
Editorial

Bruce Chien-Ta Ho

Institute of Electric Commerce, National Chung Hsing University,
250, Kuo Kuang Rd, Taichung, Taiwan 402
Fax: 886-4-22859497 E-mail: bruceho@nchu.edu.tw

Jerome Dauw-Song Zhu

Department of Business Administration and Accounting,
National Dong Hwa University, No. 1, Sec. 2, Da Hsueh Rd.,
Shou-Feng, Hualien, Taiwan 974
Fax: 886-3-8633024 E-mail: dswu@mail.ndhu.edu.tw

Biographical notes: Dr Bruce Chien-Ta Ho is an Assistant Professor in the Institute of E-Commerce at National Chung Hsing University. His current research interests include performance evaluation and operations management. Dr Ho has authored and co-authored 3 books. He has also published widely in various international and national leading academic journals and conferences. Samples of his work can be found in the *Journal of Air Transport Management*, *Journal of Operational Research Society*, *Industrial Management and Data Systems*, *Asian Review of Accounting*, *International Journal of Productivity and Performance Management*, *International Journal of Management and Enterprise Development*, *International Journal of Operational Research*, and *Production Planning and Control*. He is the Editor of the *International Journal of Electronic Customer Relationship Management*. He serves on the editorial board of the *International Journal of Enterprise Network Management*, and serves as a chair and on the board of committee of various international conferences, and is a referee for several international journals in these disciplines.

Dr Jerome Dauw-Song Zhu is Professor and chairperson of Department of Accounting at National Dong-Hwa University. He received his PhD from National Sun Yat-Sen University. As a consultant and scholar, he has been involved in management practices for a long time. His current research interests include management control systems, behavioural accounting and consumer behavior. He has published 22 refereed journal articles in behavioural accounting, consumer behaviour and healthcare fields including: *Chiao Ta Management Review*, *Sun Yat-Sen Management Review*, *Management Review*, *Journal of Healthcare Management*, *Journal of Human Resource Management*, *PanPacific Management Review*, *Web Journal of Chinese Management Review*, *Journal of Management*, *The Journal of Tokyo International University*, *International Journal of Productivity and Performance Management*. Professor Zhu serves on the editorial board of the *International Journal of Electronic Customer Relationship Management*, and will host the Supply Chain Management and Information Systems Conference (SCMIS 2006) as co-chairperson.

1 Introduction

In the cycle of business management, managers can make use of performance evaluation to understand how effective resources are utilised. Based on the results of the evaluation, they could make appropriate decisions for future business operations and better guide the allocation of resources. As such, effective performance evaluation can help managers exercise more effective management. However, choosing a viable approach for an effective evaluation of performance is not an easy task. There is an abundance of literature available discussing decision analysis applied to performance evaluation, some of which may already have been known to the public. However, some works had simply been borrowed from the domain of industrial study and applied to commerce; some were still in their embryonic stage. The aim of this special issue of *IJMDM* is to compare all approaches in decision analysis when applied to the evaluation of performance, and ascertain their main differences.

The first paper by Chen, Duh and Lin uses the Balanced Scorecard (BSC) to examine the determinants of the implementation of BSC and investigates whether the determinants vary with the implementation stages. One hundred and fifty-seven responses obtained from a questionnaire survey were analysed. The results show that CFO's involvement, participation by different departmental managers, top management support and organisation size are significantly correlated with the BSC implementation stages.

The second paper, written by Dharmapala and Zaibet, presents a best practice analysis of farmers' technical efficiency and returns to scale in the Sultanate of Oman, using Data Envelopment Analysis (DEA). The Charnes-Cooper-Rhodes (CCR) and Banker-Charnes-Cooper (BCC) models are used to compute relative efficiency measures for individual farmers. They also used factor analysis to describe the variance-covariance structure of the input variables and DEA efficiency measures. It showed the validity of using four inputs under BCC efficiency in terms of the percentage of variability explained.

The work of Bose explores the financial and economic issues pertaining to the valuation of new biotech firms, which are evaluated vis-à-vis the value drivers of these firms. The value drivers are tested for significance and hypotheses are formed on their financial, economic and management implications. The investigative process involves using quantitative methods, such as descriptive statistics, logit modelling and multivariate regression, to evaluate the valuation issues in the context of the challenges faced in valuing these potentially high-growth and intellectual-capital intensive firms.

The contribution of Parnell, O'Regan and Ghobadian is to measure performance in competitive strategy research. When testing for strategy-performance linkages, attention is often given more to the measurement of strategy than to the measurement of performance. However, the selection of performance measures can dramatically influence the findings and conclusions of such studies. This paper note provides evidence to support this assertion. Specifically, it is demonstrated that empirical findings can be directly linked to performance measures utilised. Because different strategies may have different performance objectives, selecting appropriate measures is a critical, but difficult task.

This paper of Kulshrestha reviews the various international benchmarking efforts undertaken in the field of water supply and outlines a generic framework for the evaluation of the performance of water supply utilities. The proposed scorecard identifies a few key

indicators and uses certain clusters to group the indicators appropriately. The methodology involves assigning weights to indicators in conjunction with their scores on a devised scale, and evaluates cluster and performance scores by employing a spreadsheet.

This paper of Chen, Chan and Shiu presents a multi-person verbal model that focuses mainly on the behaviour decision makers. They propose a systematic procedure to quantify the effects of their behaviour on the weights of verbal terms which cannot be analysed using statistical methods. An example concerning the aggregation of share analyst opinions on share recommendations is presented in this paper to show how the proposed model works. The performance of the shares recommended by analysts is also evaluated.

The final paper of Wu presents the grey relative analysis to treat the fuzzy group decision making problem. To aggregate individual opinions into an optimal consensus, this approach integrates grey relative analysis in two steps, one for individual integration and the other for group integration. Since subjectivity, vagueness and imprecision enter into the assessments of experts, trapezoidal fuzzy numbers are utilised to deal with the fuzziness of human judgement. Both weights and alternative performance scores on attributes are allowed to be fuzzy.

Altogether, the presented papers describe interesting applications and solutions in the performance measurement field.

The Guest Editors would like to thank all the authors for submitting their papers to this special issue and the reviewers for their valuable comments and contribution.