



Manufacturing & Service Operations Management

Publication details, including instructions for authors and subscription information:
<http://pubsonline.informs.org>

OM Forum—Making OM Research More Relevant: “Why?” and “How?”

Christopher S. Tang

To cite this article:

Christopher S. Tang (2016) OM Forum—Making OM Research More Relevant: “Why?” and “How?”. *Manufacturing & Service Operations Management* 18(2):178–183. <https://doi.org/10.1287/msom.2015.0553>

Full terms and conditions of use: <https://pubsonline.informs.org/Publications/Librarians-Portal/PubsOnLine-Terms-and-Conditions>

This article may be used only for the purposes of research, teaching, and/or private study. Commercial use or systematic downloading (by robots or other automatic processes) is prohibited without explicit Publisher approval, unless otherwise noted. For more information, contact permissions@informs.org.

The Publisher does not warrant or guarantee the article's accuracy, completeness, merchantability, fitness for a particular purpose, or non-infringement. Descriptions of, or references to, products or publications, or inclusion of an advertisement in this article, neither constitutes nor implies a guarantee, endorsement, or support of claims made of that product, publication, or service.

Copyright © 2016, INFORMS

Please scroll down for article—it is on subsequent pages



With 12,500 members from nearly 90 countries, INFORMS is the largest international association of operations research (O.R.) and analytics professionals and students. INFORMS provides unique networking and learning opportunities for individual professionals, and organizations of all types and sizes, to better understand and use O.R. and analytics tools and methods to transform strategic visions and achieve better outcomes. For more information on INFORMS, its publications, membership, or meetings visit <http://www.informs.org>

OM Forum

Making OM Research More Relevant: “Why?” and “How?”

Christopher S. Tang

UCLA Anderson School, University of California, Los Angeles, Los Angeles, California 90095,
chris.tang@anderson.ucla.edu

Should OM research become more relevant? I provide my own perspective on this question and some practical ideas for our community to explore. This article is based on my Manufacturing and Service Operations Management (MSOM) Distinguished Fellow inaugural lecture given at the University of Toronto on June 29, 2015.

Keywords: operations management research; innovation; relevance; rigor; research process

History: Received: April 23, 2015; accepted: June 19, 2015. Published online in *Articles in Advance* August 12, 2015.

1. Introduction

Knowing so many giants in the operations management (OM) research community personally, I am humbled to be elected as a 2015 Distinguished MSOM Fellow. I am grateful to those anonymous individuals who nominated me and to the members of the 2015 MSOM Distinguished Fellow Selection Committee (Mark Ferguson, Steve Gilbert, Serguei Netessine, Aleda Roth, and Jan Van Mieghem) who elected me. Not only is this recognition truly unexpected, it has a special meaning to me because 2015 marks the 30th anniversary of my academic career at the UCLA Anderson School. The preparation of the MSOM Fellow inaugural lecture motivates me to reflect about the past, present, and future of OM research. This turns out to be a daunting task because many distinguished OM researchers have shared their views about many OM research topics and/or OM research methods in various articles and books already.

For recent discussions about different OM research topics, the reader is referred to de Kok and Graves (2003) and Singhal (2012) for supply chain management, Green (2012) for healthcare delivery operations, Drake and Spinler (2013) for sustainable operations, Simchi-Levi (2014) for data-driven OM research, Netessine (2014) for innovative business models, Karmarkar (2015) for service operations, Starr and Van Wassenhove (2014) for humanitarian operations and crisis management, and Sodhi and Tang (2014b) for socially responsible operations. Also, for recent discussions about different OM research methods, the reader is referred to an excellent series of Handbooks in Operations Research and Management Science published by Elsevier for various operations research/

management science (OR/MS) analytical methods (discrete optimization, stochastic programming, etc.), Fisher (2007) for empirical methods, Cachon (2012) and Van Mieghem (2013) for interesting and relevant OM research, and Van Wassenhove and Besiou (2013) for the use of system dynamics as a tool for analyzing complex problems with multiple stakeholders.

