

RESEARCH Notes

Practical Questions in Building Competency Models

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Practical Questions in Building Competency Models

INTRODUCTION

Competency modeling, an approach originated 30 years ago, has become a mainstream practice in human resource management. Over that period, the methodology has evolved, partly in response to changes in organizations and the workplace, and partly in response to the needs of people using the competency models to address specific needs in organizations. I will begin with a brief discussion of the original creative insights from the development of the first competency model, because some of these insights are still relevant today. Next, I will describe how changes in organizations and the world of work have affected the practice of competency modeling. In the rest of the paper, I will draw on my own experience in competency modeling over the past 20 years, to discuss seven practical questions for human resource professionals and others who are planning to develop competency models in their organizations.

THE FIRST COMPETENCY MODEL

The first competency model was developed in the early 1970's by the eminent psychologist David McClelland and others at a fledgling consulting firm called McBer and Company¹. The U.S. Department of State was concerned about the selection of junior Foreign Service Information Officers, young diplomats who represent the United States in various countries. The traditional selection criteria, tests of academic aptitude and knowledge, did not predict effectiveness as a foreign service officer and were screening out too many minority candidates.

When asked to develop alternative methods of selection, McClelland and his colleagues decided that they needed to find out what characteristics differentiated

¹ McClelland provides a description of the study in his introduction to *Competence at Work*, by Lyle M. Spencer, Jr. and Signe M. Spencer. New York: Wiley, 1993.

outstanding performance in the position. They first identified contrasting samples of outstanding performers and average performers, by using nominations and ratings from bosses, peers, and clients. Next, the research team developed a method called the Behavioral Event Interview, in which interviewees were asked to provide detailed accounts, in short story form, of how they approached several critical work situations, both successful and unsuccessful. The interviewer used a non-leading probing strategy to find out what the interviewee did, said, and thought at key points within each situation. To analyze the data from the interviews, the researchers developed a sophisticated method of content analysis, to identify themes differentiating the outstanding performers from the average performers. The themes were organized into a small set of "competencies," which the researchers hypothesized were the determinants of superior performance in the job. The competencies included non-obvious ones such as "Speed in Learning Political Networks"; the outstanding officers were able to quickly figure out who could influence key people and what each person's political interests were.

THE EVOLUTION OF COMPETENCY MODELING

From this initial study, the McBer team developed a methodology that dominated the practice of competency model building for the next 10-15 years. Key insights from the initial study are still highly useful in competency model building today: the focus on outstanding performers, use of behavioral event interviews, and thematic analysis of interview data, and distillation of the results into a small set of competencies described in behaviorally specific terms.

The method differed from traditional job analysis in several ways. Job analysis focused on understanding tasks and the skills needed to perform each task; competency modeling, however, focused

on personal characteristics needed for success in a broader job role. And while job analysis focused on effective performance, competency modeling focused on outstanding performance. Practitioners of job analysis attached credibility to the views of job holders and other subject matter experts about what is important for effectiveness. Competency modelers believed that only outstanding performers could provide insights about what is important, but that even outstanding performers could not always articulate the secrets of their success. Finally, while job analysis often led to long lists of tasks and their associated skill requirements, competency modelers distilled the results of their studies into a relatively small set of underlying personal characteristics.

It is interesting to speculate about why competency modeling took hold and became widespread. The interest value of competency models may be one reason. Personal characteristics are more interesting than tasks, and insights about outstanding performance are more interesting than those about effective performance. Another reason for the success of competency models is that they work well as unifying frameworks for a variety of applications in human resource management. A manageable set of personal characteristics can serve as a conceptual framework for selection, assessment, professional development, performance management, and other human resource programs. Finally, competency models work well as vehicles for driving organizational change. In my own work, I have developed models that include competencies with names such as “Promoting Innovation,” “Accelerating Change,” and “Valuing All People.”

The first ten years of competency modeling were dominated by consultants trained in the McBer approach. This approach involved a rigorous research methodology, which included

identification of criterion samples of superior and average performers, behavioral event interviews, thematic analysis of transcripts of half the interview sample, and cross validation through coding and statistical analysis of the other half of the interviews. During this period, competency models were most often used to guide selection and professional development.

Today, 30 years after the first competency model, more than half of the Fortune 500 companies are using competency modeling. Consultants working in the McBer tradition are still building many models, but these consultants have been joined by many other consultants using different methodologies. With market pressures to build models more quickly and less expensively, there is less emphasis on methodological rigor.

Over the last decade and especially in the last five years, organizations have begun to use competency models in new ways. Many organizations that have redesigned their work processes and restructured their jobs have developed competency models for newly designed jobs for which there are few, if any, job incumbents with experience. These new competency models, of necessity, describe emerging and anticipated skill requirements, rather than skills that have been effective in the past. Many organizations have taken a “one size fits all” approach to competency modeling, by developing one competency model, usually for leaders, and applying this model to a large set of jobs, sometimes even non-managerial ones. Other organizations have moved in the opposite direction, by simultaneously developing multiple competency models for different jobs within an organization.

