

Empirically-Grounded Analytic (EGA) Models

We encourage the submission of manuscripts that are based on empirically-grounded analytic (EGA) models. Because the definition is elusive, we offer some elaboration here. In a general sense, EGA models combine mathematical, stochastic, and/or econometric modeling techniques with empirical data. The requisite empirical grounding is achieved by using empirical case methods, action research methods, or interviews to establish a theoretically and empirically relevant research question. Model parameterization should similarly be grounded in empirical data, and assumptions that the model makes must be empirically reasonable; methodological convenience or analytic tractability cannot trump empirical rigor. Imputing the cost parameters of a model based on actual observed data is a good example of being empirically rigorous. Just like all research published in JOM, authors must seek a sense of generality, not just focus on a single instance of a problem. Finally, the credibility of EGA models is strengthened if research is not only motivated by a practical problem but is field-tested in authentic settings as well.

We sometimes get submissions where the model is based on conjecture about how a real-life process could look like, based on ostensive similarities one has identified by, say, reading an article in the popular press. As a general rule, this does not provide sufficient grounding, which must always be explicit and empirically plausible. Similarly, one plant tour or an informal discussion with an executive is not sufficient to establish relevance; grounding must be more than anecdotal. The ground rule for EGA models is straightforward, and is more or less identical with the ground rule used to evaluate all manuscripts: to be considered for publication in JOM, an EGA modeling paper must plausibly establish an authentic practical operational problem that is general enough to warrant the researcher's attention.