Everything You Wanted To Know About Competency Modeling

BY RICHARD J. MIRABILE

Competency models are hot. But before you can reap their benefits in improved performance, you have to know the terms and the tools. Here's a definitive guide.

IT'S INEVITABLE. Start with a good concept, develop it, apply it, refine it, and, as people begin to see its potential, they (and companies) will try to use it. Pretty soon, seminars, brochures, articles, and consultants claim to specialize in it. Next, the corporate world is abuzz with the jargon, even though there are no accepted, standard terms. When that happens, the intended benefits are seldom realized.

Such a scenario applies to many HRD phenomena that have swept through organizations for the past 50 years—from management by objectives and quality circles to situational leadership and process reengineering. Still, I am a firm believer in all of the aforementioned approaches—when properly understood, properly implemented, and properly rejected when that is appropriate. Most of the solutions, programs, and new spins on organizational behaviors have value. The problem is that they're often misunderstood and, therefore, implemented poorly. In such instances, the result is unmet expectations—expectations that were unrealistic in the first place.

In our zeal to do better work, find the right solutions, change the old unworkable ways to new no-nonsense approaches, and sometimes make a buck, potentially solid ideas can become distorted and applied improperly under what may turn out to be just the wrong conditions.

Hot button

A current hot topic in HRD is competency modeling. For the record, the idea of testing for competence rather than intelligence was first proposed

A Guide To Collecting Data

Job Analysis Method	Major User of Method	What Method Involves	Major HRD Uses	Major Advantages	Major Disadvantages
Direct observation	Job analyst	Observation, recording	Safety and health, part of other methods	Can obtain reasonably complete picture of manual, repetitive jobs	Limited to manual, repetitive jobs; can't observe mental processes or workers' qualifications
Work-methods analysis	Industrial engineer	Observation, recording (stopwatch or video camera)	Safety and health, training, compensation	Serves as database for setting performance standards	Limited to manual, repetitive jobs; can't observe mental processes or workers' qualifications
Critical incident technique	Supervisor or manager	Observation, recording, judgment	Performance appraisals	Captures nonroutine, unusual behaviors	Lengthy data-collection process; translation into job description is difficult
Interviewing	Job analyst	Recording, interviewing	Training, job descriptions, with other methods	Can provide in-depth information	Time-consuming
Functional job analysis (FJA)	Job analyst	Observation, recording, interviewing, judgment	Job descriptions, planning, recruiting, selection	Widely applicable, useful job-classification system	Requires analyst trained in FJA
Job inventories and checklists	Job occupant	Judgment (rating)	Planning, selection, training	Data collection is fast; data for different jobs is easily compared	Time-consuming to construct the inventory
Position-analysis questionnaire (PAQ)	Job analyst, job occupant, supervisor	Judgment (rating)	Planning, selection, training, compensation	Widely applicable; data for different jobs is easily compared	Does not provide a written description of job or duties

in the early 1970s by David McClelland, a former Harvard psychologist. McClelland was asked by the U.S. Foreign Service to find new research methods that could predict human performance and reduce the bias of traditional intelligence and aptitude testing. Thus, the notion of competence measurement was born.

Perhaps the best place to begin is where there seems to be the most confusion: the terminology. Since McClelland proposed this concept more than 25 years ago, the confusion surrounding its use has grown, probably due to the evolution of his original ideas.

Let's start with a glossary of terms used by most proponents of competency modeling.

The term competence also implies incompetence

Ability. This refers to a talent, such as manual dexterity, visual or spatial acuity, or conceptual thinking. The premise is that though abilities may be taught, learned, or enhanced, there's a natural predisposition to them.

Behavior. This is the observable demonstration of some competency, skill, ability, or characteristic. It's an especially definitive expression of a competency in that it is a set of actions that, presumably, can be observed, taught, learned, and measured.