Competency models are still most often used to support selection and professional development, but a new

type of developmental assessment – “360 feedback,” competency assessment by self, manager, peers, direct reports, and customers – has become a new human resources application in its own right.

In the past ten years there have also been changes in the workplace which affect competency model building. Because organizations are changing more rapidly, the “shelf life” of a competency model has diminished. Frequent reorganizations change job roles and make existing job descriptions and competency models obsolete. Competency models are often needed for new and critical jobs, even though there are few employees with experience in these jobs and fewer still who could be considered outstanding performers.

Staff functions, such as human resources, have become leaner, so that the remaining staff have more responsibilities and job pressures and less time for discretionary, additional activities such as investing time in competency model building. Thus, more of the model building work falls to external consultants. At the same time, human resources staff are under more pressure to produce results quickly, and this means implementing a useful human resources application, not simply developing a competency model. The budget for the development of a new competency model must therefore compete with the budget for its applications.

Organizational changes have also affected employees, who are the “end users” of competency models. The increased intensity and pace of work make it more difficult to get employees to participate in model building activities, especially resource panels and focus groups. Perhaps because of the pace of work, employees’ attention span, their tolerance for complexity, and their willingness to read have diminished. As a result, competency models need to be leaner and simpler,

with high-impact language that holds the reader’s attention.

HOW ARE COMPETENCY MODELS BUILT TODAY?

Consultants and HR professionals have developed a variety of approaches to modelbuilding, but some common patterns are evident. There are three widely used sources of data for competency models: (1) resource panels or focus groups with subject matter experts, (2) critical event interviews with superior performers, and (3) generic competency dictionaries.

Resource Panels

Resource panels may include job incumbents, people who manage job incumbents, and others, such as human resources and training staff, who have worked closely with job incumbents. A resource panel usually follows a structured process, to get participants to think systematically about the job and the personal skills and other characteristics needed for effectiveness. The facilitator poses a series of standard questions (e.g., about the main responsibilities and tasks, formal and informal performance measures, most challenging types of situations encountered, and personal characteristics required for effectiveness) and captures respondents’ ideas on a flip chart. A key section of the panel, sometimes called a “future scan,” involves asking participants about emerging changes in the organization, industry, marketplace, and technology, and the implications of these changes for the job under consideration. I usually close my own resource panels with an exercise in which participants review a set of generic competencies and rate their importance in light of the preceding discussion.

Besides providing a forum for input about the job, a resource panel is an organizational intervention that allows formal input from different organizational constituencies. If it reconvenes after a draft model has been prepared, the panel

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can help guide decisions about the final content or structure of the model.

Sometimes, instead of holding a single resource panel, several are held, with different sets of stakeholders. For example, in the development of a leadership model for upper middle managers, we held four focus groups: one each with job incumbents, senior managers, direct reports of job incumbents, and HR staff. Another common variation is to use interviews with senior managers to do a future scan.

Critical Event Interviews

Critical event interviews with superior performers provide the second main source of data used in building competency models. Some researchers use behavioral event interviews much like those developed in the early years of competency modeling. Behavioral event interviews involve in-depth probing of a small number of broad events or experiences. Conducting these interviews requires mastering a sophisticated probing strategy. Other researchers have developed different types of critical event interviews, which usually involve more limited probing of a larger number of events and experiences.

If critical event interviews are used, they are almost always tape recorded and transcribed, so that a consultant can read and analyze information from them. Using these interviews significantly increases the time and cost required to develop a model. Suppose, for example, that an organization decides to include interviews with 12 superior performers. Interviews are usually one to two hours in length, and a consultant can conduct as many as three interviews per day. Individual reading and analysis of an interview takes about half a day. After the individual analysis, the analysis team usually meets for one to two days to integrate the interview data. Thus, including the 12 interviews in the process could add 12 consulting days to

the model building project.

But these interviews have unique value; they can provide highly detailed examples of how specific competencies are actually demonstrated by job incumbents. Because of their value, the interviews are usually included in model building projects focused on a single, critical job. But when an organization wants to develop multiple competency models for a number of jobs, the time and cost of including the interviews are often prohibitive.

Generic Competency Dictionaries

Some consultants and HR professionals with extensive experience in competency modeling have developed generic competency dictionaries: conceptual frameworks of commonly encountered competencies and behavioral indicators. These generic competency dictionaries typically have 20 to 40 competencies, each with 5 to 15 behavioral indicators.

A generic competency dictionary has several uses in model building. First, it provides a common conceptual framework or starting point for the model building team. The framework is useful in categorizing initial ideas about job requirements, and the model building team can feel free to modify or add to the framework. Second, the framework can be used in a resource panel by asking participants to rate the importance of a set of generic competencies selected for relevance to the job.

