Winter 2019 Newsletter
INFORMS Behavioral Operations Management Section

I have decided to end my newsletter career. Lisa Yeo of UC Merced has kindly agreed to accept the duty. However, she can’t do anything without your input. Please send your input to Lyeo2@ucmerced.edu

If you have a paper, please include the citation and abstract. If you are a track chair for a conference, don’t make me track you down and send you multiple reminders. Send me a paragraph for the newsletter before and after the conference. If you have some news to share with the community, send it in. You can send them as they happen, you don’t have to wait for my email. Send to lyeo2@ucmerced.edu

Old copies of the newsletter can be found at the INFORMS Section Website https://www.informs.org/Community/BOM

General topics include:
A. People, B. Places (Meetings, special issues, etc.), C. Things (Research).

A. People:

Urlich Thonemann has let us know that Lisa Scheele has had a third child and is touring the world while on maternity leave from McKinsey.

Winners of the INFORMS BOPs Section Best Working Paper Award were Andrew Davis and Kyle Hyndman for Private information and endogenous Matching in supply chains. Runners up were Ruth Beer, Ignacio Rios and Daniela Saban for Increased transparency in producrement: the role of peer effects and Daniel Fuller and Jordan Tong for From Noise to bias in linked supply chain decisions. Nominees and volunteers are needed for next year’s competition. Please contact Julie Niederhoff jniederh@syr.edu
Enno Siemsen has accepted the position of Associate Dean for MBA and Masters programs at the University of Wisconsin. (Your friendly editor has no clue why he would accept such a job but wishes him luck, enjoyment and fulfilling experiences.)

Doug Thomas sent news: “I moved the summer of 2017 to join the Technology and Operations Management area at the Darden School at UVA. I am enjoying my new school and new colleagues. Also enjoying country living in Charlottesville despite having some weather I was not expecting this past fall. I hope everyone is doing well.” He can now be reached at ThomasD@darden.virginia.edu.

After a few years at INSEAD (first in France and then in Singapore), Serguei Netessine has returned to Wharton, where he is now Vice Dean for Global Initiatives, Dhirubhai Ambani Professor of Innovation and Entrepreneurship, and PhD program coordinator in the Operations, Information and Decisions Department. His contact information reverted to what it was before 2008 and can be found at http://www.netessine.com.

2018 CBOM Junior Scholar Paper Competition: The POMS College of Behavior in Operations Management was proud to award the 2018 Junior Scholar Paper Competition to Blair Flicker for “Managerial insight and ‘optimal’ algorithms.” We would like to thank Nikolay Osadchiy, Tony Cui and Kyle Hyndman for their work on the awards committee.

The POMS College of Behavior in Operations Management (CBOM) invites submissions to the 2019 CBOM Junior Scholar Paper Competition. We welcome papers in the domain of behavioral operations management. The finalists will present their paper in a special session at the 2019 POMS Annual Conference in Washington, DC. and the winners will be announced at the business meeting for the BOM track. Complete entries must be received on or before Feb 15, 2019. Any questions related to the competition should be sent by email to nikolay.osadchiy@emory.edu.

B. Places

The editors of OR have agreed to a Special Issue on Behavioral Queueing Science. Editors will be Arnmann Ingolfsson, Avishai Mandelbaum, Kenneth Schultz and Galit Yom-Tov. Look for a formal announcement soon. Deadline for submissions will be early 2020. All methodologies are welcome.

The 30th POMS Annual Conference will be held in Washington D.C. on May 2-6, 2019. Kyle Hyndman (UT Dallas) and Shan Li (Baruch College, CUNY) serve as co-chairs for the BOM track. BOM track will have 11 exciting sessions, chaired by John Aloysius (Univ. of Arkansas), Tingliang Huang (Boston College) together with Hang Ren (George Mason Univ.), Basak Kalkanci (Georgia Tech), Shan Li (Baruch College, CUNY) together with Diana Wu (Univ. of Kansas), Blair Flicker (UT Dallas), Evgency Kagan (Johns Hopkins), James Fan (Naval Postgraduate), Xiaobo Zhao (Tsinghua Univ.) together with
Wanshan Zhu (Tsinghua Univ), Ozalp Ozer (UT Dallas) together with Xiaolin Li (UT Dallas), Kyle Hyndman (UT Dallas) and Eirini Spiliotopoulou (Vrije Universiteit Amsterdam).

