IEM
The Institution of Engineers, Malaysia

WEBINAR

QUANTIFYING RISK IN PROJECT DECISION MAKING

Project Management Technical Division

Project Managers utilises a myriad of tools in executing projects to successful completion. However, Project Management of engineering projects is a field that, unlike pure engineering fields, is immersed in uncertainties and risks that that greatly affects the success of projects. Projects stakeholders do not have the benefit of absolute project parameters to plan and make quality decisions thus making it challenging for them to ensure a good project outcome.

A risk is a negative event that has yet to occur having measurable properties of likelihood and impact levels. In the Risk Management process, all risks can be measured qualitatively for the purpose of risk mitigation. However, some risks can be measured quantitatively via the Monte Carlo simulation, a stochastic analysis process, which can be used as a tool to facilitate project decision questions such as:

- What is the probability of the deterministic baseline project completion date and cost with the identified project risks? Should we continue with this project?
- What is the project completion date and cost of a project for a fair chance (i.e. 50% probability) of success with identified project risks?
- How much contingency should we add on to the project baseline schedule to increase its probability to 80%?
- If we use a 70% project cost probability, how does it affect the bottom line?
- Given a choice of several projects to invest in, which project should we select given their respective risk parameters?
- Assuming the technical specifications of a few equipment brands are acceptable, how do we perform the selection based on CAPEX, equipment lifespan and other lifecycle costs based on known risk parameters of equipment operations?
- How do we prioritise risks for mitigation? Which risks have the significant impacts?

This objective of this webinar is to provide an appreciation to the participants of the benefits of using a stochastic analytical process to quantify risks when making fundamental project decisions which are usually done during project inception.

SPEAKER

Ir. Faizal A. Sanusi

Ir. Faizal A. Sanusi has served the Project Management Technical Division in IEM since 2005, including as its Chairman in 2012.

He has a BSc in Civil Engineering from the George Washington University, USA in 1988 and an MBA from Open University, Malaysia in 2005.

His engineering and project management experience spans from the building industry to the oil & gas industry since he began his career 30 years ago. In his career, he has performed various roles ranging from design engineer, resident engineer, project engineer and project manager for a myriad of engineering projects – civil Infrastructure works, commercial buildings including an intelligent office institutional building, gas processing plants, offshore gas pipeline installations and offshore gas producing platforms. He also challenged himself as an entrepreneur in the business of facilities management for oil and gas on-shore installations and has provided trainings in various project management topics to the Royal Malaysian Navy and private commercial property developers.

Some of his notable career highlights as follows:

- Project Advisor and Project Services Manager for Oil & Gas Exploration & Production MNCs
- Project Services Division Head for a local Offshore Oil & Gas Service Provider
- Project Manager for the Malaysian Securities Commission 4 star intelligent building project
- Director of a local Facilities Management company overseeing Oil & Gas O&M projects

While he is currently the Principal Consultant of Centaur Project Controls Sdn. (a Project Management consulting firm), he mainly indulges his time in creating project management microapps to aid him in his profession.

Saturday I 27 June 2020 I 2PM - 4PM

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