Third, the framework can be used to guide the analysis of critical event interviews. In some of my own consulting projects, for example, I have trained project team members to use a generic competency framework to note and record in a spreadsheet each instance of each generic competency. The analyst uses a spreadsheet form to record the interviewee's initials, the page number

from the transcript, a paraphrase of the significant behavior, and the names and numbers of relevant generic competencies and behavioral indicators. When we combine the data from each analyst's spreadsheet, we create a database that we can sort in multiple ways. For example, we can quickly print out a list of all instances of a generic competency and its individual behavioral indicators. We can also tabulate the number of instances of each element of the generic dictionary. The final model is not limited to concepts from the generic competency dictionary. We may conceptualize a competency by drawing from more than one of the generic competencies; and sometimes we identify new competencies unrelated to any of the existing generic ones.

Generic competency dictionaries are essential when developing multiple competency models within the same organization, to ensure that common skills and characteristics are always described with the same competency names. The organization reviews and revises a set of generic competencies, which then serve as building blocks for the construction of the individual competency models. Whenever a competency is used, it has the same general definition, but the behavioral descriptors can vary from one job to the next.

Other Sources of Data

Although most competency models rely on some combination of the three data sources just described – resource panels, critical event interviews, and generic competency dictionaries – other sources are sometimes used. For example, some researchers use surveys with all job incumbents to validate a competency model. But there is some question whether the views of all job incumbents represent an appropriate basis for validation. The history of competency research shows that superior performers often demonstrate skills and characteristics that are not even understood or appreciated by the majority

of people in a job.

For certain jobs, such as telephone customer service representatives, it is possible to observe or record job incumbents in action. For most professional and managerial jobs, observation is impractical, because critical behaviors are unlikely to occur during a limited observation period, and because the presence of the observer may influence the behavior of the individuals being observed.

For jobs with external customers, such as some sales and customer support jobs, it can be helpful to conduct interviews with customers of superior-performing job incumbents. Besides being able to describe effective behaviors of people in the target job, customers can also describe what representatives from other, competing companies have done.

When an industry is changing rapidly, or when an organization believes it has few exemplars of superior performance, it is useful to interview industry experts. Industry experts may have a good understanding of the marketplace trends and opportunities and the realistic strategic alternatives open to a company. These strategic alternatives may dictate the selection of leaders with particular skills and competencies. The insights of an energy industry consultant were extremely helpful to me, in developing a competency model to guide selection of a new chief executive officer of an electrical and gas utility company.

Expert systems for job analysis can serve as an alternative or a complement to a resource panel. The expert system includes a job analysis software program that poses questions about job tasks, work processes, and the working environment. Based on the answers to the questions, the program generates a competency model from a set of pre-programmed generic competencies. When used with

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an appropriate group of subject matter experts, experts can quickly generate a competency model. But the model cannot reveal new competencies or technical skills that are not included in the generic set.

KEY QUESTIONS FOR HR PROFESSIONALS BUILDING COMPETENCY MODELS

I have described how competency models are built and some options regarding the use of different sources of data. When planning the development of a competency model or models, there are practical considerations that affect the design of the project, the format and content of the competency model, and the success of the project's implementation. The following seven questions may be useful to HR professionals responsible for planning and implementation:

1. What HR application should we include in the initial model building project?
2. What will the key users of the model need from it?
3. How should key stakeholders be involved?
4. How extensive should the data collection be?
5. How should we balance research with intuitive approaches?
6. What format of behavioral descriptors will best suit the application?
7. How do we plan to accommodate additional, future competency models?

1. What HR application should we include in the initial model building project?

In the first years of my experience in competency model building, I did not appreciate the importance of this question. After all, competency models had many potential uses – for diverse areas including selection, assessment, development, performance management, training design, and planning career paths. Client organizations also did

not always feel a need to have an initial application in mind when building a competency model. Competency models were a novelty, and many organizations wanted to build one first and only afterwards think about how to apply it in the organization.

Experience changed my thinking. Too often, I saw organizations build a competency model but never get around to applying it. And a competency model alone provides little value to anyone. I now believe that it is essential to have a particular HR application in mind when building a model and build the implementation of that application into the initial project plan.

There are three important reasons for doing this. First, the nature of the intended application can shape the data collection and analysis. For example, in a project to construct a competency model for sales professionals in a consulting firm, we knew that the competency model would need to be incorporated into a sales training program. Since the training program would be built around the selling process, it was important to understand how the selling process worked for different types of consulting projects. We therefore organized a day-long resource panel focused on defining the sales processes for both simple and complex consulting projects. When we later identified the competencies, we were able to link them to steps in the two sales processes.

A second reason for having an HR application in mind when building a competency model is that a planned application can shape the format of the model, especially its behavioral descriptors. For example, if the model will be used by managers to assess jobholders' demonstration of the competencies, as part of a performance appraisal, it is important to include behavioral descriptors of less effective behaviors as well as effective

ones. In one instance in my experience, the leader of a work unit charged with redesigning a high tech organization's business processes wanted to be able to give regular performance reviews in which he assessed people on their demonstration of the competencies. After considering various formats for rating levels of competency demonstration, we decided to identify three or four key dimensions for each competency and to create rating scales for each dimension with specific behavioral descriptions of effective and less effective behaviors for each dimension. The bipolar rating scales made it easier for the manager to give accurate feedback and to explain low ratings to jobholders. With this application in mind, we convened groups of subject matter experts to consider the requirements for each job. The group drew on a set of generic competencies to help identify and conceptualize the most important competencies for the job in question. Next we identified the key dimensions for each competency and discussed effective and less effective behaviors associated with each dimension.