With all these great ideas about what type of OM research we should do and which research method we should consider, what more can I say or write? How can I add value to the reader? Upon much soul-searching, I decided not to discuss the OM research I have done in the past. Instead, I would like to focus on a few things we can do in the future that are intended to build a better future for our OM community. To think about the future, let me begin with the past.

Since the Industrial Revolution, OM research has played an important role in the development and refinement of many big ideas ranging from assembly production systems to quality control systems to the Toyota Production System. Over the last 30 years, we witnessed many manufacturing firms changing from “vertically integrated” to “globally decentralized” in the 1980s, many developed countries shifting from the “manufacturing-based economy” to the “service-based economy” in the 1990s, and then shifting further to the “knowledge- and information-based economy” in the early 2000s. Buffa (1980) urged OM researchers to go beyond traditional OM subject areas (scheduling, production planning and inventory control, facility location, quality control, etc.). Since then, OM researchers have ventured into “issue-oriented” topics: supply chain management,

healthcare management, service management, socially and environmentally responsible operations, humanitarian logistics, interfaces with marketing and finance, etc. This exciting expansion of OM research has also motivated us to examine these issue-oriented topics using different research methods including economic analysis, empirical methods, behavioral experiments, and case studies.

Over the last 30 years, it is gratifying to see that our OM research community has grown partly because of the rapid expansion of business schools in many countries, especially China. At the same time, it is satisfying to observe that more OM researchers are examining various problems that are relevant to current practice. If we measure the success of OM based on certain “internal measures,” our community is doing well. For example, the subscription rates of some key OM research journals (e.g., *Manufacturing & Service Operations Management* (M&SOM), *Management Science* (MS), *Production and Operations Management* (POM)) have experienced a mild increase over the last five years, whereas many other research journals experienced a decline. The impact factors of these journals remain stable. Should we be content with this outcome?

With so many talented OM researchers who work so hard, are we achieving our potential? Let us consider the following questions. To what extent is OM research addressing the emerging issues arising from the “technology revolution”? To what extent is OM research addressing the UN’s eight Millennium Development Goals, which include eradicating extreme poverty and hunger? To what extent is company practice or public policy being influenced and improved by OM research? To what extent is OM research featured in the media? There are certainly some bright spots; see, for example, the INFORMS Franz Edelman Award winners (www.informs.org/Recognize-Excellence/Franz-Edelman-Award), the news posted on the INFORMS in the News page (<https://www.informs.org/About-INFORMS/News-Room/INFORMS-in-the-News>), MSOM best paper award-winning articles (<http://pubsonline.informs.org/page/msom/msom-best-paper-award>), the 50 most influential papers published in *Management Science* between 1954 and 2004 (www.informs.org/content/view/full/6817), and the winner of the first Production and Operations Management Society (POMS) Applied Research Challenge in 2014. However, the “returns on OM research effort” appears to be low. During my discussions with many OM colleagues in various business schools located in the Americas, Europe, Asia, and Australasia over the last decade, I often heard that there is a self-perception that OM research in business schools is being underrecognized by practitioners (and policy

makers). I wonder if this self-perception is true. And, if it is indeed true, then *why*?

2. Is OM Research Relevant to Practitioners?

Is it true that the OM research community is being underrecognized by practitioners? Based on my discussions with the POMS practice leaders in 2013 and 2014 and based on my earlier discussions with the INFORMS Roundtable members, I am afraid this perception is indeed true. In fact, I was surprised to learn that they find most OM research articles published in *MS*, *M&SOM*, *POM*, and even *Interfaces* tend to be *irrelevant*. Deep down in my heart, I know there is a “gap” in all management research disciplines, not just OM. For example, Pfeffer and Fong (2002) and Yip (2011) argued that there is little evidence that business school research is influential on management practice. However, I was surprised by the comments of these OM practice leaders for four reasons.

