

# Comment on "The OR/MS Ecosystem: Strengths, Weaknesses, Opportunities and Threats" by ManMohan S. Sodhi and Christopher S. Tang

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It is good to assess periodically the strengths, weaknesses, opportunities and threats to our profession. This paper serves a useful function in doing so, but I do have some concerns about it.

My biggest concern about the paper is the overstatement of the weaknesses of the profession and, especially the role of academics in this weakness. For example, the paper states that "It does not help that practitioners are but little engaged in OR/MS journals. Even the practitioner-oriented journal *Interfaces* has only two practitioners on its 26 member editorial board." The paper fails to appreciate that a substantial number of academics are also practitioners. This includes Art Geoffrion, to whom the paper is dedicated, and over half of the (non-author) academics credited in the paper's acknowledgements section with being presenters at the motivating cluster at the Pittsburgh INFORMS meeting. In addition, while 24 of the 26 members of the *Interfaces* editorial board have academic affiliations, at least half of the 26, including Gene Woolsey of the Colorado School of Mines, are serious practitioners.

The footnote listing the exceptions to the "Lack of practitioner involvement [in] OR/MS publications," omits the OR Practice section of *Operations Research*, which since its founding over two decades ago has always published only real applications and made it a practice to have at least one referee on each paper be a practitioner. It also omits the extensive coverage of applications in OR/MS Today, which is the only publication all INFORMS members get. At present, the main source of the relative scarcity of papers about real practice in INFORMS journals is not the unwillingness of editors to print them, but the unavailability of such papers to the journals. As a former editor of both the OR Practice section and of *Interfaces*, I know first hand how hard it is to get good practice written up for publication. It is only half way to a joke to say that aside from the fact that they are not paid to write, there are only two reasons why practitioners don't write up real practice—one is that the project failed, and they don't want to look silly, and the other is that it succeeded and they don't want their competitors to know.

Unfortunately, the paper is correct that, "Improvement on something already published by garnering more mathematical results under slightly different or more general assumptions is one of the formulas for getting a paper published, which in turn advances a young researcher's career." However, this is a short-sighted strategy. It is counter balanced, in part, by the fact that most such papers get few citations while seminal papers that open up important new areas of application get many citations, which in turn advances a researcher's career.

In a similar vein to the criticism of the role of academics in journals, the paper states that “OR/MS professional societies are **dominated by academics** [emphasis in the original].” This is highly misleading with respect to INFORMS (and at least some non-US societies). While there are a limited number of INFORMS members who have extensive experience both as academics and practitioners, a large fraction of the INFORMS leadership comes from these people. Look at the list of INFORMS presidents, starting with John Little and Al Blumstein, and you will find very few who do not fit that description (and one exception is Brenda Dietrich, who is a researcher in industry but not an academic).

I have two final comments on other topics. First, the paper suggests that as a strategy, “Professional societies could create journals or magazines with a broader appeal to end users [that] address practical managerial issues and how OR/MS can help end users with their most important decisions.” This is not a bad goal or a new idea, but it is not one that we have ever been able to pull off. I think that it is inherently undoable. Managers care primarily about management issues, rather than analysis, and that is where our skills, including the skills of the bulk of our practitioners, lie. While our members may contribute to it occasionally, it is hard to imagine an INFORMS publication competing successfully with the *Harvard Business Review*.

Second, in discussing OR education, the paper doesn’t mention courses in the art of modeling such as those pioneered by Steve Pollack at Michigan and Dick Smallwood and Pete Morris at Stanford. The skills these courses develop are vital. OR/MS as a profession has become much better at solving equations, but it may have lost some of its skill in knowing which equations to solve.