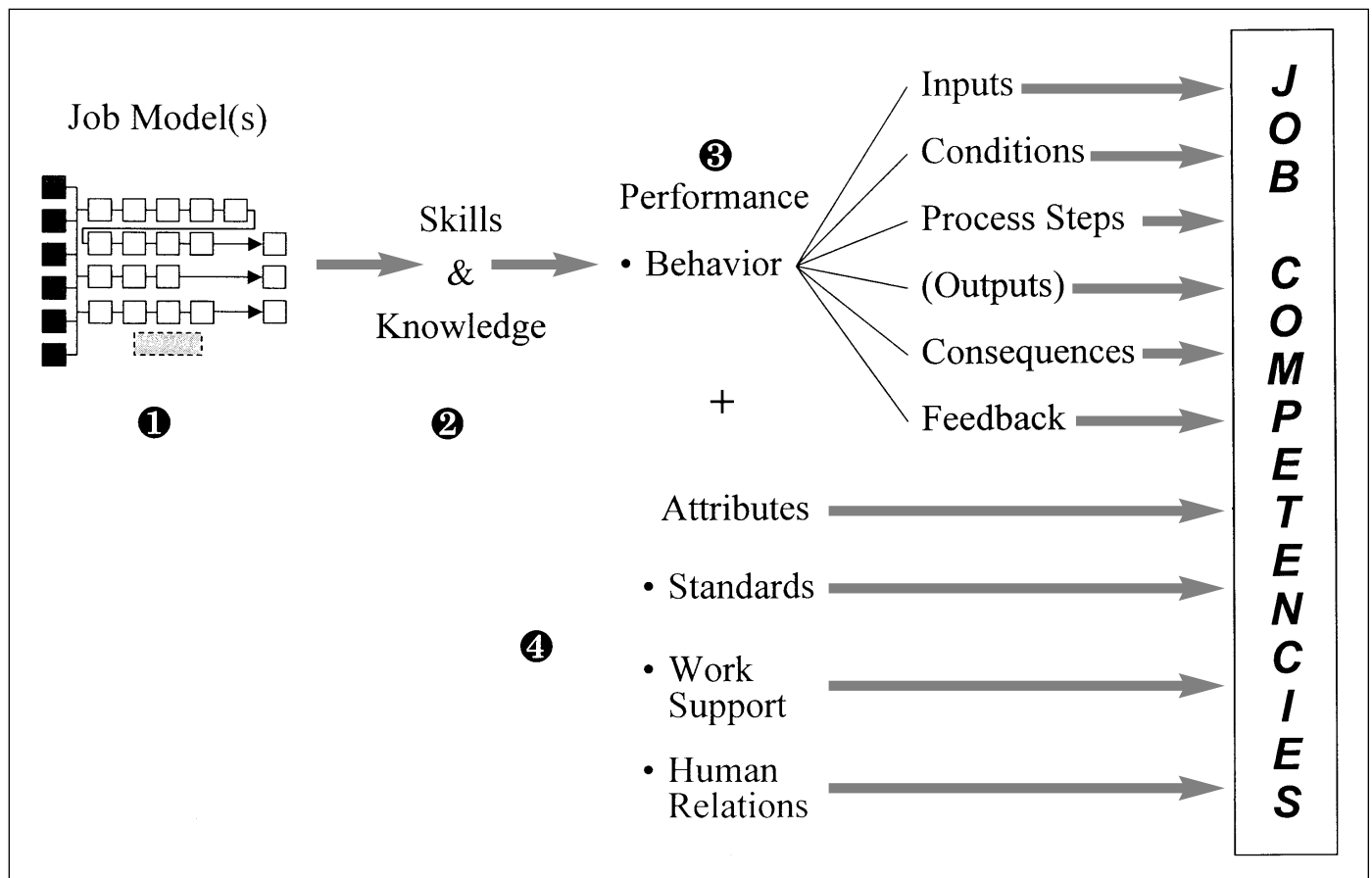
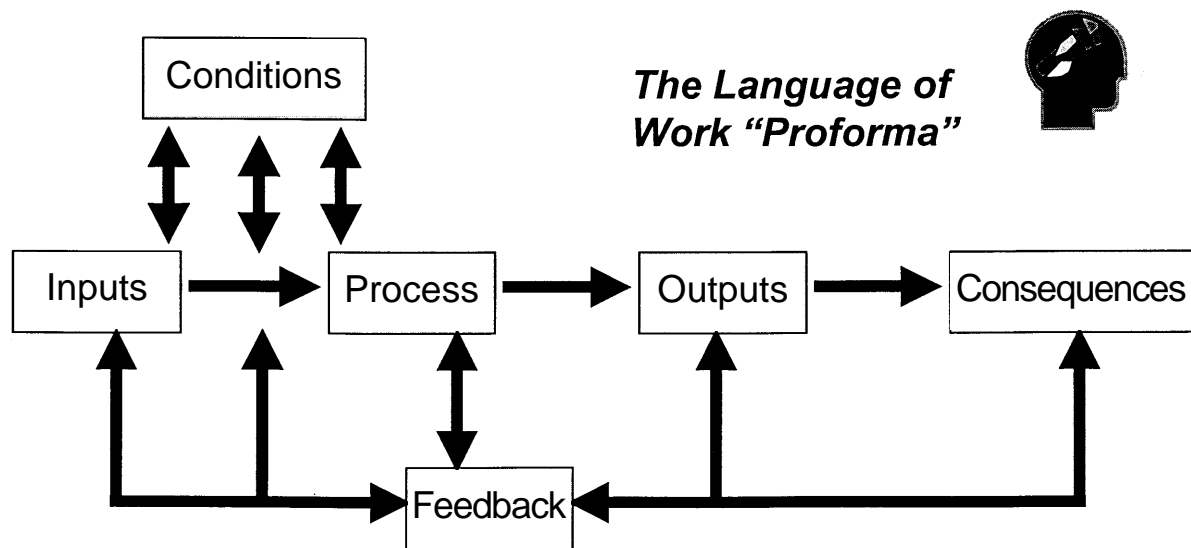


