

A multi-dimensional scale development for the digital workforce competencies: an exploratory study

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The need for a well-equipped, multi-tasking digital workforce emerged into the limelight post-introduction of the “industrie 4.0” technologies. Initially proposed to improve the effectiveness and competitiveness of the German manufacturing companies, but quickly spawned across the globe, transversely affecting and bringing about fundamental business changes in all sectors, including the Information Technology (IT) sector. Despite the requirements of multi-competent IT professionals, the digital workforce competencies construct has not been thoroughly researched, nor has a scale establishing the basic threshold of required competencies been developed. Using the data from face-to-face expert interviews, followed by validating the scale on three different sample sizes, we aim to establish a competency scale required for recruiting IT/ITES engineers. Applying the extended Bloom’s Taxonomy theory, we established a four-dimensional scale of the construct and validated a scale of 26 items. The scale has the potential to be useful for the employers of the IT/ITES industry for employing the freshers in the industry as well as for the students who seek employability in the IT/ITES industry. It is also helpful for the policymakers and educators of higher education institutes who engage in imparting knowledge to B.Tech students, thus contributing to preparing a multi-tasking workforce that is industry-ready that helps mitigate the unemployability gap within the industry.