TWENTY-TWO CRITICAL PITFALLS IN SIMULATION MODELING
AND HOW TO AVOID THEM

Averill M. Law

4729 East Sunrise Drive, #462
Tucson, AZ 85718, USA

ABSTRACT

Simulation modeling is the most widely used operations research technique for designing new systems
and optimizing the performance of existing systems. Yet, the education of many analysts is limited to
vendor training or university courses that focus on how to use a simulation-software product. While such
instruction is certainly important, we would argue that it is not, in general, sufficient for performing sound
simulation studies. We will discuss 22 critical pitfalls that can result from not having an understanding of
the entire simulation-modeling-and-analysis process. The talk concludes with a brief discussion of oppor-
tunities for addressing educational deficiencies.