



## Engineering the Project Manager

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**THERE** is a fixation about how we engineers apply our knowledge and training to our work – and logically so, as it is our work that defines us. The accumulation of all engineering output is the intellectual material that is to be realised into the desired system or project where a specific set of knowledge and skills is required to successfully deliver the project. While it is common for someone of a certain engineering discipline to manage a project of the same discipline, he or she may not necessarily be the best project manager for the job.

There are some differences that I can think of which mark the difference between this and other engineering disciplines. The first that comes to mind is that the project manager has to realise that he is no longer an “engineer”. His performance depends on the performance of the project team which can even extend to the performance of the individuals executing the ground work. Hence, the ability to effectively and strategically plan the project, acquire the right resources and manage and/or lead the resources to achieve the project objectives is a key element of a project manager.

Problem solving and decision making across multi-disciplines are other attributes required. In some cases, the ability to make a quick decision despite not having adequate data, is required (which can be more often than not as projects are time sensitive). While other disciplines have well defined boundaries that are visible on drawings, calculation sheets and design codes, a typical project has several known variables of unknown values (e.g. economic conditions, socio-political situations, market conditions, weather, availability of labour, etc.) which can impact a particular project in terms of schedule and costs and, in some cases, unknown variables of unknown values.

The switch from engineer to project manager is not something inherent in an individual, but it can be achieved with knowledge and, in my opinion, lots of practice. For those aspiring to be project managers, set the pathway to achieve the milestones in attaining both knowledge and experience. With the above said, the Project Management Technical Division has and will continue to facilitate this for the benefit of IEM members.

In this month's **JURUTERA**, we hope readers will find articles of interest and gain some new insights into the subject of project management. ■

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Ir. Faizal Abdullah Sanusi is currently the Chairman of the Project Management Technical Division in IEM after serving on this committee for the past 7 years. He has performed engineering and project management roles in the Oil & Gas (upstream and downstream projects) and building industries for the past 25 years. Ir. Faizal also provided Project Management training for PETRONAS Management Training Institute (PERMATA), local property developers and the Royal Malaysian Navy. He also participated in several talks to local educational institutions such as Universiti Malaya, UNITEN and industrial institutions such as IEM and PML. He holds a B.Sc. Civil Engineering (Wash. D.C. 1988) and an MBA (Malaysia 2008).