First, by definition, OM is about “managing” the design, execution, and control of processes that convert resources into products and services, and it is about managing the implementation a company’s business strategy. Second, over the last decade, *MS*, *M&SOM*, and *POM* have strived to publish more *relevant* OM research articles than before, especially articles that are motivated by actual practice (and some articles have actually influenced practice). Third, many OM professors are now working on important policy-/strategy-level operational issues including global supply chain issues, socially and environmentally sustainable operations, healthcare management, humanitarian operations, etc. Fourth, knowing that these practitioners are experts in the practice of OM and that most of them are trained in OM, OR, or engineering, I would have thought our research should be appreciated by POMS practice leaders and INFORMS Roundtable members. So why would practitioners find that our OM research work tends to be irrelevant in general?

3. Should OM Research Become More Relevant?

As OM researchers are working on relevant OM topics motivated by practice, why should there be a gap between OM research and OM practice? Even if this gap exists, should we care about what practitioners think? We should care for two reasons. First, OM researchers and OM practitioners are *two sides of the same coin*: the latter’s practice can stimulate the former’s research, and the former’s research can influence the latter’s practice. Second, OM practitioners and OM researchers are *symbiotic*: we can thrive together! Although this gap exists in all management

research disciplines, we can take the lead to close this gap for our OM community. Why not?

To change practitioners’ view about our research, we need to change ourselves first. So let us begin by self-examination. I think the gap is caused by three factors: (a) our research training, (b) our target audience, and (c) our journal review process.

a. *Our research training*: Most of us are trained in operations research or engineering. We are trained to develop and/or apply technical tools to solve certain well-structured problems. However, few of us received formal training about proper ways to identify, frame, and formulate interesting problems. This may explain why most OM research articles tend to focus on “how” and “what” via prescriptive (mostly) or some descriptive or predictive analysis.

b. *Our target audience*: When we work on research problems, our immediate goal is to get our articles accepted for publication, even though we should be mindful that we are also committed to disseminate knowledge through teaching and hopefully create impact on practice. Knowing that likely reviewers will have similar research interests (in terms of topic and method), we write our research articles by targeting this “special group” without much concern about the readability of the paper by OM practitioners.

c. *Our journal review process*: Many reviewers tend to use “rigor” as a key measure to judge the merit of an article. This tradition has helped us build a strong reputation for being rigorous. However, even when some reviewers value “relevance” as a key measure, some relevant OM papers may still be rejected because what the reviewers’ perception of relevant OM problems may be different from what OM practitioners truly value. In addition, relevant OM papers without rigorous analysis are likely to be rejected by top journals.

These three factors have created a strong incentive for us (including myself) to conduct OM research by using the following process. First, armed with certain analytical tools, it is “optimal” for us to identify a relevant topic, or at least an “arguably relevant” topic that allows us to apply our “tools.” Then, by imposing certain assumptions, we “cast” a certain aspect of this OM topic and develop certain tractable models and perform our analysis (mostly prescriptive and occasionally descriptive/predictive). Finally, we write up our results generated from the analysis as insights. In my opinion, *results are not insights* unless they lead to some real implications about a real OM problem. Therefore, unless our research is motivated by real practice or built on truly relevant research, the theoretical insights generated from our research may not be relevant to practitioners.

The above research process has worked well for many of us because, as a result of the three aforementioned factors, our research articles are primarily

written for, reviewed by, and hopefully cited by other OM researchers with the same interests. This process is “locally optimal” for us as individuals, but it has created three major “global” challenges:

1. *The OM research community focuses on research problems of questionable applicability*. These three factors can hinder us from embarking on examinations of “real” OM problems that are less structured (Fisher 2007) or that involve multiple stakeholders (Van Wassenhove and Besiou 2013). Consequently, some of us end up working on problems that we can “solve,” but not necessarily the problems that *need* to be solved. Even when we conduct incremental OM research by building on existing literature, our research will be relevant only when the existing literature is based on real practice. Hence, we need to produce more relevant OM research for others to build on.

