

Systematic Assessment Through Mathematical Model For Sustainability Reporting In Malaysia Context

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Abstract. Sustainability assessment have been studied and increasingly recognized as a powerful and valuable tool to measure the performance of sustainability in a company or industry. Nowadays, there are many existing tools that the users can use for sustainable development. There are various initiatives exists on tools for sustainable development, though most of the tools focused on environmental, economy and social aspects. Using the Green Project Management (GPM) P5 concept that suggests the firms not only needs to engage in mainly 3Ps principle: planet, profit, people responsible behaviours, but also, product and process need to be included in the practices, this study will introduce a new mathematical model for assessing the level of sustainability practice in the company. Based on multiple case studies, involving in-depth interviews with senior directors, feedback from experts, and previous engineering report, a systematic approach is done with the aims to obtain the respective data from the feedbacks and to be developed into a new mathematical model. By reviewing on the methodology of this research it comprises of several phases where it starts with the analyzation of the parameters and criteria selection according to the Malaysian context of industry. Moving on to the next step is data analysis involving regression and finally the normalisation process will be done to determine the result of this research either succeeded or not. Lastly, this study is expected to provide a clear guideline to any company or organization to assimilate the sustainability assessment in their development stage. In future, the better understanding towards the sustainability assessment is attained to be aligned unitedly in order to integrated the process approach into the systematic approach for the sustainability assessment.

