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In This Issue

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A regular feature of *Manufacturing & Service Operations Management*, "In This Issue" briefly describes each issue's articles and highlights their contributions.

Key words: editor's comments; issue overview; summaries

"Evaluating Operations Management–Related Journals via the Author Affiliation Index," by Michael F. Gorman and John J. Kanet

The quality of academic journals is important for judging individual scholars and academic institutions. Journal quality has historically been assessed through opinion surveys and citation analyses. Yet survey reports are often incomplete, dated, and methodologically inconsistent. Published citation reports suffer other drawbacks. For example, the widely used Impact Factor (IF) is incomplete as it only includes journals listed in the Journal Citations Report (JCR) database. Moreover, IF values are highly sensitive to differences in journal subject matter, making comparisons across disciplines difficult. In this *OM Forum* article, the authors introduce an alternative approach: the Author Affiliation Index (AAI). The AAI measures the percentage of a journal's U.S. academic authors that are affiliated with a selected list of top U.S. business schools. The AAI does not suffer from the disadvantages noted above. It is simple to calculate and can be computed for any journal at any time. And because its reference group of potential authors is fixed, it can be used to assess the relative research quality of individuals in different business disciplines.

The authors apply their AAI measure to 27 journals in which researchers in the operations management publish. Sensitivity analyses indicate that the AAI is robust with respect to its inputs and is quite stable over time. It also correlates well with rankings from other studies. While the AAI should not replace surveys or IF analyses, it supplements these methods and is particularly useful in making interdisciplinary (within business administration) comparisons of the relative quality of journals.

"A Method for Staffing Large Call Centers Based on Stochastic Fluid Models," by J. Michael Harrison and Assaf Zeevi

The two central problems of telephone call center management are staff scheduling and skills-based routing. This paper is directly concerned with the first of these problems and—because the two problems are linked—is indirectly concerned with the second.

The authors propose a method for setting staff levels in a "large" call center that serves multiple customer classes and has multiple agent pools. Their analysis is based on a fluid model that explicitly models both stochastic and temporal variability in average arrival rates over the course of a planning period. The approach is very general, and numerical examples show it provides an accurate and efficient approach to solving a difficult staffing problem.

"On the Value of Mix Flexibility and Dual Sourcing in Unreliable Newsvendor Networks," by Brian Tomlin and Yimin Wang

Supply chains can fail for various reasons; dual sourcing is one way to hedge against such risks. This paper provides insight into the value of mix flexibility and dual sourcing in unreliable supply chains. Using risk-sensitive investment criterion (loss aversion and Conditional Value-at-Risk (CVaR)), the authors show that these criteria can have an important impact on the preference for different supply chain strategies. In particular, their analysis shows how supply chain reliability, demand correlation, product contribution

margins, and investment criteria affect the appropriate supply chain design. The paper extends the mix-flexibility literature to allow for supply chain reliability concerns, and it extends the dual-sourcing literature to allow for multiple products. One of this paper's key contributions is bridging these two literatures.

"Positive vs. Negative Externalities in Inventory Management: Implications for Supply Chain Design," by Serguei Netessine and Fuqiang Zhang

This paper makes two primary contributions to understanding the impact of externalities caused by retail competition in supply chains. First, the authors provide an in-depth analysis of centralized and competitive inventory management with positive externalities (complementarities), drawing parallels and emphasizing contrasts between the management of products with negative externalities (the predominant case in the extant literature, e.g., demand substitution). Second, they show that many of the known results on retail competition critically hinge on the (often implicit) assumption that externalities are negative. Their analysis leads to the key insight that supply chain coordination is most important under competition with complementarity at the retail level. These findings have many potential practical applications, among them inventory management over a product's life cycle and the optimal choice of retail locations.

"Measuring Item Fill-Rate Performance in a Finite Horizon," by Douglas J. Thomas

Item fill rates are a pervasive measure of customer service in most inventory systems. The standard computation of fill rate is based on an assumption of stationary and serially independent demand over an infinite horizon. Yet in reality managers are often held accountable for fill rate performance over a finite horizon. Even with the right long-run inventory policy, actual fill rates over a given month or quarter may deviate from their long-run average, subjecting the firm to penalties from its customers. That is, over a finite horizon the fill rate is a random variable and studying its distribution is relevant to understanding real-world inventory performance. In this article, the author shows how to analyze this distribution and its implications for setting appropriate inventory levels.

"The MSOM Society Student Paper Competition: Extended Abstracts of 2004 Winners"

Last, we are pleased to present the extended abstracts of the 2004 MSOM Student Paper Competition. These abstracts highlight the best work of the latest generation of OM researchers.