

# Agent Based Simulation Enabling Assessment of Customer Centric Hyperconnected Demand and Supply Chain Transformations

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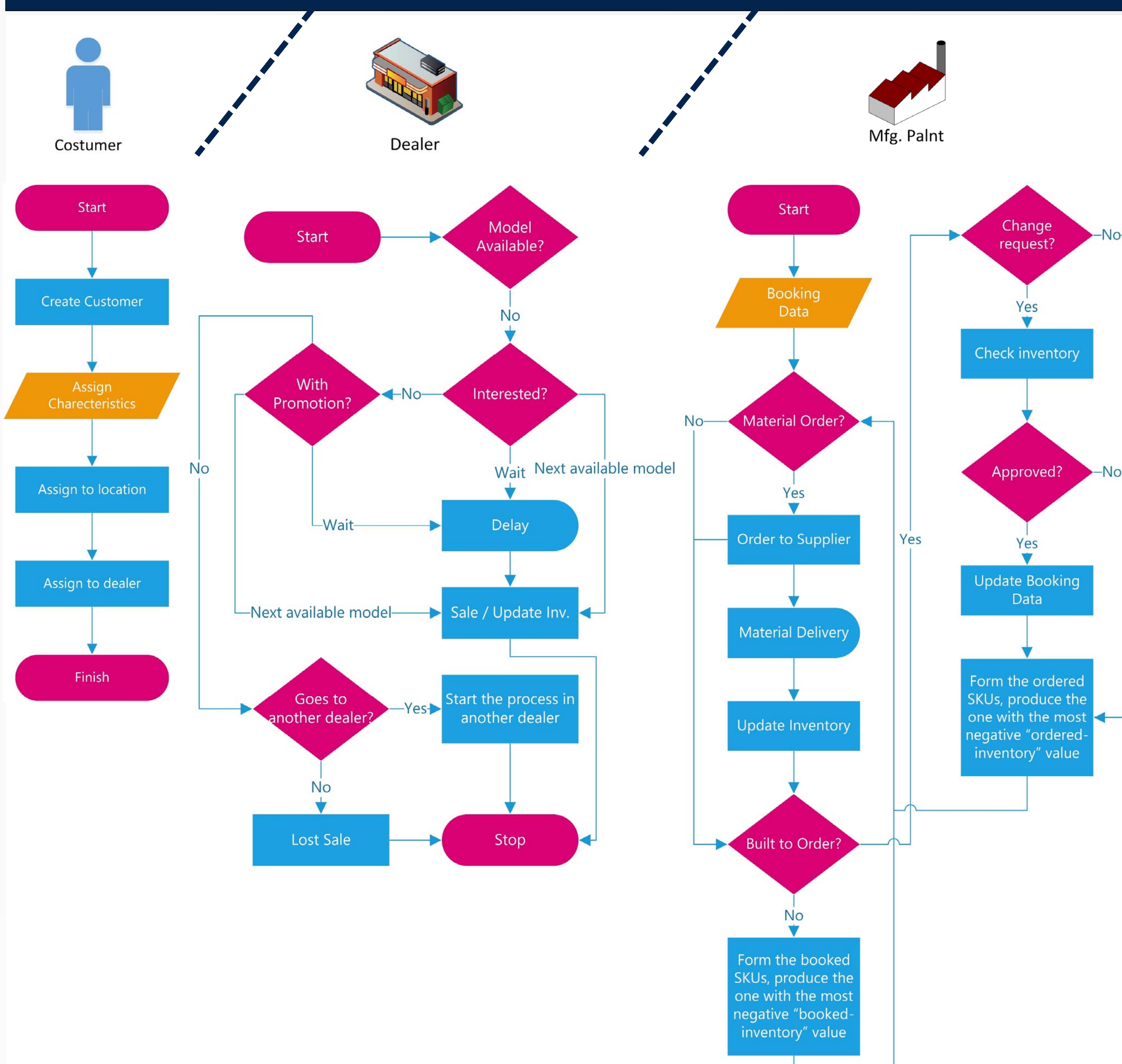
## Research Challenge

