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Towards Greater Relevance in Production and Operations Management

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What should we research and teach in production and operations management (POM)? This question is indeed a difficult, onerous, and a controversial one to answer. There would be a plethora of opinions that would exist among the large constituency of scholars who conduct research in a variety of operations management related topics, and convey the results of such research to students of the field. Some would even ponder whether such a question should be raised at all, since it is well nigh impossible for a single individual or a group of scholars to establish an agenda for the field that would represent some sort of a consensus opinion. Nevertheless, this issue is of such importance that several prominent POM scholars have joined this debate in one form or the other since the early 1980's (e.g., Buffa, 1980; Chase, 1980; Meredith et al., 1989).

In these changing times when almost every process in the business world is being reengineered, it may be worthwhile to revisit this question. Extending the debate may be valuable since our field is still attempting to clearly define its identity. While I do not profess to have all the requisite answers, it is hoped that this article will help define the challenges that must be tackled by leading-edge thinkers in the field. I will also outline some of the barriers that have impeded the growth of the field, along with my own thoughts regarding where we need to go forward from here.

Much of the ensuing discussion amalgamates and interchangeably talks about teaching- and research-related ideas, since I believe that the two are inextricably linked with one another. A partial evidence of this belief lies in the fact that a perusal of a

typical introductory-level textbook in POM shows that most topical chapters are based on existing research in the field. In addition, a substantially large portion of the reference material is from academic sources. In other words, we tend to teach what we research.

In order to better understand where we currently stand, it might be helpful to first briefly trace the origins of our field and discuss some of the trends that have occurred over time. The discipline of POM evolved primarily from operations research as increasingly new and sophisticated techniques were applied to solve problems that had a potential application in the manufacturing or service sector firms. The advent of computers and the simplex technique helped solve large-scale linear programming problems as they began to be applied to decision areas like aggregate production planning, machine scheduling, location analysis, project planning, etc. Thus the availability of techniques fueled the growth of the field.

Consequently, Buffa in 1980 called for an evolution of the field from beyond this phase to the next level, in which actual problems encountered in different manufacturing and service operations would become the basis of future research and teaching. Instead, by and large we stayed with the methodology-driven research and teaching agenda that had provided the initial impetus for the growth of the field. This issue was also noted by Meredith et al. (1989), almost a decade after the call to arms was issued by Buffa for establishing in our research and teaching a "strong element of relationship to the practicing world."