

Foreword: Special Issue on OPERATIONAL EXCELLENCE TOWARDS GREEN GROWTH

Ming-Lang Tseng

Department of Business Administration, Lunghwa University of Science and Technology, Taiwan

Kimhua Tan

Business School, the University of Nottingham, United Kingdom

Anthony SF Chiu

Department of Industrial Engineering, De La Salle University, Manila, Philippines

This special issue of the Industrial Engineering and Management System Journal addresses sustainability and production analysis through various analytical tools, design and practice in Asia. The articles present and analyze green issues and production efforts by analysts and efforts by companies in the supply chain. The articles showcase discussions on sustainability planning to enhance production practices such as data envelopment analysis, meta-heuristic and optimization methods on the implications of lean production, green innovation, production plan and control, the implementation of processes and methods of assessing evaluation and practices. The articles show that issues of production controlling should be explored in different ways and experimented within different contexts; that is, there is none 'one method fits all production problems' approach. Policy change, innovation, and service quality improvement were high on the agenda of the Asia Pacific Industrial Engineering and Management System Conferences, as would continuously efforts to promote industrial engineering and management system.

Toward understanding of operational excellence and green growth

Digital world decision-making systems exists numerous inherent and undefined uncertainties. To handle these uncertainties, the development of efficient tools referred to as the different theories. Hence, this special issue is to include the special topics and tools to deal with production plan and control. In addition, the green topics are always surrounding the companies. It is often difficult for a decision-maker to apply a single tool to solve the production problem. To handle this condition, there are tools to include in this special issue, in that data envelopment analysis, meta-heuristic and optimization methods, simulation optimization, empirical study, and fuzzy set theory were applied to describe and deal with production plan and control. As important analytical impacts, concurrently, the analytical tools have been further developed by researchers and successfully employed in a variety of real-world applications. In order to show the current state of tools development, this special issue intends to provide a platform to display the new developed researches in green operation, supply chain and production planning applications, such as management problems, stochastic, transportation, scheduling, service quality problems, etc.

Lessons from 14th Asia Pacific Industrial Engineering and Management System Conferences: “OPERATIONAL EXCELLENCE TOWARDS GREEN GROWTH”

The Asia and Pacific region has been at the forefront of the 21st century surge in economic growth, a outsourcing and production optimization situation driven primarily by manufacturing's and which has led to expanded production requirements needed to fuel an ever increasing amount of production outputs. To realize that, human capacity building and education for fostering a specialist of industrial engineering and management system science are essential along with training the public people for better knowledge in industrial engineering and management system.

The best approaches to operational excellence and green growths are difficult for most companies to pinpoint. Top management confronts a seemingly limitless range of potential responses. Therefore, the companies that consistently outperform industry averages in both revenue growth and operating margins have also shown increased management controlling activities related to operational excellence, such as locating close to integrating supply chains, stochastic efficiency, optimization solution are relatively important in Asia Pacific region. Hence, the competitive essence is the mechanism by which the organization best creates economic profit. It is a short- and long-term characteristic.

Therefore, the industrial engineering and management system has significantly compounded the environmental carrying production capacity pressures in the Asia Pacific region. These countries are now shouldering an increasingly greater share of regional and global environmental production-related burdens. The coming decades likely witness increased pressures on the productions to shift to more production-efficient and production controlling as part of production efforts to sustain growth, conserve resources and developing environmental friendly approach in Asia Pacific region.

Finally, the guest editors sincerely thank Managing Editor, Prof. Chi-Hyuck Jun, for his kind support for the organization process of this special issue “OPERATIONAL EXCELLENCE TOWARDS GREEN GROWTH”, and also thank all the authors and reviewers for their submissions and rigorous reviews.