

Talk on Project Learning for Sustainable Innovativeness and Competitive Advantage

PROJECT MANAGEMENT TECHNICAL DIVISION



by Ir. Lee Boon Chong

THE talk entitled “Project Learning for Sustainable Innovativeness and Competitive Advantage” was organised by the Project Management Technical Division (PMTD) of IEM on 20 November 2010 at Wisma IEM, Petaling Jaya. The talk was delivered by Sr. Dr Zulkiflee Abdul Samad, who is a Senior Lecturer in Project Management at the Faculty of Built Environment, University of Malaya.

Sr. Dr Zulkiflee is an academician, consultant and professional, with about 15 years of experience in project management in both the construction industry and academia. He is also currently the Head of Department of Quantity Surveying. The session was chaired by Ir. Lee Boon Chong. A total of 63 participants attended the talk. The talk covered the following four main areas.

KNOWLEDGE AND KNOWLEDGE MANAGEMENT CYCLE IN PROJECTS

Sr. Dr Zulkiflee first described the meaning of explicit knowledge, tacit knowledge and knowledge management. Knowledge management cycle in project is defined in four sequential steps, starting from data collection, processing data into information, transforming actionable information into knowledge and embedding knowledge into individual and organisational processes that add value to projects.

PROJECT AND ORGANISATION LEARNING

The speaker then explained that, although projects were extremely suitable for learning due to their time limitation, resource constraints, great complexity, diversity and risk propensity, mistakes might be repeated in new projects and some efforts might be redundant.

Very often, the end of the project means the end of the learning process. The purpose of project learning is centred on project risks, project competencies, sustainable innovativeness and competitive advantage.

Categories of knowledge that can be derived from projects consist of technical knowledge, procedural knowledge and organisational knowledge. By systematically documenting the most effective problem-solving mechanisms and the most serious mistakes that were made in the course of a project, organisations can then reduce project risk, develop project competencies and build up sustainable innovativeness and competitive advantage.

PROJECT LEARNING - CULTURAL IMPACT, METHODS, IMPEDIMENTS AND KEY SUCCESS FACTORS

Project learning is described as a set of actions used by the project team to create and share knowledge within and between projects. It consists of operational learning, organisational learning and managerial learning. The speaker described the link between project learning and organisation learning. Cultural impact was then explained in terms of knowledge comparison between an individual and a group, universal and circumstantial, low context and high context, and theoretical and pragmatic.

Three methods of project learning were outlined, namely, human-centred, process-based and content-based. Examples of impediments to project learning are cultural diversity, project nature and communications. Project key success factors were discussed, including institutionalising the lessons learned process, having continuous project review,



Sr. Dr Zulkiflee sharing his knowledge and experience



Members listening attentively



IEM's appreciation to Sr. Dr Zulkiflee

gaining top management support, encouraging employee participation and using ICT to create knowledge space.

FOSTERING PROJECT AND ORGANISATIONAL LEARNING

Sr. Dr Zulkiflee gave an outlook on what an organisation could and should do in order to create an effective learning environment and its potential impact on organisational learning from projects. He wrapped up the presentation by proposing three methods for fostering project and organisational learning, *i.e.* integrating project learning into project management methodology, establishing knowledge enablers, and moving towards the ideal of a learning organisation. The talk ended with a very active Q&A session. ■

Talk on Waterproofing Solutions for Basement and Underground Structures

CIVIL AND STRUCTURAL ENGINEERING TECHNICAL DIVISION

THE Civil and Structural Engineering Technical Division organised an evening talk on 22 September 2010 on the solutions to waterproofing for basement and underground structures. The talk was conducted by Gordon Sprouse of Fosroc, United Kingdom, and was attended by 60 participants.

Sprouse advised that the design considerations must first be looked into before selecting the appropriate waterproofing system for an underground basement. He informed that, in the UK, there are two documents being used as reference to assist in specifying the most appropriate waterproofing system, *i.e.* CIRIA Report No. 139 (Water-Resisting Basement) and BS 8102:2009-Protection of Below Ground Structures against Water from the Ground.

The CIRIA report complements BS 8102, which adopted the use of different grades based on the use of the basement. For example:

| Basement Grade | Description/Basement Usage |
|-------------------------------------|--|
| Grade 1 (Basic Utility) | Car parking, plant rooms (excluding electrical equipment), workshops |
| Grade 2 (Better Utility) | Workshops and plant rooms requiring drier environments; retail storage areas |
| Grade 3 (Habitable) | Ventilated residential and working areas including offices, restaurants etc, leisure centres |
| Grade 4 (Special) | Archives and stores requiring controlled environment |

The basement use and grades should be agreed upon by the owner(s) and consultant(s) before selecting the appropriate waterproofing system.



by Ir. Boone Lim

Sprouse mentioned that there are three main types or methods to provide waterproofing protection to the basement. He explained each of them in detail:

Type A - Tanked (*e.g.* membranes and coatings)

Type B - Integral (*e.g.* waterproofing admixtures)

Type C - Drained (*e.g.* HDPE panels)

He informed that CIRIA Report No. 139 provides a table to guide in the selection of waterproofing system:

| Basement Grade | Suggested Protection Method |
|----------------|---|
| Grade 1 | Structure alone or Type A or Type B or Type C |
| Grade 2 | Structure + Type A or Type B or Type C |
| Grade 3 | Combined such as Types A and B or Types A and C |

Finally, he advised the engineers to look into the detailing of each waterproofing system that had been selected as many waterproofing failures were due to lack of effort in detailing.

Sprouse then presented a case study on a recent project he was involved in and highlighted the uniqueness of the project and the detailing issues for that waterproofing system.

The evening talk ended with a lively discussion. Ir. Boone Lim, the chairman, thanked Sprouse and presented him with a token of appreciation. ■