What is a Competency Model?

A competency is a specific, identifiable, definable and measurable skill or characteristic that is essential for the performance of an activity within a specific business or industry context. Some examples of competencies are safety awareness, critical analytical thinking, problem solving, communication and team work.

The first competency model was developed in the early 1970’s for the US Department of State by David McClelland and his colleagues of McBer and Company as an alternative selection tool for junior Foreign Service Information Officers. Later McBer and Company developed a methodology that is still highly useful today in competency model building and comprises of “focus on outstanding performers, use of behavioral event interviews and thematic analysis of interview data and distillation of the results into a smaller set of competencies described in behaviorally specific terms”. In the last 30 years this technique has gained importance as an integral practice in human resource management.

Based on the US Department of Labor’s (DOL) framework, the competency model can be described as a pyramid consisting of a hierarchical set of tiers. The pyramid is divided into 3 main blocks of Foundational, Industry Related and Occupation Related competencies. Each of these blocks is made up of tiers which consist of a set of competencies that represent the skills, knowledge and abilities essential to be successful in an occupation in the industry the model represents.

Starting from the base, the tiers cover competencies that are common to several occupations and industries. As we traverse up the pyramid, the competencies become industry and occupation specific. It is important to note that the above picture does not suggest that this is a sequential model i.e. one needs to have all the below competencies in order to posses / develop the higher level competencies. The model is constructed in a bottom-up approach using a combination of research, data collection and analysis, focus groups and case study interviews.
Uses of Competency Models

Competency Models benefit a wide array of users; as a standard set of skills that can be used for recruiting, profiling jobs, evaluating employees and designing academic and professional certification programs. They serve as a bridge between educators, businesses and other stakeholders who are invested in preparing students and workers for today’s workplace challenges.

Competency Models can be used by employers as a useful selection and professional development tool. It can assist HR staff match specific skills and work requirements to different jobs during selection, promotion, career path development and while developing training programs for the organization. It can help to assess performance of individuals in their jobs as well as in their roles of managers, direct reports, customers and team members. It can also be a means for businesses to communicate their performance expectations to their workers.

Competency Models can serve as a measure of the gap between employer needs and the offerings of the current education and training delivery system. Contents of existing coursework can be reviewed and mapped against the tier competencies and a crosswalk can be created and “gaps” can be identified. As education or training providers evaluate existing programs or design new ones, the Competency model can serve as a benchmark, resulting in addition of courses that will match workplace requirements and trends.

Training providers can also use competency models to develop industry-validated certifications. Acquiring such a certification establishes that the graduate of the particular training program has demonstrated mastery in the competencies as stated in model for that industry or sector.

Competency models work as a guide for Workforce Investment Boards and One Stop Career Centers to match job requirements and skill sets determined by employers to potential candidates. In this way an even larger group of individuals such as in-school youth, out-of school youth, dislocated workers, current workers and special needs populations are serviced, thus increasing the talent pool of available workers.

As these key partners work together by sharing assets and resources, the competency model provides a good guidance for government investments in workforce preparation strategies within a region or the state.
Best Practices

A great deal of research has been done to design competency models by both the private sector and government agencies, to address their respective skill needs.

The Washington State Board for Community and Technical College has developed the Energy Industry Skill Standards. The goal of this project is to specify the critical work functions, key activities, performance indicators and knowledge, skills and abilities an individual needs to succeed in certain energy-related occupations. The result of this project will support the development of new curriculum and the strengthening of existing curriculum in programs leading to certain careers in the energy industry.\(^7\).

The Center for Energy Workforce Development (CEWD) utilizes the Competency model framework defined by US Department of Labor, as a tool educators, workforce investment professionals and businesses to articulate the skills required to perform the work so that effective screening of candidates can occur and training courses can be developed to prepare candidates for work in the industry.\(^8\).

The Utah State Office of Education makes use of the Technology & Engineering Pathways. The mission of technology education in Utah is to enable students to understand, design, produce, use and manage the human-made world, in order to contribute and function in a technological society.\(^9\).

Mid Continent Research For Education and Learning (MCREL) has created a subject standard that provides teachers and administrators with valuable information about proven, effective approaches to the challenges in education today. By building on research to solve specific problems, MCREL develops widely acclaimed PreK-16 educational products that are used in classrooms nationally and internationally to help educators maximize student learning.\(^10\).