Figure 1. Systematic Competency Identification and Development: The Language of Work Model.



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Figure 2. A Model for Defining, Aligning, Talking, Facilitating, Improving, Thinking, Measuring, and Changing Performance.

triggers), governed by conditions (rules, regulations, policies), through a series of process steps, aided by feedback (facilitating and reinforcing communication).

When we have defined and understood any given job with these six words, we can add certain performance-enabling elements, such as competencies, skills and knowledge, and attributes. These enabling elements meet a variety of organizational and personal needs as job holders and managers. Training departments can use lists of skills and knowledge to plan training offerings. Managers can use job models to establish standards, goals, do performance reviews, and establish reinforcement programs. By adding attributes, standards, entry-level requirements, accountabilities, and so on, human resources can establish more accurate recruiting and selection processes. Executives can use them to align jobs to processes, goals, and strategies.

Each of these enablers is relatively easy to define once the performance has been determined using the six elements. Thus, we set standards to any of the six elements beginning with outputs and consequences, measure or identify desired attributes to execute process steps, define accountabilities from outputs and consequences, and so on.

First Define the Job Model

We chose to model a generic manager job, as we both had done extensive work on manager jobs for major corporations. Also, modeling the job of a manager allows discussion of a fuller range of competencies that might not appear in more common professional or technical jobs. Of course, we recognize that the definition of a manager will differ from

organization to organization. One of the nice features of job models is that they are easily updated or revised to reflect the exact performance of the person doing that job in a given organization. We have found that it typically takes less than two hours to define a job model, whether for a job with very tangible aspects or a more amorphous knowledge worker or managerial position.

To use the six elements of behavior to define a job model using the Language of Work, we note that in any job we produce certain **outputs** (deliverables) and **consequences** (results) by using certain **inputs**, under certain **conditions** (rules and regulations), through a set of **process** steps, aided by **feedback** from various sources. For simplicity's sake, in showing how to build competencies from a job model, we will illustrate one major output of a manager's job, Plans Made and Approved, and its related inputs, conditions, process steps, consequences, and feedback. These are shown in Figure 3.

After the six elements are defined, the skills and knowledge needed to perform the job must then be attached to the job model to build job competency descriptions. As Marrelli (1998, p. 10) has defined, skill "is a learned capacity to successfully perform a task or activity with a specific outcome." Knowledge is "the information or understanding needed to perform a task successfully." Skills and knowledge in job modeling are defined for the elements of inputs, conditions, process steps, and feedback, because these are the elements of performance that lead to outputs and consequences. Thus, as illustrated in Figure 4, we see the skills and knowledge for the process that produce the Output 1, Plans Made and Approved.