The School of Industrial Engineering at the Eindhoven University of Technology is proud to host the 14th annual Behavioral Operations Conference in Eindhoven, the Netherlands on July 7 – 10, 2019. The conference will begin with a welcome drink on Sunday evening and continue with a one-day young scholars’ workshop on Monday, July 8, and the main conference on Tuesday and Wednesday, July 9-10. Eindhoven is easily reached by train directly from Amsterdam Schiphol Airport. The extended abstract submission deadline for both the main conference and the young scholars’ workshop is February 24. For more information, please contact Rob Basten or visit https://jindal.utdallas.edu/events/behavioral-operations-conference/. We hope to welcome all of you in Eindhoven!

(Editor’s note, for a short intensive course in comparative culture, carve out some time to visit the Commonwealth and German Military Cemeteries outside Eindhoven. The US one is also worth a trip but it’s a bit farther.)

The inaugural Behavioral Operations Management Summer Institute for PhD students will be held June 10-14, 2019, at the University of Michigan, Ross School of Business in partnership with the Center for Value Chain Innovation. This 1-week event will provide PhD students a solid foundation to conduct behavioral operations management research. Additionally, we hope that the summer institute will encourage collaboration and the creation of a research community among the next generation of researchers. Morning sessions will focus on supplementing students’ foundational knowledge of BOM. Afternoon sessions will focus on research production. The registration cost is $225, and includes breakfast and lunch throughout the week. For additional information, or to apply, please visit the event website, online at https://bit.ly/2QpG0VC

The 2018 INFORMS Annual Meeting was held this past year in Phoenix, Arizona from November 6-9. The Behavioral Operations Management Track was chaired by Ruthy Beer of Indiana University and Anyan Qi from University of Texas Dallas. The track included 14 sessions, plus one joint session also listed in the Practice track. Topics ranged from behavioral work in supply chains and sustainable operations to works on experimental and incentive designs. Thank you to all of the session chairs: Xiaobo Zhao, Wanshan Zhu, Julie Niederhoff (Working Paper Comp.), Jordan Tong, Michael Becker-Peth, Stephen Leider, Blair Pickett, Anyan Qi, Ruth Beer, Andrew M. Davis, Evgeny Kagan, Enno Siemsen, Mahdi Mahmoudzadeh, Elena Katok, Leon Valdes, Xiaoyang Long, Yinghao Zhang, Xiaobo Zhao, and Wanshan Zhu.

The 2019 INFORMS Annual Meeting is in Seattle, WA from October 20-23. There will be a Behavioral Operations Track chaired by Michael Becker-Perth of Rotterdam School of Management (m.beckerpeth@rsm.nl) and Lisa Yeo from University of California Merced
We invite papers investigating operations management topics through human-subject experiments, behavioral modeling, or empirical studies on human behavior. The track is open to studies of all aspects of behavior and decision making, such as social preferences, bounded rationality, risk preferences, cultural differences, and prospect theory. The track also welcomes papers that aim at validating models of rationality in the laboratory. All talks should have an operations management context.

The 10th International Workshop on Behavioral Operations Management jointly organized by Tsinghua University, The South China University of Technology (SCUT), and Operations Research Society of China was held in Guangzhou China on December 15-16, 2018. About 450 conference participants attended the conference. Gary Bolton (U of Texas, Dallas), Karen Donohue (U of Minnesota), Elena Katok (U of Texas, Dallas), Ozalp Ozer (U of Texas, Dallas), Enno Siemsen (U of Wisconsin, Madison), gave keynote speeches. Tony Haitao Cui (U. of Minnesota), Shu-Cherng Fang (North Carolina State U), Xiaobo Zhao (Tsinghua Univ.), and Yongwu Zhou (SCUT) served as conference co-chairs.

