
Editorial

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Biographical notes: Chunhui Xu is a Professor in Finance and Management Science at Chiba Institute of Technology (CIT), Japan. He gained his PhD at Huazhong University of Science and Technology, China and Doctoral degree in Engineering at Tokyo Institute of Technology. He had been a Research Fellow at Harvard University before joining CIT in 2002. His research interests include decision-making under uncertainty and conflicts, incentives in organisations, optimisation, financial investment and risk management. He has published over 100 papers in domestic and international conferences and journals including *European Journal of Operational Research*, *Journal of the Operational Research Society*, *IEEE Trans. on Systems, Man and Cybernetics*, and *International Journal of Systems Sciences*. He is the Founding Editor-in-Chief of the *Asian Journal of Management Science and Applications*.

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It is our great pleasure to announce the launch of the *Asian Journal of Management Science and Applications (AJMSA)* by Inderscience Publishers. The journal aims at publishing high quality original research on all aspects of management science and its applications in industry and business, with a focus on research done in Asian countries or

related with Asia. We expect that *AJMSA* will provide a constructive forum among researchers in Asia for developing and exchanging new ideas on management. We would like to thank all the leading researchers in the field that accepted our invitation to take part in this effort as members of the advisory board and the editorial board. With their valuable support, we shall do our best to ensure the success of the journal.

Management science has made a great contribution to the industrialisation and modernisation of the world economy. It will continue to be a focus of concerns along with the development of globalisation of industry and business. To facilitate the idea exchange and research cooperation on management theories and practice in Asia, leading scholars from the main Asian countries setup the Asian Association of Management Science and Applications (AAMSA) in 2011. *AJMSA*, as the official journal of AAMSA, seeks to publish high-quality scientific articles on the theoretical developments and practice of management.

AJMSA publishes original papers from scientific research focusing on the problems, interests, and concerns of managers. We welcome a broad range of research on how management work is done (descriptive), and/or should be done (normative), in diverse organisational forms, such as for-profit and non-profit firms, private and public sector institutions, and formal and informal social networks.

This journal provides a platform for the discussion of multi-disciplinary and multi-paradigmatic approaches to scientific management. It includes research that addresses management issues using tools from traditional fields such as operations research, management science, mathematics, statistics, industrial engineering, psychology and sociology, case studies, and multi-disciplinary research. As can be noted in the subject coverage of *AJMSA*, suitable topics for the journal include the broad area of management science and its applications in industry and business. Managerial issues related to industry and business, and approaches and methods for dealing with managerial problems, are all topics of the journal.

The inaugural issue of *AJMSA* comprises of five papers.

The first paper ('Bayesian analysis of unemployment dynamics in Japan') is contributed by Koki Kyo, Hideo Noda and Genshiro Kitagawa. The authors propose a Bayesian approach for decomposing the unemployment rate by constructing a dynamic matching function model. They analyse the factors behind the movement of the unemployment rate in Japan. The primary contribution of this paper is presenting a promising approach to the attribution analysis of unemployment rate using a dynamic framework based on Bayesian modelling to reflect diverse patterns of structural change.

The second paper ('Modelling the behavioural factors of green supply chain management implementation in mining industries in Indian scenario') is contributed by Kamalakanta Muduli and Akhilesh Barve. This paper identifies the behavioural factors presented in green supply chain management environment (GSCM) of Indian mining industries and finds out the extent of their effect on GSCM implementation through graph theory and matrix approach (GTMA).

The third paper ('Adjusted-Stackelberg scheme in applying profit-sharing to coordinate dual channel supply chain') is contributed by Erwin Widodo, I Nyoman Pujawan, Budi Santosa, Katsuhiko Takahashi and Katsumi Morikawa. A dual channel supply chain (DCSC) is a structure of simultaneous sales through conventional store and online facility. This paper proposes an approach of profit sharing based on an adjusted Stackelberg equilibrium result on DCDS prices. The authors find that the profit sharing

mechanism provides a win-win solution for both the leader and the follower in increasing their individual profits.

The fourth paper ('Improved algorithm using generalised flows for an optimisation problem in a cash flow network') is contributed by Akira Nakayama and Pan Li Gang. One of the important objectives of a company is to maximise the total cash at the final term in a cash flow network. Previous algorithms are not necessarily efficient from a computational complexity point of view. The three main results of this paper are as follows:

- 1 an efficient algorithm has been developed for this optimisation problem
- 2 the close relationship between the optimisation of cash flow and the general flow problem with gains or losses is identified
- 3 the algorithm has been applied to a typical Brazilian company that produces frozen concentrated orange juice.

The fifth paper ('Optimal worker assignment with two special workers in a limited-cycle model with multiple periods') is contributed by Xianda Kong, Jing Sun, Hisashi Yamamoto and Masayuki Matsui. This paper analyses the properties of optimal assignment with two special workers in limited-cycle problems with multiple periods. The authors systematically classify and model the multi-period problem and define the optimal worker assignment under the reset model. Two theorems are used to analyse the optimal assignment when the consecutive delay cost is monotonically increased. The result of this study can be applied to explain fixed optimal worker assignment mechanics.

AJMSA aims at serving the management science community with a focus on the Asian region, including researchers, educators, practitioners and students. We look forward to receiving research papers from both management professionals and academics so as to advance our understanding of scientific management.