2. *The OM research community is becoming more fragmented, and it lacks a clear identity*. Because our articles are targeted for other OM reviewers/researchers with similar interests in terms of research topic or method, the OM community has divided itself into many MSOM “special interest groups” and POMS “colleges” that are interested in topics ranging from healthcare to supply chain management, from behavioral OM to revenue management, and from sustainable operations to technology management. (If our articles are targeted for the same interest group, then the citations of each OM article are limited by the size of the corresponding interest group. This may explain why the citations of OM articles tend to be lower than those in finance and marketing. For example, upon examining the five most influential economics journals, Pieters and Baumgartner (2002) showed that OR/OM discipline articles are rarely cited by other business or social science disciplines.) This development reflects our diverse interest in various OM topics, but it can create the identity crisis of OM as a community. For example, we developed a Web page to provide a clearer definition of OM for our MBA students at the University of California, Los Angeles (UCLA), whereas other areas (finance, marketing, accounting, etc.) do not appear to have identity issues.

3. *The OM research community has diminished external visibility*. Our community is divided into different interest groups, each of which works on a limited class of problems with limited or questionable applicability. At the same time, our OM research articles are written primarily for other OM researchers with the same interests. Consequently, our research work is not perceived as relevant by OM practitioners.

In summary, the three aforementioned factors have led us to become more fragmented and inward-looking. At the same time, we are under pressure to produce research articles without any real incentive

to pay attention to practitioners’ interests. Consequently, practitioners cannot understand why and how our research problems are related to the real OM problems that they face. Practitioners may wonder, how does this OM research problem address a certain aspect of a real OM problem? How would this result provide a better understanding of the real problem? Without such a basic understanding, how can we expect OM practitioners to appreciate OM research?

4. How Can We Make OM Research More Relevant?

What can we do as a community? If we do nothing, then I fear that the OM community will eventually become isolated at best and marginalized at worst. If we try to do something, then there is likely to be major pushback, especially when many of us are already overwhelmed with research, teaching, and service. (Based on my own observations and my endless discussions with my dear UCLA colleague Arthur Geoffrion, I learned that, unless there is a serious crisis, drastic changes that require significant efforts rarely work in a sustainable manner.) Therefore, I shall refrain from suggesting any “major reform” of the OM research community, and I shall refrain from defining a “clear identity” for the OM community.

Instead, I shall take a pragmatic approach by first focusing on the things that we are already doing (writing and reviewing OM research articles), except that I suggest that we do them *slightly differently* so that we can increase the chance for others to *understand, accept, and appreciate* our work. Specifically, I suggest we do the following three “little things” immediately:

1. *Think “why” before “how.”* Because we tend to focus on the technical analysis aspect of problem solving instead of problem formulation, we should remind ourselves to strike a balance between the why and the how. Specifically, when we write an OM research article, we should not just focus on *how* to solve this problem and lose sight on *why* this problem is relevant/interesting and important. If we do not first convince ourselves that our work is relevant, how can we expect others to appreciate our solution?

I believe the why is as important as the how, especially when many innovative ideas start with why, not how. I also think my belief is consistent with Toyota’s “5 Whys” technique and is supported by the following quote attributed to Albert Einstein: “The formulation of the problem is often more essential than its solution, which may be merely a matter of mathematical or experimental skill.”