The 11th International Workshop on Behavioral Operations Management will be hosted by Beijing Foreign Studies University on Dec. 14-15, 2019 in Beijing China. Contact Tony Cui tcui@umn.edu for information.

C. Things (Send a citation and abstract. You should include a picture to accompany your paper and make it stand out more. Your work deserves the extra attention!)


Firms often compensate employees based on their relative performance in the most recent business period. These firms need to consider what type of performance information to share with their employees in order to obtain better outcomes in the long run, without diminishing staff motivation. In this paper, we empirically investigate the impact of sharing irrelevant benchmark “information” (e.g., information about the interim winner’s performance) when individuals are making repeated decisions under uncertainty. The decision-making context used is the newsvendor problem, which is a canonical framework for operations management decision making. The newsvendor problem occurs in many business contexts, such as buying fashion goods for retail, setting safety stock levels, setting target
inventory levels for perishable goods, selecting the right capacity for a service facility, and overbooking customers. Theoretically, information about the interim winner's performance has no value for making improved decisions in future rounds, and it might even be misleading. Surprisingly, we find that displaying such irrelevant benchmark information results in significantly improved decisions overall, as compared to a control group; this additional display may motivate participants to perform better. We also identify two personality traits related to impulsivity which moderate this positive information display effect.


Demand forecasts are the lifeblood of supply chains. Academic literature and common industry practices indicate that demand forecasts are often subject to human interventions. Judgmental forecasting or judgmental forecast adjustments can cause both positive and negative repercussions to the rest of the supply chain. This paper provides the first systematic literature review of judgmental forecasting and adjustments focusing on key features that impact various decisions in supply chains. A carefully assembled and shortlisted literature pool is analyzed for systematic mapping of the published works using bibliometric tools. The primary sub streams of research within the broader scope of the field are synthesized from a rigorous keyword cluster analysis and a thorough discussion is presented. Our review concludes by encapsulating the key learnings from four decades of academic research in judgmental forecasting and suggests future research avenues to expand our understanding of the role of humans in demand forecasting and supply chain decision-making.


Behavioral operations research has proliferated greatly over the decade since its first formal review in 2006. The growth of the field warrants an objective mapping of contributions to the literature and the identification of trends. We conduct a systematic review of the literature of behavioral operations and supply chain management (BOSCM) across eight key operations and supply chain management journals, with publication dates through the end of June 2018. Collected articles are categorized into twelve operations contexts as well as emerging topic considerations. Key research trends, theoretical foundations and methodological choices are discussed in each context. The results show that supply chain management, inventory management, and procurement/auctions have been the most popular operations contexts for BOSCM researchers. The results of our co-citation analysis shows that the fundamental research areas that have informed and shaped the field include supply chain risk management, marketing, cognitive psychology and social psychology. Based on these findings and a survey of the most prolific authors in the field, we discuss possible avenues for future research.


Product forecasts are a critical input into sourcing, procurement, production, inventory, logistics, finance and marketing decisions. Numerous quantitative models have been developed and applied to
generate and improve product forecasts. The use of human judgement, either solely or in conjunction with quantitative models, has been well researched in the academic literature and is a popular forecasting approach in industry practice. In the context of judgemental forecasting, methods that integrate an expert's judgement into quantitative forecasting models are commonly referred to as “integrating forecasting” methods. This paper presents a systematic review of the literature of judgemental demand forecasting with a focus placed on integrating methods. We explore the role of expert opinion and contextual information and discuss the application of behaviourally informed support systems. We also provide important directions for further research in these areas.


The field of behavioral operations has produced a rich tradition of experiments in newsvendor decision-making. Our study provides a meta-analysis of 24 papers in this research area; we confirm that the pull-to-center (PtC) effect, where average order quantities in a sample lie in between average demand and optimal order quantities, is a very stable observable phenomenon across studies. However, we also show that the asymmetry in the PtC effect between high-margin and low-margin conditions varies significantly from study to study; factors that allow predicting the extent and direction of the PtC asymmetry include the likelihood of obtaining losses, the way underage costs are presented to subjects, and the existence of a decision support system. We validate these factors using a controlled experiment. In conclusion, the PtC asymmetry appears less as a fundamental attribute of human behavior, but rather as a function of the design aspects of the experiment.