Behavioral anchors. These are more specific than behaviors, which are descriptive but independent of each other. Anchors are built in levels; each level of description is more complex than the previous one. In other words, for a five-level anchor description of a particular competency, level 2 would be more complex and inclusive of level 1, level 3 would be more complex and inclusive of level 2, and so on.

Beliefs. These are the ideas and concepts that people hold to be true for themselves or for others. An example

of a belief is, "Most people are basically honest."

Characteristic. This refers to a personality predisposition that may be taught, learned, or altered but probably occurs naturally in some people more than others. An example of a characteristic is tenacity.

Cluster. This is a group of competencies, skills, or behaviors, organized for the purpose of simplification. An example might be a technical cluster under which various behaviors describe the cluster for a job or group of jobs. Another term for cluster is *theme.* Cluster can also refer to a group of jobs connected by a common knowledge base or by organizational structure.

Competency. This is a knowledge, skill, ability, or characteristic associated with high performance on a job, such as problem solving, analytical thinking, or leadership. Some definitions of a competency include motives, beliefs, and values.

Competency model. This term describes the output from analyses that differentiate high performers from average and low performers. Competency models are represented in different formats, depending on the methods used to collect the data, customers' requirements, and the particular biases of the people creating the model.

Core competency. This term refers to organizational capabilities or strengths—what an organization does best. A core competency might be product development or customer service.

Criticality. This is a measure of how important a particular competency is for a job or group of jobs.

Frequency. This refers to how often a competency is used in a particular job or group of jobs.

Job analysis. This is a process for collecting competency information—information that describes in detail the criteria for successful job performance. There are many ways to conduct a job analysis. Some are sophisticated and time intensive. Typically, job analysis focuses on tasks, responsibilities, duties, accountabilities, knowledge and skill requirements, and any other criteria for successful job performance.

Job profile. This term refers to the development of a prioritized set of competencies or success factors for a particular job or group of jobs. It may include the use of proficiency ratings for each competency.

Knowledge. This refers to a body of information relevant to job performance. It's what people have to know to be able to perform a job, such as a knowledge of policies and procedures for an HRD professional.

Motives. These are what people are driven to think about, seek, and desire. Wanting power is a motive.

Proficiency. This refers to how much of a particular competency a person must have to be successful in his or her work. It is the degree of mastery of a skill or area of knowledge.

Skill. This refers to the demonstration of a particular talent. It can be a mechanical skill, such as operating a piece of equipment, or a verbal skill, such as making a presentation.

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Subject matter experts. They are people that provide the initial information that results in a competency model. Typically, they're average to high-performing workers or supervisors. Or, they can be peers, customers, or others that are highly knowledgeable about the requirements of a job. SMEs also develop job and personal profiles.

Success factors. This term describes knowledge, skills, abilities, behaviors, and characteristics associated with or necessary for high performance. It helps avoid the confusion surrounding the term *competency,* because success factors include anything connected with high performance. The term *competence* also implies incompetence.

Trait. This refers to a person's physical quality or behavioral tendency, such as being gregarious.

Values. These are internal evaluations and judgments on what people consider to be good, positive, useful, or important. Integrity is a value.

360 feedback. This term means the same as *multirater evaluation,* which has been around since the early 1950s. It means that a person and his or her supervisor, peers, staff, or customers (or some combination) are the evaluators in his or her performance assessment.

Constructing the model

Here are some tools for building a competency model.

Job-analysis interviews. Job-analysis interviews can be conducted in person or on the phone, and one-on-one or in focus groups. Interviews are probably the best method of data collection because the interviewer can probe and ask follow-up questions. It is, however, time-consuming.

Focus groups. Focus groups are useful for collecting information from SMEs when it's not practical to conduct one-on-one interviews. Focus groups also stimulate dialogue among the SMEs, though the information can be biased in favor of dominant participants.

Questionnaires. These are useful when it's necessary to interview many SMEs, when SMEs are inaccessible, and when there are time constraints. It's imperative to have appropriate questions, a sufficient sample returned, and the results analyzed and interpreted accurately.