MANAGER JOB MODEL (partial)			
Output	Plans Made & Approved		
Inputs	Financial & Quantitative Data	Knowledge of Business	Customer Need
	Employee Need	Superior's Needs	Employee Data
	Other Managers	Market Data	Technology Data
Conditions	Standards		
	Federal & State Regulations	Ethics & Professional Standards	Business Environment
	Budget	Regulations Requirements	Company Policies & Procedures
Process Steps	1. Determine Need	5. Review With Stakeholders	9. Determine Support Needed For Success
	2. Analyze Demands	6. Revise Based On Input	10. Obtain Approval
	3. Assemble Resources	7. Assess Risk & Threats; Mitigate	11. Develop Communications Plan
	4. Draft Plan	8. Finalize Plan	
Consequences	Achieve department goals and objectives commensurate with business mission		
	Customer satisfaction		
	Seek management approval		
	Budgetary compliance and efficiency		
	Employee satisfaction		
Feedback	Client	Management	Peers
	Staff	Customers	Suppliers/Vendors
	Results	External Experts	

Figure 3. Manager Job Model.

With the job model (including skills and knowledge) in place, a process that takes less than four hours to complete in our experience, one is ready to identify the competencies. How is this done?

Where to Look to Identify Competencies

Job Behavior

Behavior is the foundational layer of job performance in light of alignment to the business mission/strategies/core processes, in this case as a manager. The Language of Work model defines behavior in the six elements of the job model illustrated in Figure 2. The defined inputs, conditions, process steps, outputs, consequences, and feedback, and the related skills and knowledge become the source data for identifying most of the job competencies. For example, Figure 3 shows the skills and knowledge for the process steps related to one of the outputs of the manager job. From these skills and knowledge we have identified seven competencies (out of a total of 24 for the entire job).

The majority of job competencies emanate from the process steps. This is logical, because most job behavior is found in

the steps executed (and the skills and knowledge needed) in doing the work. But competencies are also needed to identify and use the inputs, follow the conditions, and use feedback. Figure 5 lists a representative example of these other elements of a job. These, as with competencies for process steps, were derived from the job model.

Having developed competency statements based on the behavior of the job, we can turn our attention to the other areas of performance that will help to generate a comprehensive list of competencies.

Attributes

An attribute or ability is "a demonstrated cognitive or physical capacity to successfully perform a task with a wide range of possible outcomes" (Marrelli, 1998, p. 10). Other definitions favor the use of available measures of attributes, such as the Kolbe Index (Kolbe, 1991), to identify attributes among exemplary performers; often the same persons involved in the job modeling definition itself.

Attributes are linked to behavior in that the capacity of a person to do a job skillfully is associated with his or her