As the external consultant, I took the information from these sessions and prepared draft competency models with key dimensions and bipolar rating scales for each dimension. At a second session with the subject matter experts for the job, we reviewed and revised the model, key dimensions, and behavioral descriptors. The final product for each job included a competency assessment rating form to be used when conducting performance reviews. In this case, having a clear idea of the model's intended application shaped both the data collection plan and the format in which the model was presented. As a result, the model helped the manager provide a high level of clarity about desired behaviors and thus to create a high-performing unit with high morale.

There is a third reason for making the application part of the initial model building stage: ensuring that money and other resources will be available for the application. If the initial application is not part of the budget for the model building project, there is a chance that financial support will no longer be available when the competency model has been completed. The organization receives little benefit from its investment, until the model is applied in a way that enhances productivity.

2. What will the key users of the model need from it?

The planning of a competency model requires identifying the most important stakeholders and users and considering how they will want to use the model.

People in the job often want to use a competency model to provide a recipe for success. These users are asking, "What could I be doing differently that would make me more effective?" They are likely to value very specifically worded behavioral indicators that describe what to do, with whom, and in what circumstances. A matrix linking the competencies to major job tasks is also helpful to job incumbents.

Supervisors can use the same detailed information to assist in coaching jobholders. Since part of a supervisor's job is also providing detailed feedback about effective and less effective behaviors, descriptions of less effective behaviors associated with each competency are beneficial. For the same reason, supervisors may find it useful to have a matrix linking the competencies to key performance criteria and measures. Because supervisors are also in charge of hiring for the position, they need a competency model that includes all of the important skills and qualifications required for the position, including technical skills and educational credentials that are baseline requirements

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for all jobholders.

Human resources professionals who will be using a competency model have a different set of needs. HR staff may need to build a shared conceptual framework of competencies and a common language for describing the competencies. They can then facilitate matching skill profiles to different jobs through selection, promotion, and career-path planning; and the creation of training and development programs for people across a broad range of jobs. HR staff also need easy ways to compare the requirements of different jobs in the organization. It is useful for HR staff to be able to say which competencies are required for a job and the level at which the competencies need to be demonstrated, to achieve effective performance. Since HR staff often need to communicate and explain a competency model, they prefer competency models that are clear, simple, and written with powerful language.

Because HR staff want others throughout the organization to use the model, they need to ensure buy-in to the model by key stakeholders. All key stakeholders should be consulted or included in generating data to build the model and in reviewing draft versions of the model, to ensure that it is complete and accurate.

HR staff must also ensure that the competency model can withstand potential legal challenges, which are more likely if the model will be used to guide selection and hiring of staff. Using a rigorous, systematic process of data collection and analysis is the best protection against possible legal challenges.

HR staff may be interested in acquiring not just a competency model but the technology and training to build other competency models in the future. If so, the project plan should include training of HR staff and their participation

in all phases of the project.

When competency models are needed for critical jobs, especially leadership positions, the organization's top executive is an important stakeholder. Top executives often want to use competency models to drive organizational change. Top executives want competency models to be aligned with the organization's strategy and most important values. It may be important to include competencies describing needed leadership skills, such as "Change Management" or "Business Partnering," as well as desired values, such as "Integrity" and "Customer Orientation."

It may also be important to include competencies that reinforce changes in the organization's structure, work processes, and culture. For example, for organizations that are moving away from hierarchical structures with supervisors to flatter structures in which much work is done by self-directed work teams, competencies in areas such as coaching and team facilitation become important.

When an organization's top executives take an interest in a competency model, they are likely to want it written with powerful, high-impact language that can inspire and motivate. Top executives are also likely to want the competency models to provide a clear, consistent message for all employees. One way to do this is to have a common set of core competencies that are the same for all employees.

3. How should key stakeholders be involved?

To be successful, a competency model building project must involve key stakeholders. There should be careful consideration of how and when to involve people most effectively. An example from the development of a sales competency model for an information services consulting firm can illustrate the process at work. To achieve buy-in from

the sales organization, the HR staff of the organization wanted to engage many of the sales representatives and their managers, who were deployed in different sales regions. In the initial project plan, a standard resource panel would involve six sales representatives and six managers of sales representatives. There would be an additional 12 interviews with superior-performing sales representatives. But the HR staff wanted to involve more than these 18 sales representatives without incurring the large costs of conducting and analyzing additional interviews. In addition, another key stakeholder for the project was an internal sales consultant who was charged with building an intranet system for tracking the progress of each sale. To involve this key stakeholder, and to increase the number of sales representatives in the model building, we hit upon the idea of holding an extra resource panel. This panel, with 12 more sales representatives, focused on defining the complex sales process, an activity that would meet the needs of the internal consultant, while adding value to the competency model.