Job descriptions. These can be useful sources of information, assuming that they are up-to-date and supplemented with some data from interviews or questionnaires.

Competency-model formats. The best way to explain the different formats for building a competency model is to give examples. Some models use statistical data to describe the competency requirements in specific detail and use less detail in the competency descriptions. Others reverse the balance.

In a competency model for a district sales manager, the approach might be to identify success factors (competencies), provide a behavioral description of each one, rank-order the factors by criticality, and establish a proficiency level for each factor. Success factors might include "leadership," "integrity," "self-motivation," and "tenacity."

Such models are useful for identifying job or role requirements at the

competency level and for matching jobs with people.

A cluster-type model of leadership success factors for manufacturing managers might list behavioral descriptors under broad categories or themes, such as "developing oneself" and "working with others." For example, under the category "taking initiative," the behavioral descriptors might include "finds innovative paths to effective results" and "takes risks." No criticality or proficiency is established for the clusters or descriptors. These types of models are useful for capturing information in groups and for grouping jobs in such horizontal categories as "managers" or "executives."

The box "A Competency Model for a Systems Engineer" shows a model that identifies technical competencies, with the definitions on the left-hand side and on the right-hand side, possible performance behaviors for establishing a level of proficiency for each competency. The best application of this type of model is for establishing competencies and a proficiency-rating scale to provide indicators of expected performance behavior. That approach is considered performance management.

Another type of model is one in which a specific competency is given a basic definition and behavioral anchors describe specific levels of expected performance behavior. The levels become more complex as the behaviors go up the scale. For example, the specific competency might be "organizational influence." The basic definition might include "the ability to influence others effectively...providing information and giving others ownership of their ideas." The behavioral anchors might include "relies on facts" and "persuades." This type of model is useful for identifying and managing definitive performance expectations, and for identifying specific training and development needs.

The most important point about competency models is that the formats be governed by the collective wisdom of the people that need and build them. Still, if those people have only one way of producing output, a second opinion might be desirable. The decision to use a particular type of competency model should be determined by the desired applications.

For example, if the model's intended purpose is performance management, it's best to have more detail or specificity in the model.

If the applications are to be succession planning, staffing, or 360 feedback, it might not be necessary to have a high level of detail, depending on how the competencies or success factors are defined.

Remember: Applications that seem unnecessary at first may prove useful down the road.

How much detail?

One of the most controversial and difficult issues to address in building a competency model is deciding what level of detail to use to describe the competencies. This decision determines how long it takes to build the model and what applications it will be used for, including the capability to compare information across jobs and people. The fundamental question is, "What is it that you're trying to accomplish by building the model?" In other words, "What do you want to be able to do as a result of building this model?" Believe it or not, people often don't consider the answer in depth. In such cases, the model usually has too much detail or too little.

> *Applications that seem unnecessary at first may prove useful down the road*

The rule of thumb is that the more detail you create,

- the longer it takes to complete the model
- the more money it requires
- the less you can generalize the results
- the less you can compare information across jobs or people
- the more you restrict the possible range of acceptable performance
- the more you inhibit creative, alternative ways to achieve the same results
- the faster the information becomes obsolete
- the more you can articulate specific expected outcomes
- the more specific the performance management can become
- the more you can differentiate between performance levels and between people.

Job and personal profiles

Competency models can be the first step in developing job profiles and in rating an employee's level of competence against a model or profile. Here are some rating approaches.

Absolute rating scales. These typically use a range of ratings—for example, 1 to 3, 1 to 5, or 1 to 7—with a description for each level. Scales help establish the importance of a particular competency for a job, the proficiency level for each competency, and the competency level of an individual. Such scales help establish absolute levels of criticality or proficiency. However, they tend to produce ratings that cluster around the middle or above the middle of the scale range, known as *central tendency error.* Consequently, absolute rating scales are limited in how well they can differentiate performance levels. Their power to predict performance is weak to moderate.