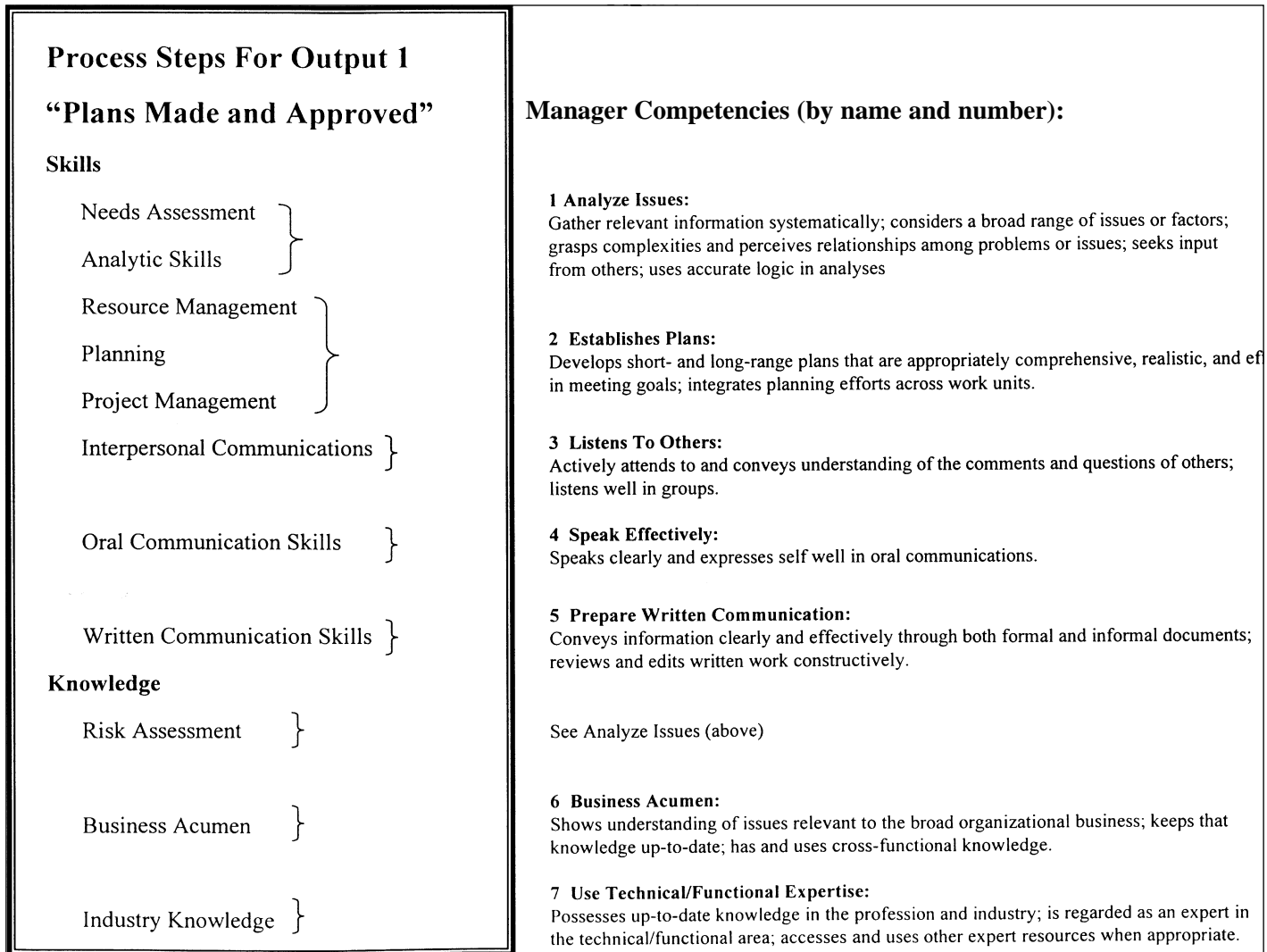


Figure 4. Sample Competencies to Process Steps of Behavior.

ability to do many of the behaviors implicit in the job. Some things we can learn, but the basic attributes we can't.

Identifying competencies for attributes is probably the single most often guessed-at arena for competency identification. It should not, however, be a guessing game. Rather, one or more of the commercially available attribute identification instruments are recommended. This can be accomplished in tandem with job modeling, which usually uses three or four exemplary performers. Immediately following the job modeling session, participants complete the Kolbe Index. From the results of the Index, we can then match appropriate competencies to the attributes of the job. A typical competency for a manager identified from an attribute test would be as follows:

Demonstrating Adaptability:
 Handles day-to-day work challenges confidently; is willing and able to adjust to multiple demands, shifting priorities, ambiguity, and rapid change.

Job Standards

Standards describe the level of proficiency that we want the job behavior to achieve. Competencies for standards tend to be simple and straightforward. Usually, they relate to work quality, quantity, timeliness, and cost. Some jobs, such as in accounting, may have numerous and very stringent standards competencies, whereas other jobs are more generalized in terms of overall job efficiency. For example, in the case of the manager, the competency might read, as it did in this illustration—

Allocates one's time effectively; handles multiple demands and competing priorities, effectively and accurately processes paperwork; manages meetings effectively, and manages budgetary requirements set by the organization.

Once we have the behavior definition for a job (as reflected in the job model), we can determine what standards are