This project had another set of key stakeholders: the four members of the organization's top management team. We arranged meetings with each of these individuals, to provide a briefing on the project plan and progress to date and to seek ideas on how to ensure the project's success within the organization.

4. How extensive should the data collection be?

The extent of the data collection depends on the significance of the job for which the model is being constructed, the budget for the project, and the intended uses of the model. Almost every model building project includes a resource panel or group meeting of subject matter experts. A resource panel can accommodate up to 15 participants. With larger groups, it is difficult to allow time for all participants to respond to every question. Sometimes

an organization decides to hold more than one resource panel, to accommodate two important groups that are geographically remote from each other, or to gather separate perspectives from job holders, their managers, and their direct reports.

If the job is essential to the organization, it is important to include critical event interviews with superior performers. There are three key benefits to adding interviews to a competency model building project. First, it is primarily through critical event interviews that the research team can develop good behavioral descriptors of a competency. Good descriptors specify what outstanding performers actually do when they demonstrate the competency. Second, analysis of critical event interviews may reveal some competencies that would not be mentioned in a resource panel. Interpersonal and influence skills are areas that are often not well articulated by participants in resource panels. Third, conducting and analyzing interviews adds to the rigor of the research process, an important consideration if the model will be used for selection.

The number of interviews should be large enough to permit detection of themes demonstrated by as few as a quarter of the interviewees. If each theme must be noticed in at least two interviewees, a minimum of eight interviews is needed. Ten to twelve interviews are more commonly used. Samples that must include representatives from major geographical, functional, or demographic groups may need to be a little larger.

Because it is expensive to conduct and analyze interviews, few competency studies today involve more than 20 interviews for one job. In my experience, when there are 20 or more interviews, the analysis team has difficulty working with the large volume of themes and examples.

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In addition to resource panels and interviews, other sources (e.g., internal or external customers) may furnish useful data. The HR professionals making the decision about the project plan need to consider whether the anticipated benefits of collecting additional data will justify the additional cost.

5. How should we balance research with intuitive approaches?

Research approaches to competency model building emphasize systematic data collection and analysis, and a priori decision rules about how much evidence is sufficient to warrant inclusion of competencies and behaviors in the model. Research approaches also emphasize identifying coherent constructs of personal characteristics that are conceptually and empirically separate from each other. The earliest competency models built by McClelland and his colleagues used a research approach. Traditional job analysis, as practiced by industrial psychologists, also uses a research approach.

The principal advantage of a research approach is the validity of the resulting competency model. A research approach can accurately identify the behaviors currently demonstrated by superior performers and the beliefs by jobholders and other subject matter experts about what is currently important to superior performance. Because of its validity, a competency model developed using a research approach can withstand potential legal challenges.

But research approaches are not as useful for identifying what will become important in the future, especially when only a few individuals in an organization have a clear strategic vision. Nor will a research approach generate a competency model that is linked to a leader's vision of where he or she wants to take the organization.

Intuitive approaches rely heavily on the judgment and insights of the model building team. There may be little, if any, data collection and analysis, and the results of the analysis do not determine what is included in the competency model. Instead, the model building team generates ideas about what to include in the model and, after discussion, reaches consensus on the content of the model. Intuitive approaches are driven more by values than by empirical results.

The main advantage of intuitive approaches is that they can produce competency models that include all of the elements that the model building team and upper management believe are important in the model. Intuitive approaches are also less expensive, since they do not require collecting and analyzing data.

The chief disadvantage of intuitive approaches is that they risk creating competency models that describe behavior appropriate for a desired future state, rather than for the current reality. In addition, the lack of methodological rigor in constructing the models makes them vulnerable to legal challenges.

Few competency models today are constructed with a pure research approach or with a pure intuitive approach. Most HR staffs want to collect and analyze data as part of the model building process. But they also want the freedom and flexibility to add competencies and behaviors to the model to ensure that it reflects the organization's values and strategic direction, and to demonstrate responsiveness to the concerns of key stakeholders. Finding the right balance between research and intuitive approaches depends on the values of the internal HR team, the preferences of external consultants (if they are involved), and the extent to which the team feels a need to be responsive to the desires of upper management and other stakeholders in the model building process.

One method for balancing research and intuitive approaches is to use a research approach to develop a draft competency model and then to review the model with key stakeholders. If one or more of the key stakeholders urges a change in the model, the internal HR team may decide to make the change (e.g., by adding a competency to ensure that the model is more closely aligned with the chief executive's values).

This method was used in building a competency model for managers of consultants in an information services consulting firm. When we reviewed the initial competency model with one of the senior executives of this firm, he suggested that we add a competency called "Managing Through Processes." The firm had grown rapidly through acquisitions and by hiring staff from many other organizations, and it needed to integrate and control this diverse talent. The consulting staff was being taught to manage projects using a few standard methodologies. The addition of the proposed competency, which had not been evident in critical interviews with outstanding performers, supported the organization's expansion strategy.