Forced-distribution rating scales. These scales have descriptions for each level and are used for the same reasons as absolute rating scales. The difference between those two types of scales is that forced-distribution scales are restricted in how many times a particular rating can be used for a job or employee. For example, with a five-point scale, a restriction might be that rating 5 can be used only twice, and so on down the scale. Such scales are useful for establishing accurate differences between people, but only in relative terms. They don't show absolute levels of performance. Using a five-point rating scale, two employees could be rated 5 for leadership competence, but one actually may have twice the level of competence. The predictive power of this type of scale is moderate to strong.

Paired-comparison ratings. In this approach, all competencies are ranked

A Competency Model for a Systems Engineer

TECHNICAL CLUSTER	PROFICIENCY RATINGS
Systems Architecture Ability to design complex software applications, establish protocols, and create prototypes.	**0**-Is not able to perform basic tasks. **1**-Understands basic principles; can perform tasks with assistance or direction. **2**-Performs routine tasks with reliable results; works with minimal supervision. **3**-Performs complex and multiple tasks; can coach or teach others. **4**-Considered an expert in this task; can describe, teach, and lead others.
Data Migration Ability to establish the necessary platform requirements to efficiently and completely coordinate data transfer.	**0**-Is not able to perform basic tasks. **1**-Understands basic principles; can perform tasks with assistance or direction. **2**-Performs routine tasks with reliable results; works with minimal supervision. **3**-Performs complex and multiple tasks; can coach or teach others. **4**-Considered an expert in this task; can describe, teach, and lead others.
Documentation Ability to prepare comprehensive and complete documentation including specifications, flow diagrams, process control, and budgets.	**0**-Is not able to perform basic tasks. **1**-Understands basic principles; can perform tasks with assistance or direction. **2**-Performs routine tasks with reliable results; works with minimal supervision. **3**-Performs complex and multiple tasks; can coach or teach others. **4**-Considered an expert in this task; can describe, teach, and lead others.

against each other until all possible pairs are ranked. The result yields one competency consistently ranked highest, one next highest, and so on until all of the competencies are ranked in terms of their criticality to a job.

In employee ratings, all employees are ranked against each other until all possible pairs are ranked. The result is a rank-order listing of the most effective or most competent employees, using some measure of effectiveness or competence as the criterion for comparison. The up side is a solid outcome. The down side is that it's difficult, if not impossible, to compare job outcome against employee outcome, and that the number of possible pairs can be extremely large. For example, to rank 20 employees, the number of combinations is 190.

The power of this type of scale to predict performance is moderate to strong.

Implementation: the missing link

Competency models provide potentially valuable information, but they're useless if there's no coherent and systemic implementation strategy for leveraging the information. Experience has shown that it's often the lack of strategic implementation and necessary support structures that leads to the inevitable collapse of a new program, direction, or initiative that once held promise. Organization development has taught us that for large-scale change to stick, it's necessary to have the right content, processes, and support structures in place. Even with those vital components, there's no guarantee. But without any one of them, the effort will more than likely fail.

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Content. Process. Structure. Those make up the foundation for successful change. No matter what anyone tells you, implementing a competency model is a change effort. For instance, new information will be used to modify HRD efforts or introduce new ones. The model will also affect the way people do their jobs, and it will affect decisions on employees' careers, their perceptions of their competence, their potential for advancement, and other job and career issues.

On an administrative level, a competency model requires someone to manage the new information to ensure confidentiality, accuracy, and relevance to current circumstances. Therefore, it's crucial that the "drivers" of the model implementation maintain an appropriate perspective. Without that, the changes and the organization's complexities can become obstacles to success. ■

Richard J. Mirabile *is president, CEO, and co-founder of Success Factor Systems, 425 Market Street, Suite 500, San Francisco, CA 94015. Phone 415/659-0312; e-mail rmirabile@s-factors.com.*