- Create an agent based discrete event simulation model enabling to simulate a complex large scale demand and supply chain for high value consumer products such as vehicles
- Interconnect the simulation with the company's supply chain cockpit, automatically computing and displaying key performance indices
- Model explicitly:
  - Behavior of each customer interacting with a dealer in his purchasing process in a potential substitution context
  - Ordering behavior of each dealer in the network,
  - Product delivery, assembly and manufacturing planning and control process
  - Parts supply planning, ordering and delivery processes
- Enable simulation based experimentations assessing tactical and strategic transformations of the demand and supply chain, including exploitation of the Physical Internet

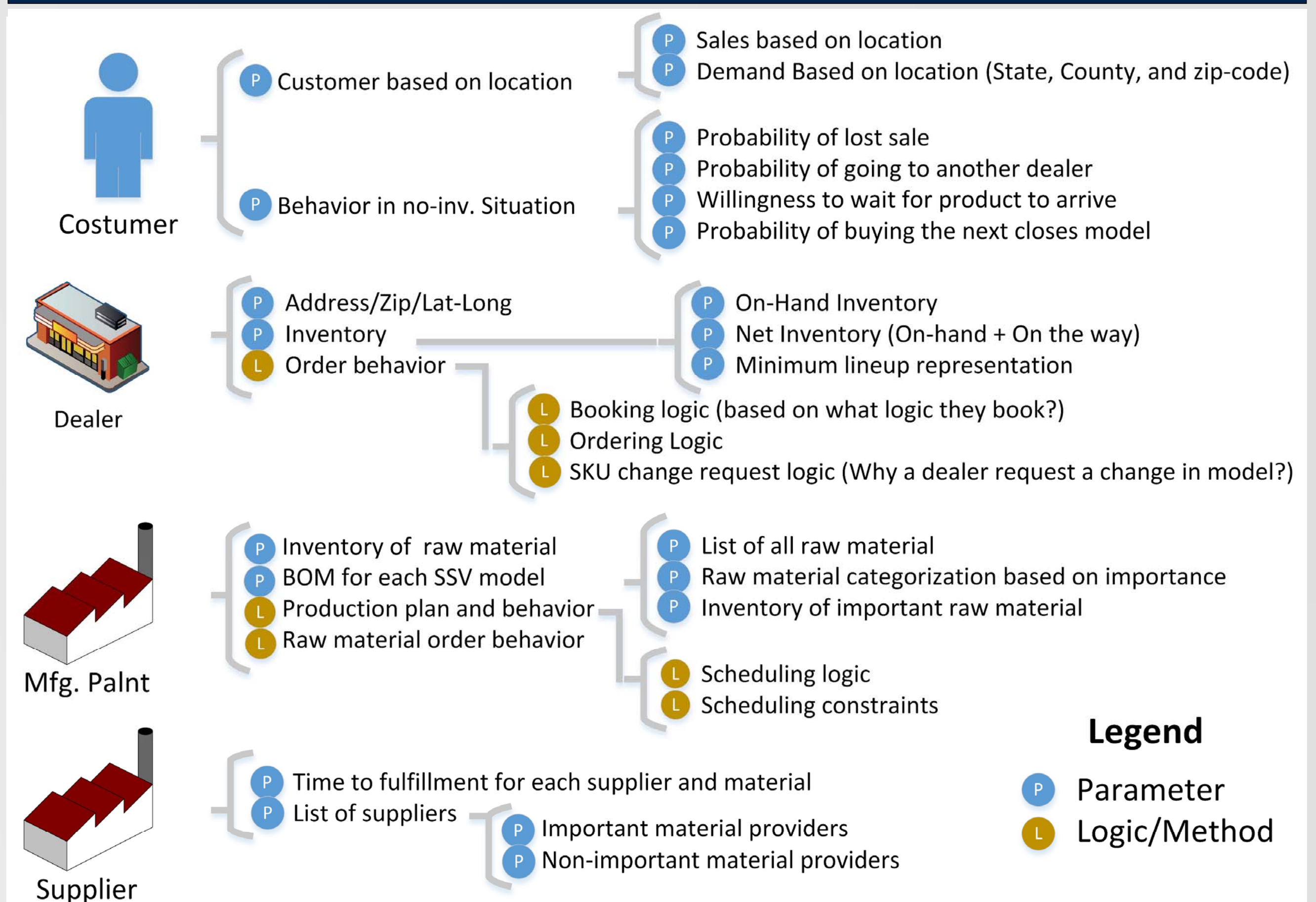
## Demand & Supply Chain Map



## Illustrative Agent Flowcharts



## Illustrative Inputs



## Illustrative Outputs

