
Introduction

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In the present special issue a group of selected papers presented in a workshop on 'Performance and risk measurement: operations, logistics and supply chains' are collected. In this special issue, performance measurement is assuming the central stage¹ and the papers address this topic from several perspectives, bringing empirical evidences from both manufacturing and service industries.

In 'Operational performances in manufacturing and service industries: conceptual framework and research agenda', Grando *et al.* deal with measurement practices and expertises in both manufacturing and service industries. Borrowing control system's design principles outlined by accounting and control theory literatures, the paper proposes a conceptual framework suitable to classify manufacturing and services industries. Then, after a review of the main contributions on performance measurement practices peculiar of each typology, it proposes a research agenda.

Proth in 'Supply chains: measure, evaluation and specific risks' describes the risk characteristics of supply chains and demonstrates how to measure the risk performance of supply chains, both at strategic and operational levels. An application to the control of production cycle and Work-In-Process level is studied in particular. These methods establish the link between production cycle and WIP level and may be the starting point of a simple evaluation approach of the Supply Chain.

In 'Performance measurement systems in after-sales service: an integrated framework', Gaiardelli *et al.* deal with performance measurement for the after-sales process. The paper provides a review of the existing contributions on this topic, then proposes an integrated framework for After Sales performance measurement consisting of four levels (business, process, activity, and development and innovation). Finally, it provides an empirical application of the framework to four case studies in durable consumer goods – automotive, home appliances and consumer electronics.

Lo *et al.*, in their paper 'A wider look at demand fluctuations and its relationship to manufacturing performances: empirical results', identify the types of demand fluctuations and show the impacts they have on certain manufacturing performances. Based on the performance data from a benchmarking study, relationships between demand fluctuation/demand fluctuation and demand fluctuation/manufacturing performance are tested using a non-parametric ranking method. After a review of the literature on this topic, the paper presents the empirical analysis and outlines its main findings.

Mahmoudi *et al.* in 'A simulation model for customer-supplier cooperation in telecom supply chain', consider that Telecom Supply Chains are subject to instabilities and uncertainties. To manage performance and the risks of the supply chain, they point out that a collaboration based on an exchange/sharing of reliable information between the different actors is essential for risk management. Their paper presents and implements a methodology that aims to evaluate the strategic risks of the supply chain actors' policies (capacity requirements planning and supply behaviours).

In 'Current applications of a reference framework for the supply chain performance measurement', Grimaldi and Rafele propose a framework for logistic indicators, called LogistiQual, developed through the application to logistics of the various aspects of service quality management, included in the Parasuraman-Zeithaml-Berry model. The authors also present two validations of this framework, carried out through a general process analysis performed by SCOR 6.0 and through tests in several industrial sectors.

Schaeffers *et al.*, in 'A contribution to performance measurement in the healthcare industry: the industrial point of view', state that the healthcare industry is undergoing an evolution towards a more customer-based managerial approach and that its performance measurement system should change accordingly. The authors propose the application of Theory of Constraints in hospitals, in order to develop a performance measurement system suitable for not-profit organisations. Thus, the paper develops and explains four absolute indicators and two derived performance ratios.

Stone and Love, in 'Modelling the relationship between local logistics management decisions and overall supply chain performance: a research agenda' argue that the development of a supply chain performance framework requires an examination of the conditions under which holistic-decisions provide benefits to either the individual enterprise or the complete supply chain. The paper presents the background and supporting methodology for a study of the impact of an overall supply chain performance metric framework upon local logistics decisions.

Note

- 1 Other contributions, focused on risk measurement, selected from the same workshop, have been published in a parallel special issue of *International Journal of Risk Assessment and Management*. The international workshop 'Performance and Risk Measurement: Operations, Logistics and Supply Chain' took place in Bocconi University, Milan.