Regulatory agencies, auditing firms, and supply chain partners externally promote change in firms. To this end, they commonly employ two different and somewhat contradictory intervention approaches. One approach uses punitive tactics to coerce firms to change, while the other approach uses supportive tactics to encourage change. Using the context of government agencies promoting environmental improvements in firms, we examine whether such punitive (e.g., regulatory inspections with possible sanctions) and supportive (e.g., environmental assistance, improvement recommendations) tactics can be administered in a complementary manner. Using a unique and novel longitudinal data set collected from two state-level environmental agencies in Minnesota, we analyze over 1,000 supportive environmental improvement (EI) projects in combination with intermittent (but currently uncoordinated) punitive tactics. One key finding from our research is that the timing, severity, and relatedness of punitive tactics is critical for directing managerial attention and thus improving the efficacy of supportive tactics (i.e., EI implementation). Contingent on their timing, inspections can increase EI implementation rates by up to 60% but can also reduce implementation rates by up to 50% compared with EIs in facilities that do not experience inspections. Classifying regulatory inspections as (1) either clean or adverse and (2) either related or unrelated allows us to further explain the influence of such punitive tactics on EI implementation. Finally, we provide evidence for a positive effect of successful EI implementation on long-term environmental compliance.
Mechanical Turk (MTurk), an online labor market run by Amazon, provides a web platform for conducting behavioral experiments; the site offers immediate and inexpensive access to a large subject pool. In this study, we review recent research about using MTurk for behavioral experiments and test the validity of using MTurk for experiments in behavioral operations management. We recruited subjects from MTurk to replicate the inventory management experiment from Bolton and Katok (2008), as well as the procurement auction experiment from Engelbrecht-Wiggans and Katok (2008), and the supply chain contracting experiment from Loch and Wu (2008). We successfully replicate individual biases in the inventory management and procurement auction experiments, but learning in the individual tasks occurs more slowly on MTurk compared to the original studies. Further, we find that social preference manipulations in the supply chain experiment are ineffective in changing the behavior of MTurk subjects, in contrast to the original study. We conducted an additional replication study of the supply chain contracting experiment using student subjects in a standard laboratory. Results from this laboratory replication also fail to replicate the original laboratory study, indicating that the effect of social preferences on supply chain contracting may not be robust to alternative subject pools. We conclude that factors potentially influencing the differences observed on MTurk are less related to the online environment, but more related to the diversity and characteristics of subject pool on MTurk. Overall, MTurk appears to be an important and relevant tool for researchers in behavioral operations, but we caution researchers about slower learning of the MTurk subjects and the use of social preference manipulations on MTurk.


In this paper, we explored how judgment can be used to improve the selection of a forecasting model. We compared the performance of judgmental model selection against a standard algorithm based on information criteria. We also examined the efficacy of a judgmental model-build approach, in which experts were asked to decide on the existence of the structural components (trend and seasonality) of the time series instead of directly selecting a model from a choice set. Our behavioral study used data from almost 700 participants, including forecasting practitioners. The results from our experiment suggest that selecting models judgmentally results in performance that is on par, if not better, to that of algorithmic selection. Further, judgmental model selection helps to avoid the worst models more frequently compared to algorithmic selection. Finally, a simple combination of the statistical and judgmental selections and judgmental aggregation significantly outperform both statistical and judgmental selections.


We use a behavioral experiment to examine whether the use of templates facilitates or hinders a faster production ramp-up after a process move. If the environment in which a template is applied
closely resembles the environment in which the template was developed, template use promotes knowledge transfer, resulting in increased performance while ramping up the process. However, when the environments at the origin and destination of the template differ, these benefits do not occur. We further show that making the template too rigid, i.e., not allowing any changes to the template after a production start, decreases its performance benefits. These findings help characterize when and how the encoding of existing knowledge through a template is a worthwhile investment of time and resources to facilitate a production process move.


