

Criteria for Competency Models: A List of Best-Practice Criteria to be used in Academia and Industry

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Kurzfassung: Globalization, the adoption of digital technologies and demographic development lead to increased competitiveness in today's market and make competent employees a valuable resource. Competent employees are valuable, because it is believed that their competence is displayed in higher product and service quality. Competency models are used in all different HR processes, including hiring decisions, promotions and terminations. It is of fundamental importance to unite research and organizational knowledge and thus, create one common procedure for the development of competency models across all industries. This paper contributes to the literature by showing the discrepancies between the different definitions of competencies and by providing a list of best-practice criteria for the development of competency models. However, there needs to be more research on the definition of a competency and which constructs are related to or a part of competencies.

Schlüsselwörter: competency, competency models, best practice, criteria, HR processes, personnel management

Competency models can be used in personnel marketing, personnel selection, personnel development, career crafting and when looking for a successor. Multiple competency models already exist and are used in different research areas including psychology, pedagogy and business. The use of competency models in organizations is also gaining popularity (Kauffeld 2006). Globalization, the adoption of digital technologies and demographic development lead to increased competitiveness in today's market and make competent employees a valuable resource. While the word "competency" is used in all different contexts, there is no common definition (Blumberg & Kauffeld 2021; Erpenbeck & Rosenstiel 2003; Erpenbeck, Rosenstiel, Grote & Sauter 2017; Megahed 2018). Different research areas target the concept of competency differently, which leads to different competency models. In addition, corporate companies also use their own competency models, which are based on company data and often don't satisfy statistical requirements. There is no common procedure for the development of competency modeling (Megahed 2018) and the few paper which addressed best practices for competency modeling were published over a decade ago (Campion et al. 2011; Soderquist et al. 2010; Stevens 2013). It is questionable how many competency models published over the last ten years have taken these criteria into account. Furthermore, the research outlined above often had the goal to define best practices for the industry. It is of fundamental importance to unite research and organizational knowledge and thus, create one common procedure

for development of competency models across all industries. Competency models are used in all different HR processes, including hiring decisions, promotions and terminations (Kauffeld & Paulsen 2018). These decisions need to be transparent, traceable and just. A common procedure for the development of competency models holds researchers, companies and individuals accountable and functions as a quality control. If competency management should be a valid approach in personnel management in the future, it needs similar quality stamps as formal qualifications to ensure stability and safety.

A thorough literature review has been conducted to identify relevant criteria for competency modeling. It was difficult to perform a proper systematic review, as most articles concerning competency modeling, do not address criteria specifically. Keyword searches do not identify articles which have addressed criteria in the method section and little research has been conducted solely targeting criteria for competency modeling. Furthermore, competency models used in corporate companies are often not published in peer-reviewed journals and can only be found in the company's website, yet are important to be included to identify relevant practice criteria.

The different criteria were clustered and divided into three different levels. The different levels are relevant from a hierarchical perspective, as we attempt to start with a competence, then include several competencies into a model and lastly, aim to satisfy research and practice requirements. The following levels were identified: (1) competency, (2) competency model, (3) practice and theory. The competency level concerns criteria which address the definition and anatomy of a competency, before they are added to a competency model. The competency model level concerns criteria which address the creation of a competency model (i.e. psychometric criteria, structure, amount of competencies included in a model, ...). Lastly, the practice and theory level includes criteria which are explicitly relevant for practice and concern topics such as usability, IT implementation and/or acceptance to name a few and criteria which address very theoretical and statistical issues. Research and practice criteria are joint because competency models need to fulfill research criteria to even be considered in practice. Psychometric criteria, especially, should not be weighted lightly. Statistical criteria have to be satisfied before further criteria such as fairness can be guaranteed. The next step was to group similar criteria within a level. Grouping similar criteria occurs without hierarchical aims and solely attempts to cluster criteria that address the same or related issues. Based on the different levels and clusters a final list of best-practice criteria to be used in academia and the industry was created.

However, there needs to be more research about the definition of a competency and which constructs are related to or a part of competencies. Much of the literature looks at KSAOs, which include knowledge, skills, abilities and other characteristics. Other characteristics vary across papers and include values, personality traits, intelligence, attitudes and many more. The question that arises is whether competencies can be understood as a meta-concept, including all the constructs named above or if the definition has to be narrowed and made more precise.

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