2. *Make the introduction section of the paper self-contained and readable by a broader audience.* Because

the first set of our target audience is journal reviewers (other OM researchers with similar interests), our writing can become highly specialized: only a few can understand the problem, let alone its solution. I think we need to take the first step to reach out to a broader audience so as to increase the chance that our work will be appreciated by practitioners. (We must not forget our commitment to create knowledge, as researchers, and disseminate knowledge, as educators.) Without compromising the rigorous analysis presented in the later sections of a paper (as required by most OM journal reviewers), authors should make the introduction section self-contained and readable by a broader audience. In general, authors should describe a situation/phenomenon observed in real practice. (It would be ideal if the phenomenon is generated by real observations using real data so that it is truly data-driven research, as encouraged by Simchi-Levi 2014.) Extracting from this complex and unstructured situation, the authors should describe a particular problem and explain why this problem addresses certain pertinent aspects of the real problem. (In the event of the work being incremental in nature, the authors should explain how this problem is built on the existing literature that is relevant to practice.) After explaining the “why,” the authors can then describe the analysis and the result (i.e., the “what” and “how”). After summarizing the key results, the authors should develop “insights” by explaining how these results can help practitioners to gain a better understanding of the situation or to make better decisions.

Let us “reverse engineer” the introduction section of one of the most cited OM research articles, the “bullwhip” paper (Lee et al. 1997). Without compromising academic rigor, the authors set the introduction section of this paper to be self-contained and widely accessible. It began with the description of the bullwhip phenomenon observed by Procter & Gamble, explained why the bullwhip effect can cause major inefficiencies in supply chain operations, articulated the authors’ goal as to identify four causes of the bullwhip effect (even though there may be other causes), and explained how the identification of these causes can lead to prescriptions for alleviating the detrimental impact of the bullwhip effect. With a self-contained and readable introduction section, readers can understand and appreciate the problem and the solution. By doing so, this paper has facilitated cross-fertilization within our OM research community, and it has certainly increased the visibility of OM research. Besides Lee et al. (1997), another great example is the well-known “flexibility” paper (Jordan and Graves 1995). Not only was the introduction section engaging and self-contained, the authors’ key result was displayed in a figure that was self-explanatory and memorable!

3. *Think of relevance as a qualifying criterion, but innovative ideas and rigorous analysis should be the winning criteria.* Because OM is an applied research discipline, we must remind ourselves that practical relevance of our research should be *required* when we choose problems to work on, when we write our papers, and when we review OM research articles. Recognizing the possibility that our perception of “relevant OM research” can be quite different from what OM practitioners truly value, we should all make some extra efforts to engage in dialogues with OM practitioners so that we can continually update our understanding of relevant research. (For example, the INFORMS Analytics Conference and POMS Practice Leaders Forum facilitate dialogues between OM researchers and OM practitioners.) This way, we can gain a better understanding about what is “truly” relevant, which will help us to become better authors and better reviewers.

By doing these three little things immediately, we can strike a balance between the why and the how, we can make our introduction section self-contained and accessible to a broader audience, and we can become more cognizant of relevant OM research. Ultimately, we can close the gap between OM researchers and OM practitioners over time.

5. How Can We Make OM Research More Relevant in a Sustainable Manner?

To sustain our efforts in making OM research more relevant, we should pursue the following initiatives in addition to those three little things. These initiatives are intended to attack the three aforementioned factors (our research training, our target audience, and our journal review process) that hindered us from making OM research more relevant. Below, I propose four initiatives:

a. *Take up internships or summer jobs in industry.* In general, most Ph.D. programs provide virtually no training in identifying, framing, and formulating real OM problems (Sodhi and Tang 2014a). At the same time, we must recognize that Ph.D. students are working on their theses, and assistant professors are racing against the “tenure clock.” Therefore, it can be risky for them to establish industry projects on their own because it can be time consuming, and there is no guarantee that industry projects can lead to publishable research articles. However, we should encourage them to take up short-term internships or summer jobs in companies so that they can develop these important skills through experiential learning. For example, my summer internships at the IBM T. J. Watson Research Center have helped me to conduct relevant research. Currently, some schools (e.g., MIT

Sloan School of Management) require their OM Ph.D. students to take up summer internships.

