

Value-Based Performance Excellence Model: Case Studies at Malaysian Technical Universities

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Abstract: This article discussed the case studies of performance excellence model at Technical Higher Education Institution (HEI) in Malaysia. The model integrates core values as performance indicators in six performance criteria i.e. leadership, culture, productivity focus, employee focus, stakeholder focus and performance results. 400 questionnaires were distributed to all technical universities and resulted 240 questionnaires being returned. Multivariate statistical analysis through Structural Equation Modeling (SEM) was used to analyse the model by using *Maximum Likelihood* (ML) estimation and yielded an adequate fit statistics for normed chi-square = 2.578, CFI = 0.916, TLI = 0.909 and RMSEA = 0.086. In addition, Bayesian estimation was further employed to cross-validate and support the modeling result obtained from ML estimation. The Bayesian SEM indicated that the results produced from ML estimation is almost similar and acceptable. In conclusion, the Performance Excellence Model for Malaysian Technical Universities is admissible as it has been empirically tested. This performance excellence model could be used for HEI especially the technical universities to empower intangibles performance measurement through value-based indicators.

Key words: Bayesian estimation, core values, performance criteria, value-based performance excellence model.

INTRODUCTION

In many organizations, the things that are measured are considered important while the things not measured are generally considered of less importance (Neely *et al.*, 1996). Previously, performance measurement focused on measuring tangible things like return on investment (ROI), cash flow, increase in revenue and profit. Recently, the attention and focus have changed towards measuring the intangibles as part and parcel of performance measurement in the organisation. This includes quality, customer satisfaction, safety and values. In view of this, organisations realised the importance of integrating both the financial and non-financial performance indicators for total organisational excellence (Mokhtar *et al.*, 2003b); particularly in Higher Education Institution (HEI) as universities are also competing to each other in terms of research, publication, endowment etc.

This research is a part of a larger study of Value-Based Total Performance Excellence Measurement (VBTPEM) (Mokhtar *et al.*, 2003b); that are conducted at HEI in Malaysia that concentrate on 6 performance criteria as mentioned previously and named as Value-based Performance Excellence Model for HEI. Therefore, this study would gauge the instruments developed through hypothesised measurement model of Value-based Performance Excellence Model for HEI by using Structural Equation Modeling (SEM). Specifically, the objective of the study is to (a) evaluate the value-based performance excellence model in technical universities in Malaysia using by using Structural Equation Modeling (SEM) through *Maximum Likelihood* estimation and (b) further enhanced through cross-validation by using Bayesian estimation as a comparative analysis.

Many Business Excellence Models seemed not to focus on the effect of performance rather on quality only (Mokhtar *et al.*, 2003b; Nooreha *et al.*, 2001; Fazli, 2004; Arawati, 2000). Therefore, TPTEM model was developed in 2001 by Nooreha *et al.*, (2001) and empirically tested by Fazli (2004) in a business environment. As an extension of the previous model, core values are said to be the driver in an organisation so as to withstand and excel the rapidly changing and competitive market. Following this, core values are attached and embedded in all criterias as in the Total Performance Excellence Model in Figure 1. Values have been given a considerable attention particularly in the field of leadership (Russel, 2001). It is undoubtedly that values are defined differently to individuals and in organisation. However, common values that are apostle and common must be

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