

The Department of Civil and Environmental Engineering at the University of Houston presents...

CIVE 6111 Graduate Seminar

Project Definition Rating Index (PDRI)



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2:45pm-3:45pm

Classroom Business Building (CBB) - Room 122

Zoom: <https://uh-edu-cougarnet.zoom.us/j/96748733879>

Abstract

Managing a single project is hard work. Managing an entire portfolio of projects is harder, especially in terms of resource, cost, and schedule management. As a widely adopted Front-End Planning standard, the Project Definition Rating Index (PDRI) facilitates project appraisal by stipulating key project elements, which are rated by stakeholders in terms of scope definition. PDRI has the potential to deliver significant intelligence and actionable insights to ease and enhance a portfolio manager's decision-making process. By providing portfolio managers with the best information possible they can make informed judgments of which project (s) requires the most effort and greatest priority. By providing insight into the areas that have the greatest influence on the portfolio, the value of the portfolio can be maximized. The PDRI scoring framework enables the project team to pool their expertise in a workshop format to identify and understand the cross-functional impact of project risks. The data collected during PDRI sessions provides an ideal structure to apply big data analytics allowing an analyst to mine historical PDRI data for constituent elements. Robust methods can be developed based on these insights to support capital project organizations in proactive strategic planning. Such methods include the implementation of specific processes, information technology systems, and training to fill existing capability and knowledge gaps that are common within the construction industry.

Bio

Dr. Mahdi Safa serves as a Senior Lecturer in the Department of Civil and Environmental Engineering (CEE) at the University of Houston. He presently pursuing research on smart infrastructure, maritime/coastal/port management, and integration of management fundamentals and principles, interdisciplinary approaches, and emerging technologies (e.g., data analytics, high-performance computing, automation, 3D printing, robotics, and networked sensing) to address new opportunities such as smart asset management systems and multimodal transportation. Mahdi has also served as an Assistant Professor of Construction Management at Lamar University and Sam Houston State University. Mahdi has worked in the field of technical construction project management in both academia and industry. This perspective has provided him with a broad view of this contemporary topic. Prior to joining academia, Mahdi started his professional life as an engineer and progressed to the level of Senior Manager. Mahdi has been working in the construction and manufacturing fields for 15 years with experience in a variety of construction and maintenance support activities (Mechanical, Electrical, Structural Trades) with profit and loss responsibilities. Mahdi is qualified in most areas of construction management. He has more than 50 publications on construction management, leadership, global business skills, and construction supply chain management. Through his professional life and research experience, Mahdi has grown to value exceptional communication among technical disciplines and has focused on taking an interdisciplinary approach in his research. Tomorrow's technology will be shaped by such applications and academia will evolve around institutions that facilitate interdisciplinary research. His participation in large-scale collaborative projects provide him with the knowledge and vision to contribute to such an environment