b. *Disseminate our research to a broader audience.* As scholars, we should disseminate our knowledge to a broader audience. If we all make the introduction sections of our papers self-contained and readable, it will make it easier for us (or the communications/media staff writer) to turn our research articles into blogs or press releases. (If other disciplines are not doing this already, we should take the lead!) In fact, *M&SOM* has launched new initiatives to promote relevant OM research to a broader audience. For example, authors of each accepted article in *M&SOM* are invited to write a summary of their article to be posted on an online blog (Tang 2015). This blog, *M&SOM Review* (<https://www.informs.org/msomreview>), is provided with free online access, and it can be further disseminated through LinkedIn, Facebook, Twitter, etc. This online platform enables readers to post comments online to facilitate further discussions. (POMS has launched a similar online initiative that is called POM Review; see Singhal et al. 2014). In the same vein, INFORMS is considering inviting authors to post videos about their articles on INFORMS Pubs-OnLine. To push this idea further, we should post online videos about relevant OM research on YouTube or Vimeo for open access (Terwiesch and Ulrich 2014). Therefore, by turning these self-contained introductions into blogs (or videos in the near future), we create a more vibrant OM community that engages OM researchers and OM practitioners. Through this kind of interaction and feedback, our OM research community can learn more about issues arising from practice and practitioners can benefit from our academic research.

c. *Engage OM practitioners.* The MSOM Society and POM Society can strengthen their engagement with OM practitioners. The OM community can create an entity that is similar to the Marketing Science Institute (<http://www.msi.org>). Founded in 1961, MSI has over 100 universities and 70 sponsoring companies as members and is committed to initiate, support, and disseminate leading-edge studies conducted by scholars that address research issues specified by member companies. Such an entity can create a forum that would enable researchers and practitioners to explore common interests (Sodhi and Tang 2008).

d. *Embrace different OM topics and research methods.* To thrive, we need to ensure that the “OM research funnel” will stay healthy with relevant OM topics. At the same time, we should embrace different types of descriptive, predictive, prescriptive, and validation/implementation research activities. Some of us should go beyond prescription and do some validation/implementation work at companies, whereas

some others should examine innovative operational issues arising from the technology revolution and social/environmental sustainability areas, for example. To encourage these types of research activities, we need to support these “explorers.” For instance, *M&SOM* has launched different special issues: practice-focused research; value chain innovations in developing countries; innovations in supply chain interfaces; and interfaces of finance, operations, and risk management. To allow some of these new seeds to germinate, OM journal reviewers should also evaluate these articles through different lenses by considering the three criteria (work must be relevant, innovative, and rigorous) adopted by *M&SOM* (Tang 2015).

If we all do those three little things immediately and support the above initiatives, I cannot guarantee that the OM research community will improve drastically. However, I strongly believe these ideas can enable us to engage a broader audience. Let us hope that, in the words of legendary UCLA basketball coach John Wooden, “little things make big things happen.” Why not?

Acknowledgments

This article was written during the author’s sabbatical visit at the Haas Business School of University of California, Berkeley. He is grateful to many members of the POMS Practice Leaders and INFORMS Roundtable who shared their personal views about OM and OR/MS research. Also, the comments and suggestions from friends and colleagues, Dimitris Andritsos, Nitin Bakshi, Maria Besiou, Ying-Ju Chen, Kostas Bimpikis, Alex Brown, Gérard Cachon, Felipe Caro, Soo-Haeng Cho, Nicole DeHoratius, Arthur Geoffrion, Terry Hendershott, Jose Guajardo, Teck Ho, Sang Kim, Chung-Yee Lee, Hau Lee, Ho-Yin Mak, Simone Marinesi, Morvarid Rahmani, Guillaume Roels, Nicos Savva, Alan Scheller-Wolf, Kalyan Singhal, Mohan Sodhi, Terry Taylor, Christian Terwiesch, Gerry Tsoukalas, and Steve Onesun Yoo, have been extremely helpful. Last but not least, the author is grateful to Steve Graves and three anonymous reviewers for their valuable input.

