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(54) **CREATING SIMULATION MODELS FOR COMPLEX ADAPTIVE SYSTEMS USING A MULTI-MODEL, GENERATIVE APPROACH**

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(57) **ABSTRACT**

A system and method for multi-model generative simulation modeling of complex adaptive systems, comprising a generative simulation platform, a multidimension time series datastore, and a directed computational graph, capable of running a multitude of simulations with complex and shifting model data, and an optimization engine which can introduce changes into a simulation to represent unforeseen or random changes and events to introduce changes and shifts in the simulation that might not otherwise occur.