ABSTRACT

In the wake of the economic crisis, IT companies being totally dependent on project-based business, need to find ways to score higher profit with minimum resources usage. Measuring business performance and presenting the resulting information for action is one aspect of achieving business success. This research has revealed that organization's performance can be measured not only by analyzing the organization's business units but also by analyzing the projects produced by each business units. Efficiency business model can also be formulated by using data related to each undertaken projects.

In-Fusion Solutions Sdn. Bhd., a company specializing in providing e-learning solution has been used as a case study. In this research, the efficiency measurement model for products produced by organization has been developed based on a non-parametric technique, called Data Envelopment Analysis. The model optimizes a ratio of multiple weighted outputs to a multiple weighted inputs, where the efficient unit will have a score of one, and the inefficient unit will have a score less than one. The model is simple and practical in implementation. It is hope that the projects which act as the decision making unit can later be used to determine the efficiency of the company department/unit that housed the projects. Projection for inefficient projects has also been provided and management should find a way to reduce cost of labor, material and project duration in details without disturbing the production of output.

To elaborate more on the real project undertakings by the company, a case study on Fusionware, a subsidiary of In-Fusion Solutions Sdn. Bhd. in India has been developed. The case study focused on aspects dealing with projects from TWICE Group, a parent company of Fusionware in India, which undergoes development process in 2010. After almost two years being established, Fusionware has decided to grow and being independent from the parent company. The case study highlights the real life challenges in dealing with IT projects, especially when juggling with the project resources such as labour expertise, material and timeline to complete the projects.