References

Buffa ES (1980) Research in operations management. *J. Oper. Management* 1(1):1–7.
Cachon GP (2012) What is interesting in operations management? *Manufacturing Service Oper. Management* 14(2):166–169.
de Kok AG, Graves S, eds. (2003) *Supply Chain Management: Design, Coordination and Operations*, Handbooks in Operations Research and Management Science, Vol. 11 (Elsevier, Amsterdam).

Drake DF, Spinler S (2013) Sustainable operations management: An enduring stream or a passing fancy? *Manufacturing Service Oper. Management* 15(4):689–700.
Fisher M (2007) Strengthening the empirical base of operations management. *Manufacturing Service Oper. Management* 9(4):368–382.
Green LV (2012) The vital role of operations analysis in improving healthcare delivery. *Manufacturing Service Oper. Management* 14(4):488–494.
Jordan WC, Graves SC (1995) Principles on the benefits of manufacturing process flexibility. *Management Sci.* 41(4):577–594.
Karmarkar U (2015) The service and information economy: Research opportunities. *Manufacturing Service Oper. Management* 17(2):136–141.
Lee HL, Padmanabhan V, Whang S (1997) Information distortion in a supply chain: The bullwhip effect. *Management Sci.* 43(4):546–558.
Netessine S (2014) How we can improve our profession. Presentation at the INFORMS Annual Conference, San Francisco, November 9, 2014.
Pfeffer J, Fong CT (2002) The end of business schools? *Acad. Management Learning Ed.* 1(1):78–95.
Pieters R, Baumgartner H (2002) Who talks to whom? Intra- and interdisciplinary communication of economic journals. *J. Econom. Literature* 40(2):483–509.
Simchi-Levi D (2014) OM research: From problem-driven to data-driven research. *Manufacturing Service Oper. Management* 16(1):2–10.
Singhal K (2012) Opportunities for developing the science of operations and supply chain management. *J. Oper. Management* 30(3):245–252.
Singhal K, Sodhi MS, Tang CS (2014) POMS initiative for promoting practice-driven research and research-influenced practice. *Production Oper. Management* 23(5):725–727.
Sodhi MS, Tang CS (2008) The OR/MS ecosystem: Strengths, weaknesses, opportunities and threats. *Oper. Res.* 56(2):267–277.
Sodhi MS, Tang CS (2014a) Guiding the next generation of doctoral students in operations management. *Internat. J. Production Econom.* 150(April):28–36.
Sodhi MS, Tang CS (2014b) Supply chain research opportunities with the poor as suppliers or distributors in developing countries. *Production Oper. Management* 23(9):1483–1494.
Starr M, Van Wassenhove L (2014) Introduction to the special issue on humanitarian operations and crisis management. *Production Oper. Management* 23(6):925–937.
Tang CS (2015) The past, present, and future of *Manufacturing & Service Operations Management*. *Manufacturing Service Oper. Management* 17(1):1–3.
Terwiesch C, Ulrich KT (2014) Will video kill the classroom star? The threat and opportunity of massively open online courses for full-time MBA programs. Working paper, Mack Institute for Innovation Management at the Wharton School, University of Pennsylvania, Philadelphia.
Van Mieghem JA (2013) 3Rs of operations management: Research, relevance and rewards. *Manufacturing Service Oper. Management* 15(1):2–5.
Van Wassenhove LN, Besiou M (2013) Complex problems with multiple stakeholders: How to bridge the gap between reality and OR/MS? *J. Bus. Econom.* 83(1):87–97.
Yip G (2011) Business research needs to be more relevant for managers. *Financial Times* (February 14), <http://www.ft.com/cms/s/2/f42b4028-35fb-11e0-b67c-00144feabdc0.html#axzz3hUkdcJQt>.