Proposals for increasing benchmarking data quality of projects measured in COSMIC

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Abstract

With the release of the COSMIC (Common Software Measurement International Consortium) measurement method version 3.0 in September 2007, the COSMIC FSM (Functional Size Measurement) method has reached a stable and mature status. Almost 10 years after its inception, COSMIC has proved itself to be a valuable functional sizing method for a broad range of different software types and domains, including business applications, telecommunication software, real-time systems, and hybrid of these, with any kind of logical architectural structure.

Many organisations worldwide have already adopted the method, now known briefly as COSMIC Function Points, in their operations; still a significant lack of external benchmarking data is perceived in the industry. For instance, organisations that are measuring in COSMIC have less projects to benchmark themselves to, within the well-known ISBSG (International Software Benchmarking Standard Group) benchmarking database (currently at version 10), with respect to older generation measurement methods and measures, as IFPUG or NESMA Function Points.

In this paper the COSMIC Benchmarking Committee, lead by the authors, will be introduced to the public and its goals and intents will be outlined. Topics covered in the paper are, among others, suggestions to improve the current ISBSG data collection questionnaire(s) for better usage, possibly higher data collection accuracy, and/or for compliance to the recently-issued topics of levels of decomposition and levels of granularity, and the possibilities to convert old generation measures (as IFPUG and COSMIC) to COSMIC measures for practical project benchmarking and estimation purposes.