STATISTICS 101: A REFRESHER FOR THE SIMULATIONIST

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ABSTRACT

This session will refresh attendees on basic statistics for simulation modeling. Statistical distributions commonly utilized in simulation models will be discussed. Visualizations and common uses of several distributions will be presented, along with a focus on common pitfalls to be aware of. The session will also discuss the importance of multiple replications, run length and warm-up period. Attendees should be better able to answer several common simulation statistics questions: • What if my data does not fit any particular distribution? • Why do I get the same results each time I run this? I thought simulation was supposed to include randomness? • How many replications should I run? • When can I exclude warm-up period considerations? • How can I tell if 2 simulated systems have statistically significant different performance?