While suppliers are often an excellent source of product innovation for buyers, their propensity to undertake or continue a product development project can be elusive. This study examines how characteristics of the innovation project, including the type of project revenue, type of cost uncertainty, and the contract frame, influence the decision to accept, and subsequently continue, an innovation project. Through a series of controlled behavioral experiments, we find that acceptance rates increase when projects are characterized by a low real options value or an entirely new (vs. replacement) revenue stream. While these factors have less influence on the supplier’s decision to continue the project, once accepted, continuation rates do increase if acceptance and continuation decisions are made by the same person. We also find that using a reward (vs. penalty) frame for sustaining supplier engagements significantly increases acceptance rates.


People often feel malicious envy, a destructive interpersonal emotion, when they compare themselves to successful peers. Across three online experiments and a field experiment of entrepreneurs, we identify an interpersonal strategy that can mitigate feelings of malicious envy in observers: revealing one’s failures. Despite a general reluctance to reveal one’s failures—as they are happening and after they have occurred—across four experiments, we find that revealing both successes and failures encountered on the path to success (compared to revealing only successes) decreases observers’ malicious envy. This effect holds regardless of the discloser’s status and cannot be explained by a decrease in perceived status of the individual. Then, in a field experiment at an entrepreneurial pitch competition, where pride displays are common and stakes are high, we find suggestive evidence that learning about the failures of a successful entrepreneur decreases observers’ malicious envy while increasing their benign envy in addition to decreasing their perceptions of the entrepreneur’s hubristic pride (i.e., arrogance) while increasing their perceptions of the entrepreneur’s authentic pride (i.e., confidence). These findings align with previous work on the social-functional
relation of envy and pride. Taken together, our results highlight how revealing failures encountered on the way to success can be a counterintuitive yet effective interpersonal emotion regulation strategy.


The purpose of this article is to present exciting and innovative research questions in service operations that are aligned with eight key themes and related topics determined by the Journal of Service Management (JOSM) Service Operations Expert Research Panel. By offering a good number of such research questions, this article provides a broad range of ideas to spur conceptual and empirical research related to service operations and encourages the continued creation of deep knowledge within the field, as well as collaborative research across disciplines that develops and incorporates insights from service operations.


The purpose of this article is to identify research themes in service operations that have great potential for exciting and innovative conceptual and empirical work. To frame these research themes, the article provides a systematic literature review of operations articles published in the Journal of Service Management (JOSM). The thorough review of published work in JOSM and proposed research themes are presented in hopes that they will inspire impactful research on service operations. These themes are further developed in a companion article, “Service Operations: What’s Next?”


Creative stars make disproportionately influential contributions to their fields. Yet we know little about how an innovator’s creative performance is affected by collaborating with stars. This paper studies the creative aspects of interpersonal collaboration from a distinct perspective: the quality of the collaborator. Both star and nonstar collaborators provide different benefits to a focal innovator. The innovator benefits from collaborating with nonstars because they may provide access to diverse information improving the outcome of the creative task at hand. In contrast, the focal innovator benefits from collaborating with stars because the focal innovator can also experience and learn from the star’s superior set of creative synthesis skills (which integrate diverse, sometimes contradictory ideas into new coherent and holistic solutions) and, thus, build lasting creative capabilities. Building on theoretical arguments about those two different collaboration purposes, we first examine how a star collaboration (versus a nonstar collaboration) affects a comprehensive measure of an innovator’s creativity: the likelihood of emerging as a star. Second, we examine how the different creative benefits of engaging with a star versus a nonstar collaborator affect the effect of two widely studied aspects of interpersonal collaboration on star emergence: social network cohesion and expertise similarity. In contrast to collaborations with nonstars, for which social cohesion and expertise similarity limit access to diverse information, negatively affecting star emergence, social network cohesion and expertise similarity have
a decidedly positive effect on star collaborations by improving the transfer of the star’s set of creative skills. Our empirical setting consists of designers who have been granted design patents in the United States from 1975 through 2010.

Teaching Cases