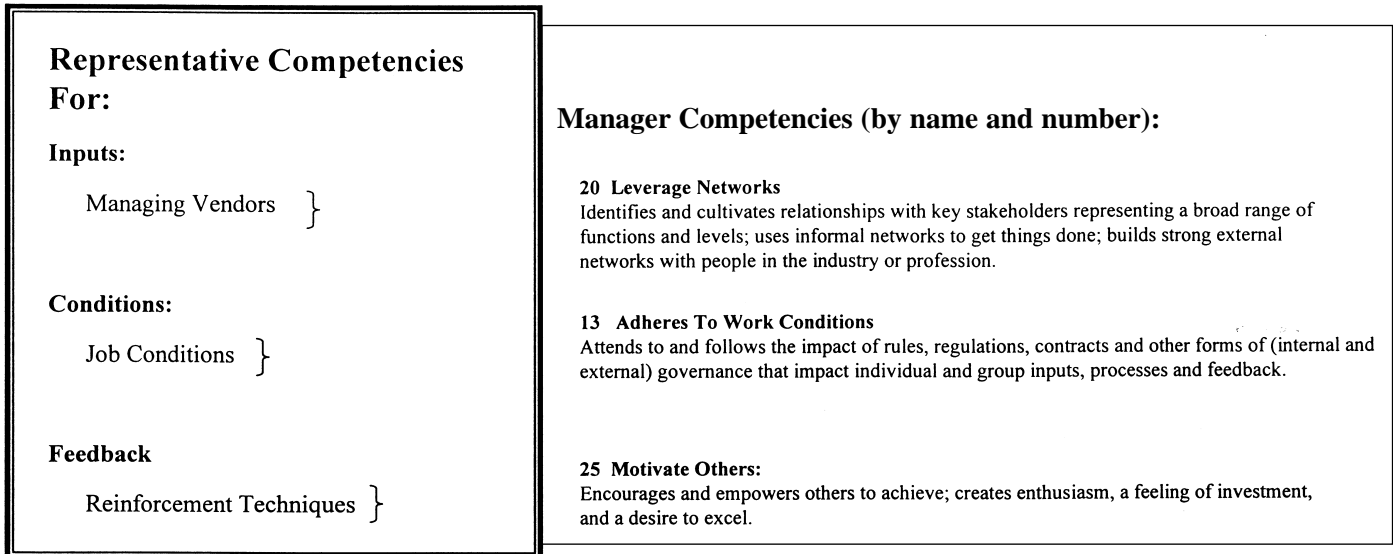


Figure 5. Sample Competencies to Inputs, Conditions, and Feedback of Behavior.

needed for that behavior. From these standards, we can build needed competency statements.

Work Support

Work support is the name for the various interventions and programs that organizations provide so that behavior and standards are achievable. The organization, through management, is supposed to provide and assure such support. Work support covers the range of actions, interventions, and programs, from assignments to organizational structure and desired culture to communication needs. Think of work support as the contributors to a healthy organization, or as the quality of water the organization must provide for fish to swim (behavior) and reach standards (how well we want the fish to swim).

Managerial jobs tend to have more competencies related to work support than do technical or professional jobs. For technical or professional jobs, the question may be what we expect these jobs to bring to the execution of their own work as self-initiated work support (that is, ranging from their own equipment to their willingness to ask questions). For example, a work support competency for individuals might be something like:

- Develops Oneself:
- Learns from experience; actively pursues learning and self-development; seeks feedback and welcomes unsolicited feedback; modifies behavior in light of feedback.

Managers are likely to have a competency such as this. They will need competencies tied to other cultural needs the organization is trying to foster.

Human Relations

Human relations are those attributes related to enabling others to get their work done, as well as avoiding things that inhibit work behaviors, standards, and work support. Managers, because they influence the work of many, are particularly in need of competencies related to human relations. Thus, a typical competency identified in human relations for a manager follows:

- Values Diversity:
- Shows and fosters respect and appreciation for each person whatever that person's background, race, age, gender, disability.

In Summary

In the final analysis, 24 competencies were generated for our manger job model. Competency lists generally require additional attention to be functional:

- If existing competency lists are used to match to skills and knowledge, they may need to be wordsmithed to fit the organizational environment.
- Some competencies may need to be combined to be more functionally useful for the individuals and organization using, developing, and assessing them. Most employees and leaders find it difficult to work with large numbers of competencies (Marrelli, 1998).
- In the case of the manager job model, it will have to be edited in terms of the kind and level of manager it is applied to in a particular organization.

Generating competencies, using any form of model or technique that is not based on an accurate model of performance, may be interesting or convenient, but the result is

not very accurate. Our clients, managers, and executives, depend on their human resources and performance professionals to provide them with reliable and effective processes. To masquerade using such methods as brainstorming, perpetuates a myth and even a fraud on our clients. These methods will produce some results, but are they really the desired ones? Are there not better and more accurate methodologies that are truly performance based?

Technology exists, based on both research and practice, to build accurate pictures of jobs. Competencies are then systematically built on the job model plus attributes, taking into account the knowledge and skills needed to perform the process steps, use the inputs, follow the conditions, and use the feedback. Then we can take into account the necessary standards, work support, and the human relations needed to perform the job.

Using this more rigorous, systematic approach will allow us to identify the competencies that need to be present in personal achievement of work, training and development of workers, selection of new hires, and promotions and transfers. 🌟

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