Another hybrid method involves using an intuitive approach to develop a prototype competency model and then collecting data and revising the prototype model based on analysis of the data. This methodology, developed by a colleague, Susan Ennis, was used in developing a leadership competency model for a large financial services company. The CEO of this company wanted to change the company's culture to ensure continued competitiveness in a faster-moving marketplace. In the future, this organization would need to develop products and services more quickly, to form more business partnerships with other organizations, and to demonstrate more teamwork and open communication.

The external consultants, working with a team of internal HR staff, used an intuitive approach to develop a prototype model that reflected the values and behaviors that leaders would need in order to implement the desired cultural changes. The intuitive approach involved reading speeches to clarify the CEO's values and strategic direction and helping the HR staff to articulate their own views of the current leaders' strengths and weaknesses. We integrated this information with our knowledge of generic competencies for senior leaders to produce an initial draft version of the competency model. The behavioral indicators for this model were mostly drawn from a set of generic competencies that we had distilled from our experience creating many other leadership competency models. Then, over a one-week period, we held a series of telephone conference calls with an HR team to revise and refine the prototype model. Since the prototype model had to be shared with the CEO and other senior leaders, it was critical that the model be credible. In addition, the HR team believed that the model should have no more than ten competencies.

After using a purely intuitive approach to develop the prototype model, we shifted to research to validate and refine the model, interviewing 12 outstanding senior managers. The HR staff selected a sample of high-performing senior managers who were also thought to demonstrate at least two of the competencies in the prototype model. Since one purpose of the interviews was to clarify the behaviors by which the prototype competencies were demonstrated, some of the interview questions were designed to elicit critical events involving demonstration of specific competencies that the interviewee was thought to possess. For example, if a senior manager was thought to possess the competency "Influence Skill," she might be asked to describe a situation in which she needed to get another person or group to provide resources or support

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for an initiative.

Another purpose of the interviews was to reveal competencies and behaviors that were contributing to effectiveness but were not part of the prototype competency model. For this purpose we developed several questions to elicit more general critical events. For example, one prompt was, “Tell me about a time when you believe you demonstrated leadership within the work unit that you manage.”

We tape recorded and transcribed the 12 interviews. We analyzed them by coding each interview for each competency and behavioral indicator in the prototype competency model, and for a set of additional generic competencies not included in the prototype. The coding enabled us to tabulate the frequency of demonstration of all of these competencies.

The results of the coding analysis led us to recommend some changes in the prototype model, including the addition of one competency: “Motivating and Energizing People.” The HR team, after much discussion, decided to include the new competency, even though this meant having one more competency than the desired ten in the final model.

6. What format of behavioral descriptors will best suit the application?

Much of the value of a competency model comes from its behavioral descriptors. There are three main options for HR staff to consider: (1) behavioral indicators, (2) evaluative competency levels, and (3) competency levels describing job requirements.

The majority of competency models use the first and simplest option, behavioral indicators. Behavioral indicators are descriptions of behaviors and thought patterns that are hypothesized to contribute to superior

performance. A competency’s definition represents an underlying ability or trait, and the behavioral indicators describe specific ways in which that ability or trait is demonstrated. For example, in a generic competency framework that I use in my consulting work, the competency, “Interpersonal Awareness,” has the following definition and behavioral indicators:

Interpersonal Awareness: The ability to notice, interpret, and anticipate others’ concerns and feelings, and to communicate this awareness empathetically to others.

- a) Understands the interests and important concerns of others.
- b) Notices and accurately interprets what others are feeling, based on their choice of words, tone of voice, expressions, and other nonverbal behavior.
- c) Anticipates how others will react to a situation.
- d) Listens attentively to people’s ideas and concerns.
- e) Understands both the strengths and weaknesses of others.
- f) Understands the unspoken meaning in a situation.
- g) Says or does things to address others’ concerns.
- h) Finds non-threatening ways to approach others about sensitive issues.

When behavioral indicators are used in a specific competency model, they are sometimes altered or written more specifically, to describe how the behavior is demonstrated in this job. For example, indicator (b) above was rewritten for use in a sales competency model:

- Notices nonverbal behavior and asks questions, when appropriate, to clarify its meaning.

Creating good behavioral indicators depends on conducting and analyzing critical event interviews with outstanding performers. Each behavioral indicator

is a theme derived from examples from several interviews.

Behavioral indicators can also be taken or adapted from a generic competency dictionary, which includes generic competencies and behavioral indicators previously identified in several competency models.

The second option for behavioral descriptors is to use evaluative competency levels. Under this option, several key dimensions are identified for each competency, and each dimension is ranked in order of effectiveness. The highest level describes outstanding performance, and the lowest level describes poor performance. Lyle and Signe Spencer used this approach to develop a generic set of competencies with levels. For example, one generic competency, “Interpersonal Understanding,” has two aspects: (a) depth of understanding of others, and (b) listening and responding to others. Listening and responding to others has these levels²:

-1	Unsympathetic
0	Not applicable or makes no attempt to listen
1	Listens
2	Makes self available to listen
3	Predicts others' responses
4	Listens responsively
5	Acts to help

Each level has more specific behavioral descriptors, which are too lengthy to reproduce here. But, as an example, the behavioral descriptor for Level 4 is, “Reflects people’s concerns, is easy to talk to; or responds to people’s concerns by altering own behavior in a helpful, responsive manner.”

