

Modeling and Simulation Body of Knowledge (M&SBOK) - Index

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M&S: Science/methodology - Experimentation

Main issues related with experimentation are outlined in the following table.

Table - Main Issues Related With Experimentation

Criteria	Issues of M&S Experimentation
Specification of experimental conditions	<ul style="list-style-type: none">- experimental frame (Zeigler)- applicability of experimental frame to a model- scenario specification- composable and synthesizable scenarios- (composable/reconfigurable) synthetic environments
Simulation runs	<ul style="list-style-type: none">- length of the run- number of runs- warm-up period- steady-state period- antithetic runs
Statistical design of experiments	<ul style="list-style-type: none">- several techniques for design of experiments (Law and Kelton); Kleijnen- automation of statistical design of experiments
Analysis of simulation results	<ul style="list-style-type: none">- post simulation analysis- post simulation report- post live/virtual/constructive simulations reports
Sensitivity analysis	
Experiment with several aspects of reality simultaneously	<ul style="list-style-type: none">- multisimulation (Ören; Yilmaz and Ören)