



IPS114: Creating a better world using composite indicators

CIDI Approach to Individual-Based Composite Indicator: Project Management Case Study in Serbia

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Abstract:

The successful performance of scientific-research organizations (SROs) implies the integration of efficient strategic project management. A crucial activity within strategic project management is the evaluation and assessment of individual projects. The ranking of the individual projects can be observed as an important part of this process. In this research, we uphold the Individual-Based Composite Indicators, by proposing the specific methodology for ranking individual projects. The methodology is based on the Composite I-distance Indicator (CIDI). This research was part of a broad national survey, which was empirically conducted in SROs in Serbia. Among others, the survey contained 75 questions regarding the project characteristics and performance, which were part of 13 different project metrics. The data on 187 projects were collected within the survey. To rank the projects according to their performance, we have chosen four performance metrics: Project portfolio, Achievement ratings, Efficiency, and Results. These were used as the input variables to create an Individual-Based Composite Indicator to rank the given projects. The specific weights for these input variables were data-driven, according to CIDI methodology. Our findings show that the ranking of individual projects was mostly influenced by Achievement ratings and Efficiency. The top-ranked projects were mostly carried out on Faculties, within the scientific areas of Technology and Engineering Sciences, as well as Science, Mathematics, and Medicine. Future study directions could ecomaps the application of different methodologies to create the specific Individual-Based Composite Indicator as well as the expansion of the study to different countries and economies. The presented analysis can help strategic and project managers of SROs to set adequate strategic guidelines, in order to improve the performance of projects and their scientific research results.

Keywords:

Strategic project management, SROs, composite indicators, ranking, I-distance, CIDI