When this approach is used, the levels form a behaviorally anchored rating scale. Whether this kind of rating scale improves the reliability and validity of

measurement is open to question, since behaviorally anchored rating scales have generally proved to be no more reliable and valid than other, simpler rating scales.

In my own work, I have found that rating scales with three or more levels for each dimension of a competency are too cumbersome. There are too many behavioral descriptions to read, when assessing someone on twelve competencies, each with two to four dimensions, with each dimension further broken down into four or more descriptors of different performance levels. Clients have found it more useful to specify only the highest and lowest levels, as in the following example of a rating scale used to assess a competency called “Personal Credibility:”

DEPENDABILITY. Has difficulty meeting project deadlines or delivering work when promised. Deliverables fall short of expectations.	1 2 3 4	Completes work when promised, even when this entails personal sacrifice. Often delivers value beyond immediate tasks.
FAIRNESS. Sometimes treats people unfairly. Demonstrates disrespect to individuals or teams during their presence or absence. Shows unwillingness to defend individuals.	1 2 3 4	Makes a special effort to treat everyone fairly and avoid favoritism; defends the interests and rights of individuals not present. Respected as an unbiased contributor.
TRUSTWORTHINESS. Is sometimes dishonest or less than forthcoming with people. Can be perceived as deceiving co-workers or clients through choice of words or actions.	1 2 3 4	Is consistently honest and forthright with people; respects confidentiality. Regarded as a highly trustworthy individual in whom clients confide

Creating behavioral descriptors in the form of evaluative performance levels is most useful when performance appraisal is planned as an immediate application. Once the competencies for the job are identified, the content for the rating scales can be determined by meeting with managers of persons in the target job. Key evaluative aspects for each competency can be discussed and identified.

A third option for descriptors is to create levels describing the extent to which a competency is required in a particular job. This alternative is most useful when the multiple competency models are being created within an organization and

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²Lyle M. Spencer and Signe M. Spencer, *Competence at Work*, (New York: Wiley, 1993), p. 39.

the HR staff need a way to distinguish the requirements of the different jobs (e.g., to help people within the unit plan career progression paths).

I used this approach in developing competency models for a variety of jobs in the commercial sales division of a manufacturing company supplying optical fiber for the telecommunications industry. The first step was to agree on a set of generic competencies, including both technical and non-technical ones, to describe the skill requirements for jobs in the commercial sales division. This was accomplished by reviewing, modifying, and adding to a generic competency dictionary. Next, I drew on the generic competency dictionary and other projects involving competency levels, to draft a set of levels for the competencies. Drafting the levels required first identifying several key dimensions for each competency and then writing behavioral descriptors of several levels. In this case, the internal HR project team wanted three levels specifying basic, intermediate, and advanced demonstrations of each aspect of each competency. The levels for one competency, “Energizing Others,” are shown below:

	A. Creating a Positive Climate	B. Energy and Enthusiasm	C. Fostering Teamwork
Basic	Develops a positive climate, marked by productivity and team spirit, in a small work unit of motivated professionals.	Serves as an effective role model for others, by demonstrating hard work and concern for excellence.	Builds teamwork in a work unit. Invites participation from all team members and values everyone's contributions.
Intermediate	Develops a positive climate in a medium-sized organizational unit, composed of several work units of motivated professionals and their managers.	Effectively uses own presence (enthusiasm and energy) to energize small groups.	Builds teamwork in an organizational unit composed of several work units. Fosters collaboration among work units within a department. Effectively resolves conflict.
Advanced	Develops a positive climate in a large organizational unit; is able to turn around a poor work climate.	Energizes large groups through the force of his/her personality; easily engages diverse groups (e.g., employees at all levels, customers).	Builds teamwork in a larger organizational unit composed of several departments. Develops team building skills in others. Fosters teamwork with other, outside work units.

As one moves from the basic level to the intermediate and advanced levels, the competency is demonstrated in larger groups and more challenging situations. The behavioral descriptions often target performance outcomes rather than specific behaviors demonstrated to achieve the outcomes.

In deciding which type of behavioral descriptors to use – behavioral indicators, evaluative performance levels, or levels describing job requirements – the most important consideration is how the model will be used. Sometimes, when a model will be used in multiple ways, more than one set of behavioral descriptors may be created. For example, behavioral indicators might be needed to support development planning, and evaluative performance levels to support performance appraisal.

7. How do we plan to accommodate additional, future competency models?

When competency models are needed in an organization with many different jobs, there are two basic strategies for model building: “one-size-fits-all” approaches and multiple model approaches. I will describe these two approaches as well as intermediate approaches.

The first basic strategy, one-size-fits-all, involves creating a single competency model with one set of competencies applicable to all jobs. Like most other competency models, a one-size-fits-all model usually comprises eight to fifteen competencies needed for effectiveness in a broad job category, such as all management positions. The competencies in such a model must be general skills, traits, and values, not job-specific skills.

