

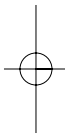


Editorial

Archie Lockamy III

Professor of Operations Management, Samford University,
School of Business Administration, 800 Lakeshore Drive,
Birmingham, Alabama 35229, USA
E-mail: aalockam@samford.edu

Biographical notes: Dr Archie Lockamy III is a Professor of Operations Management at Samford University, Birmingham, Alabama, USA. He has published in numerous journals, and is author of the book *Global Logistics: Managing The Product-Delivery System*, and co-author of *Reengineering Performance Measurement: How To Align Systems To Improve Processes, Products and Profits*. Dr Lockamy served on the Board of Examiners for the Malcolm Baldrige National Quality Award via appointment by the US Department of Commerce from 1997 to 2002. He also served as Vice President of the Board of Directors of the American Production and Inventory Control Society (APICS) Educational and Research Foundation.



Globalisation, advanced manufacturing and information technology, inter-company supply chain networks, along with a multitude of other factors, have dramatically changed the environment in which firms produce goods throughout the world. In response to these changes, many firms are seeking to develop and evaluate performance measures and performance measurement systems which allow them to determine how well their manufacturing organisations are managed, and the level of value they create for customers and other stakeholders. The measures should facilitate strategic, tactical, and operational decision making which aids the organisation in the achievement of a competitive advantage. In addition, manufacturing performance measures should assist in the scheduling and control of complex manufacturing operations in an ever-changing environment.

The objective of this special issue on manufacturing performance measures is to:

- provide insights on potential strategies, methods, tools and techniques for the development and use of sound manufacturing performance measures
- explore current practices which demonstrate the effective use of performance measures and performance measurement systems used to manage manufacturing organisations
- present research on how performance measures can be used for managing and creating value in manufacturing operations for customers and other stakeholders.

This special issue contains theoretical frameworks and empirical investigations that examine these aspects of manufacturing performance measures and measurement systems.

Many traditional performance measurement systems encourage companies to measure historical delivery performance and respond to what has already happened. Unahabhoka, Platts and Tan, in their paper 'A framework for developing and using a predictive delivery performance measurement system', present a conceptual model for developing a predictive delivery performance measurement system at the organisational level.

In the paper 'Performance measurement system simplicity', Olsen and Ward propose a new simplicity scale based on the importance rankings of performance measures found in a large-scale survey of manufacturing firms. The performance measurement system simplicity scale is developed in the paper and applied in the context of traditional manufacturing strategy constructs (i.e., cost, quality, delivery and flexibility) along with environmental dynamism.

The inconsistent results of studies on total quality management (TQM) and business performance have led to suggestions in the quality management literature that organisational effectiveness be assessed to:

- identify changes in the organisation following the implementation of TQM
- gain insights into the relationship between TQM and firms' business performance.

Kaynak responds to these suggestions by empirically validating four dimensions of organisational effectiveness and investigating relationships among the dimensions of organisational effectiveness and business performance in her paper 'Measuring organisational effectiveness and business performance in firms implementing total quality management'.

In the paper, 'Opening up the black box of performance measurement: an analytic hierarchy process-based approach', Korpela, Sandström, and Kyläheiko developed an analytic hierarchy process-based framework to better analyse the outcomes of performance measures. The goal is to reveal the underlying and often hidden reasons behind performance levels, and to define an action plan for improving performance.

It is important that manufacturing organisations are able to measure their performance in a way that will enable them to achieve a competitive advantage. In the paper, 'A framework for using business excellence models for performance improvement at an operational level', MacKerron, Masson and Moffat argue that there are already appropriate methodologies that have been developed for this purpose, namely self-assessment against quality awards and business excellence models. Subject to additional development to overcome their weaknesses, the authors contend that these methodologies can be used for measuring manufacturing performance at an operational level. The research provided in the paper outlines the development of such a framework and its successful application in a UK manufacturing facility.

**Acknowledgements**

I want to thank Professor M. Dorgham, Editor-in-Chief of the *International Journal of Manufacturing Technology and Management*, and Dr Liz Harris, Production Editor for the *International Journal of Manufacturing Technology and Management* for their assistance on this project. I also want to thank the anonymous referees who reviewed the manuscripts. Finally, I want to thank everyone who responded to the call for papers on 'Manufacturing Performance Measures.' Your responses validated the need for this special issue, and have resulted in the enhancement of the body of knowledge in this increasingly important area.

