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**Call for Papers**  
***Annals of Operations Research***  
**Special Issue: Behavioral Operations Management in Social  
Networks**

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The *Annals of Operations Research* seeks submissions for a special issue on ***Behavioral Operations Management in Social Networks***. The deadline for submission is March 31, 2016.

Over the past decade, the emerging field of Behavioral Operations Management (BOM) has proven to be a successful application of interdisciplinary fields of study. BOM introduces cognitive biases and/or social preferences to Operations Management (OM), and places greater emphasis on “human foibles” in operations systems. The traditional theory and models of operations management attempt to elicit the best performance from systems regarding aspects of design, management, and improvement. However, a long-observed gap exists between theoretical OM prediction and real-life operational practice. A consensus has gradually emerged regarding the notion that systematic errors were caught by human's cognitive biases and bounded rationality. From the perspective of cognitive psychology, human beings, acting as the core element in some practical operations systems such as plant and supply chain, are always biased, boundedly rational, and readily affected by social preferences. Obviously, a behavioral approach to OM can generate fundamentally different predictions regarding the performance of given operating systems and improved understanding of the underlying drivers of operating systems.

However, with the rapid development of BOM theory, researchers seem overly cautious in applying knowledge of cognitive and social psychology to Operations Management. Most published papers focus on the individual cognitive level and study the manner in which personal behavioral traits, such as loss aversion, fairness concerns, and reciprocity, affect individual decision-making and system operations. Study of patterns of individuals' decision-making and behaviors in a social environment, such as social relations significantly affecting individual intentions, is still lacking in the literature. In fact, human beings are embedded in thick webs of social relations and interaction, and human perception and decision-making processes are notably influenced by others with whom they interact; thus it is more sensible and rigorous to take others' influences into account when studying individual decision-making processes and behavior. The dearth of attention devoted to the influence of social psychology on OM derives, to a great extent, from the weakness of the extant OM modeling methods in depicting interactive social relations among individuals and their influences on the performance of operations systems; thus new methods, and even new paradigms, must be introduced to overcome these difficulties. To capture such promising research opportunities, it seems that social networks and the related analysis methodology are more suitable to exploitation of this potentially fruitful research field.

There has been an explosion of interest in network research across the physical and social sciences. This research views any system as a set of interrelated players or nodes. From a social network perspective, human interaction in a social environment can be expressed as a kind of relation-based pattern or rule of social network structure. In a social network, ties or links between players or nodes are usually symmetric or asymmetric, one-sided or two-sided, which makes resource distribution and information diffusion more complex. Interpersonal ties link network members directly or indirectly and accordingly affect bargaining power and decision-making. For example, individuals with different numbers of direct ties, central nodes, and peripheral nodes in the network structure of an inter-linked star will exhibit different influences, different behaviors, and therefore different choices.

With the popularity of internet-based social network platforms, such as Facebook, Twitter and Wechat, communication and interaction become more convenient and more frequent. Behaviors of individuals and organizations display many new characteristics and make economic phenomena more complicated. The introduction of social network theory to BOM appears to be a matter of great importance. Therefore, the primary aim of this special issue is to introduce social network theory to promote and disseminate the roles and applications of various modeling approaches to BOM in the context of a social network, in order to obtain improved understanding of behavioral operations management and its puzzling “pathologies” (e.g., the bullwhip effect, the herd effect, vicarious experiences, and social persuasion), leading to improved identification of appropriate management interventions.

**The special issue will target, but not be limited to, the following fields in the context of social networks:**

- Individual cognitive bias modeling and applications
- Social influence and social preferences
- Inventory and jointly inventory
- Newsboy problem, bullwhip effect and strategic procurement
- Supply chain contract and coordination
- Supply chain risk management
- Information, knowledge and innovation diffusion mechanism
- Products diffusion and marketing strategy
- Multi-stage supply chain game
- Resources allocation and potential gains realization
- Energy strategy and environmental policy
- Agency theory and applications

**Instructions for authors can be found at:**

<http://www.springer.com/business/operations+research/journal/10479>

Authors should submit a cover letter and a manuscript by March 31, 2016, via the Journal's online submission site. Manuscripts submitted after the deadline may not be considered for the special issue and may be transferred to a regular issue.

Please see the Author Instructions on the web site if you have not yet submitted a paper through Springer's web-based system, *Editorial Manager*. Be sure to note when leaving a comment that your work is intended for the special issue and to select the article type "**SI: BOM in Social Networks**".

Papers will be subject to a strict review process managed by the Guest Editors and accepted papers will be published online individually, before print publication.

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