The one-size-fits-all approach is often used when upper management wants to drive organizational change by sending a strong message about the values and skills needed for the future. This approach is

also used when upper management or HR prefers simple solutions, or when the HR staff want to quickly implement a program that will have broad impact.

The one-size-fits-all approach has several advantages. First, it provides a simple, clear message to everyone about what is important. Second, once developed, the model and applications based on the model are applicable to many employees. For example, one “360 feedback” instrument can be used with everyone whose job is included in the model. Finally, the competency model promotes the development of a common language for describing important skills and characteristics.

But the one-size-fits-all approach also has significant disadvantages. One-size-fits-all models often describe values that are espoused or wished for, rather than describing what it truly takes to be effective in a job. I have seen many organizations with a conspicuous lack of teamwork include a “Teamwork” competency in a one-size-fits-all model, even though superior performers are more likely to need political savvy and a “thick skin.” Another disadvantage is that employees may believe that the model does not really apply to their own job. They may become skeptical or even cynical about the model. Finally, one-size fits-all models are not as useful as job-specific models in guiding selection and development for a particular job.

The other strategy for developing models for people in a range of jobs is to plan to build multiple competency models from a common set of generic competencies. The first step is to identify a set of 25 to 35 “building block” competencies to be used for constructing all job models. In applying this strategy, I try to meet with senior management and HR staff to customize a generic competency dictionary for use in this organization. Customization often involves changing

some of the generic competency names and the language used in the definitions and behavioral descriptors, so that the language is consistent with concepts and terminology that are already used in the organization.

The next step is to hold a resource panel or a meeting with subject matter experts, to gather data to guide the decision about which generic competencies to include in the model for a particular job. Once the competencies for that job are identified, the panel can help select and modify behavioral descriptors from the generic dictionary, to customize the description of how each competency needs to be demonstrated in that job. This process is repeated for each job requiring a competency model. Each competency model includes a subset of the generic competencies and may also include unique, job-specific technical competencies.

The multiple model approach is most likely to be used when competency models are needed for many different jobs and when jobs have few features in common. This approach is especially useful when the planned applications include careful matching of individuals to jobs, for selection, career planning, and succession planning.

The multiple model approach has several advantages. First, because of its flexibility, the approach facilitates development of a set of competency models that encompass the jobs of all or most employees. Second, because the approach generates competency models tailored for each job, the models have high face validity and credibility. A third advantage of this approach is that it facilitates comparison of the requirements for different jobs – to design a compensation program or to plan career paths. When the organization needs to select staff, the multiple model approach helps identify which competencies are essential and

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desirable for a particular position.

The primary disadvantage of the multiple model approach is its complexity. For each job there is a different competency model, and the different models may generate a corresponding need for different competency assessment forms, selection interview guides, performance appraisal forms, and so on. The multiple model approach is likely to create administrative work for HR staff. To deal with this complexity, some organizations use software programs that help identify the competencies for a job and manage assessments and other HR applications based on the models. Another disadvantage of the multiple model approach is that because no competencies are common to all jobs, top management cannot use this approach to send a strong message about values and skills that are essential for the future.

Some organizations have adopted approaches that combine elements of the one-size-fits-all approach with the multiple model approach. These organizations typically identify a small set of core competencies, such as “Customer Focus” and “Initiative,” that apply to all jobs but supplement the core set with additional, job-specific competencies. The core competencies send a message about shared values for the future, while the additional competencies ensure that each competency model truly describes the requirements for that job. The main disadvantage of intermediate approaches is that they tend to result in competency models with larger numbers of competencies than would be the case using either the one-size-fits-all approach or the multiple model approach.

CONCLUDING THOUGHTS

Planning the development of competency models is an exercise in practical problem solving. There are alternative methods for collecting and analyzing data, for deciding what to

include in the model, and for formatting the model and its behavioral descriptors. The choices among the alternatives should depend on goals of key stakeholders, the needs of key users, the budget and time available to develop the model, and the preferred styles of the model building team.

What makes a good competency model? The model must meet the needs of its key users. Each competency should be conceptually coherent and different from the other competencies. The behavioral descriptors should be clearly and crisply worded. The model should also be parsimonious; including too many competencies and behavioral descriptors makes a model ponderous to read and use. Finally, a good model is often supplemented with components that will add value for an intended HR application.

SUGGESTED ADDITIONAL READINGS

Boyatzis, Richard E. *The Competent Manager: A Model for Effective Performance*. New York: Wiley, 1982.

Cripe, Edward J. and Mansfield, Richard S. *The Value Added Employee: 31 Skills to Make Yourself Irresistible to Any Company*. Houston: Butterworth-Heinemann, 2nd Edition, 2002.

Goleman, Daniel. *Working with Emotional Intelligence*. NY: Bantam Books, 1998.

Mansfield, Richard S. *Building Competency Models: Approaches for HR Professionals*. *Human Resource Management*, 1996, 35 (1), pp. 7-18.

Spencer, L. M. and Spencer, S. M. *Competence at Work*. NY: Wiley, 1993.