
Editorial

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published several papers in leading research journals such as the *European Journal of Operational Research*, *International Journal of Systems Science* and *International Journal of Advanced Manufacturing Technology*.

Excellence pervades every aspect of business and industrial activity and it is often envisaged as an essential ingredient of organisational success. Firms – be it a for-profit or non-profit organisation or be it a multinational corporation or a small enterprise – have been imbibing concepts, adopting tools and implementing best practices germane to different facets of excellence. Successful companies factor stakeholder perspectives into their strategic decision-making processes besides undertaking continuous improvement initiatives. Business excellence has been construed as a holistic framework for integrating stakeholder perspectives with the organisational vision and strategic objectives so as to establish performance benchmarks related to financials, markets, customers and processes. Operational excellence has been viewed as an engine for organisational growth and a key driver of productivity with the objective of enhancing/sustaining competitive advantage.

Key practices of business excellence applied across functional areas include continuous and breakthrough improvement, preventative management and management by facts. Some of the tools employed are the balanced scorecard, lean thinking, Six Sigma, statistical tools, process management, quality management, technology management and project management. Operational excellence comprises proven practices and procedures of the three foundation blocks – operations risk management, capital effectiveness and asset productivity; and it embraces the entire supply chain.

There is a need for high quality research which may serve as a ‘one-stop shop’ to learn about various industrial problems and challenges in the areas of operational and business excellence.

Accordingly, this special issue is aimed at meeting the challenges posed and overcoming the existing gaps. It includes state-of-the-art manufacturing and services industries on some critical research issues pertaining to, operational and business excellence. This special issue covers areas in the development of models, tools, techniques, methods, systems, framework etc. for operational and business excellence. It is intended for practitioners from industry who use techniques from a wide range of fields: mathematical programming, supply chain and logistics management, and process systems and operations engineering. The practical applications in the form of quantitative and qualitative case studies based on operational and business excellence are also the focus of this special issue. The papers of this special issue have real value relevance, be primarily focused on real time implementation and the target audiences of this special issue are researchers, managers, practitioners and consultants.

This special issue aims to trace established practices and track new developments in the field of operational and business excellence with the following objectives of identifying:

- conceptual frameworks and analytical models for operational and business excellence (using statistical analysis)
- country and industry-specific variables that impact operational and business excellence (through empirical research)

- insightful case studies exemplifying the importance of operational and business excellence.

The six articles presented in this issue of the *International Journal of Logistics Economics and Globalisation* address a variety of research issues germane to supply chain performance, human resource excellence, hybrid flow shop scheduling, benchmarking suppliers, new business model design and optimum power flows (OPFs).

The first research article by Jim Felix Joseph, Balan Sundarakani, Peter Hosie and S. Nagarajan analysed the supply chain practice ‘vendor managed inventory’ and illustrate the key elements of this system and the role it plays in the overall supply chain. Authors have discussed and analysed the benefits and risks of the VMI system. The design and implementation steps for this supply chain practice are extensively reviewed by the authors. The analysis of industries which would benefit from implementing this system is also conducted. An investigation is attempted to see if any industries in the UAE are following this system.

The second research article by Arun Prasad and Kamalanabhan explored the significant role of human resource practices in Indian software industry. They have conducted in-depth interviews were conducted with heads and senior human resource managers. The interview questions for this study were structured broadly on human resource practices such as staffing, training and development, performance appraisal and compensation. The sample chosen is based on the software companies listing in NASSCOM annual report (2004–2005). Authors observed that to a certain extent large-scale software companies are practising similar human resource practices across the levels/hierarchies. The medium and small software companies have subtle differences in human resource practices that are being practised across the levels/hierarchies.

The third research article by Sridhar, Prabakaran and Saravanan considered the hybrid flow shop scheduling problem. The main purpose of this paper is to present a new approach to the objective version of the well known hybrid flow shop problem. The objective of this paper is to find minimum makespan in a serial multiple-stage manufacturing system, where each stage consists of parallel identical machines. A simulated annealing (SA) algorithm is proposed in this paper to find a better/optimal or near optimal schedule. This technique reveals that the proposed algorithm is capable of providing better results than the company existing production results.

The fourth research manuscript by Mandave and Khodke discussed about the reliance of large-scale industries (LSI) on suppliers’ performance. Authors have indicated that majority of single tier managed small-scale industries (STSSI) in manufacturing sector are last tier ancillaries to LSIs. Authors have also discussed that implementing quality management system to fulfil the requirements of customers is the challenge for STSSIs. The authors attempt to identify and prioritise the LSIs’ requirements, based on the actual documents specifying their ‘supplier quality system assessment criteria’ and ‘vendor rating’ criteria. Strength, weakness, opportunity, and threat (SWOT) factors pertaining to STSSIs, and, affecting development of quality management system have been identified and analysed by the authors. This study in the Indian context further presents the ‘quality management model’ for STSSIs by benchmarking LSIs requirements and using strengths and weakness factors advantageously. The model will be useful for improving operational performance and can be independently adopted.

The fifth research paper by Sihyun Paik and Jinsop Park discussed that the price competition gets fiercer among the large discount stores recently and there have been

many changes in the market, such as the market expansions through mergers and acquisitions (M&A) and super supermarket (SSM) business models. Authors claim that a new business model for the large discount stores and its efficient operation is urgently needed. Authors have suggested a direction for the advanced shipping notice (ASN) service – ASN replenishment (ASNR) method, and a new business model – ASN replenishment specific purchase (ASNR-SP) model.

The last sixth article by Vennila, Ruban Deva Prakash, Malini, Birundha, Sumi and Evangelin Jeba proposed a SA technique has been applied for solving OPF problem which is simultaneously composed by economic dispatch (ED) and load flow problems (LFP). This technique is compared with GA, which represents a class of general purpose stochastic search techniques which simulate natural inheritance by genetics illustrated by considering a three bus system. In this paper, SA technique has been applied on a three bus test system with three generator buses and it has been worked satisfactorily.

The guest editors would like to thank all the authors for contributing their insightful papers and the referees for their precious review inputs. Special thanks to Prof. S.C. Lenny Koh for her support, guidance, advice and assistance in the preparation of this feature special issue. We hope that our readers would benefit from perusing the works of academic researchers and industry practitioners who contributed to this special issue. The editorial team welcomes comments and suggestions from our readers and researchers; and we greatly appreciate your feedback. We are sure that the scope for future research enunciated in the thought provoking articles of this special issue would pave the path for launching many more issues in the coming years.