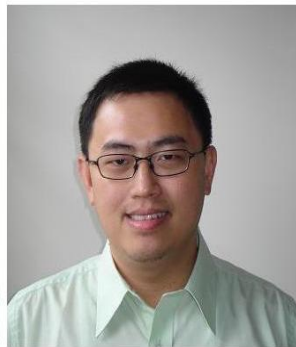


Abstract

Improvement of Scheduling Techniques in Complex Projects

Scheduling techniques such as Critical Path Method (CPM), Program Evaluation and Review Technique (PERT) and Gantt chart have been used extensively in industries for project scheduling. In this presentation, characteristics of each scheduling technique are discussed along with the introduction of a new way of managing the scheduling in complex projects, called Design Structure Matrix (DSM) technique. Layout, interpretation, and data types that can be managed by DSM are discussed in details. A case study of the DSM implementation is presented.

Short Bio:



Indra Gunawan is Associate Professor in Complex Project Management and the Director of Project Management Program in the Entrepreneurship, Commercialisation and Innovation Centre at the University of Adelaide.

He received his PhD in Industrial Engineering and MSc in Construction Management from Northeastern University, USA. Prior to joining the University of Adelaide, he was a program coordinator for Maintenance and Reliability Engineering at Monash University. Previously he has also taught in the Department of Mechanical and Manufacturing Engineering at Auckland University of Technology, New Zealand and worked as the Head of Systems Engineering and Management program at Malaysia University of Science and Technology (in collaboration with the MIT, USA).

His current research interests include system reliability modelling, maintenance optimisation, project management, applications of operations research, and operations management. He is actively involved in the Asset Management Council, a technical society of Engineers Australia.