

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, team work etc.

The first competency model was developed in the early 1970s 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 management⁷.

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 competencies**, **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.



Source: www.CareerOneStop.org/CompetencyModel

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 possess / 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, 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 at 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/ 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 trends².

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 sector⁸.

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 the skill needs of these entities.

McMurtrey et al conducted a study that investigated the most critical skills for IT professionals. They created taxonomy of skills that were divided into four areas: Core Knowledge, Technical Proficiency, Business Expertise and Personal Attributes. The conclusion of their study was that both technical and non-technical skills were important for success in this profession particularly in entry-level jobs¹.

The Illinois Occupation Skill Standards guides workforce preparation programs and employers to establish the skills and standards necessary for a job in the IT cluster. The components of the skill standard are: Performance Area, Performance Skill, Skill Standard, Performance Elements and Performance Assessment Criteria. The intent of this program is to promote education and training investment as well as to ensure the supply of a trained workforce⁹.

The Nevada Department of Education in collaboration with local academic institutions and businesses developed the Information Technology skill standards. The report identified seven career clusters within the IT field and defined eleven essential core IT skills essential to the job. The purpose of this report is to prepare current students to attain the skills needed to meet the future demands of the IT industry through secondary and post secondary (9-14) IT programs¹⁰.

In Georgia the competency-based curriculum framework for IT outlines core employability skills for IT occupation in collaboration with businesses and educators. The main objective of this initiative is to ensure that curriculum reflects the demands of the workplace and is well positioned to prepare students to meet these needs for success in their future jobs¹¹.

The *itWORKS.OHIO* report is the career field technical content standards documents for information technology. It serves as the curriculum framework for Ohio College Tech Prep and Career-Technical Educational programs in IT. Used in collaboration with other programs in the state, this document forms the basis for enhancing and expanding career-technical education and post secondary degree programs in IT¹².

Sponsored by the National Science Foundation, the National Workforce Center for Emerging Technologies developed a skill standard report for Information Technology jobs in 1999 and later updated it in 2003. Skill standards were developed for eight main career clusters within IT that represented a broad range of jobs. This report was targeted to be of use to educators, human resource professionals, training certification and assessment developers, students and job seekers as well as workforce researchers².

