

Drilling for Inventory

Motivation / Background

- Millions of dollars of inventory flow through global multi-echelon supply chain
- Significant value creation through inventory reduction – e.g. working capital reduction & OPEX reduction

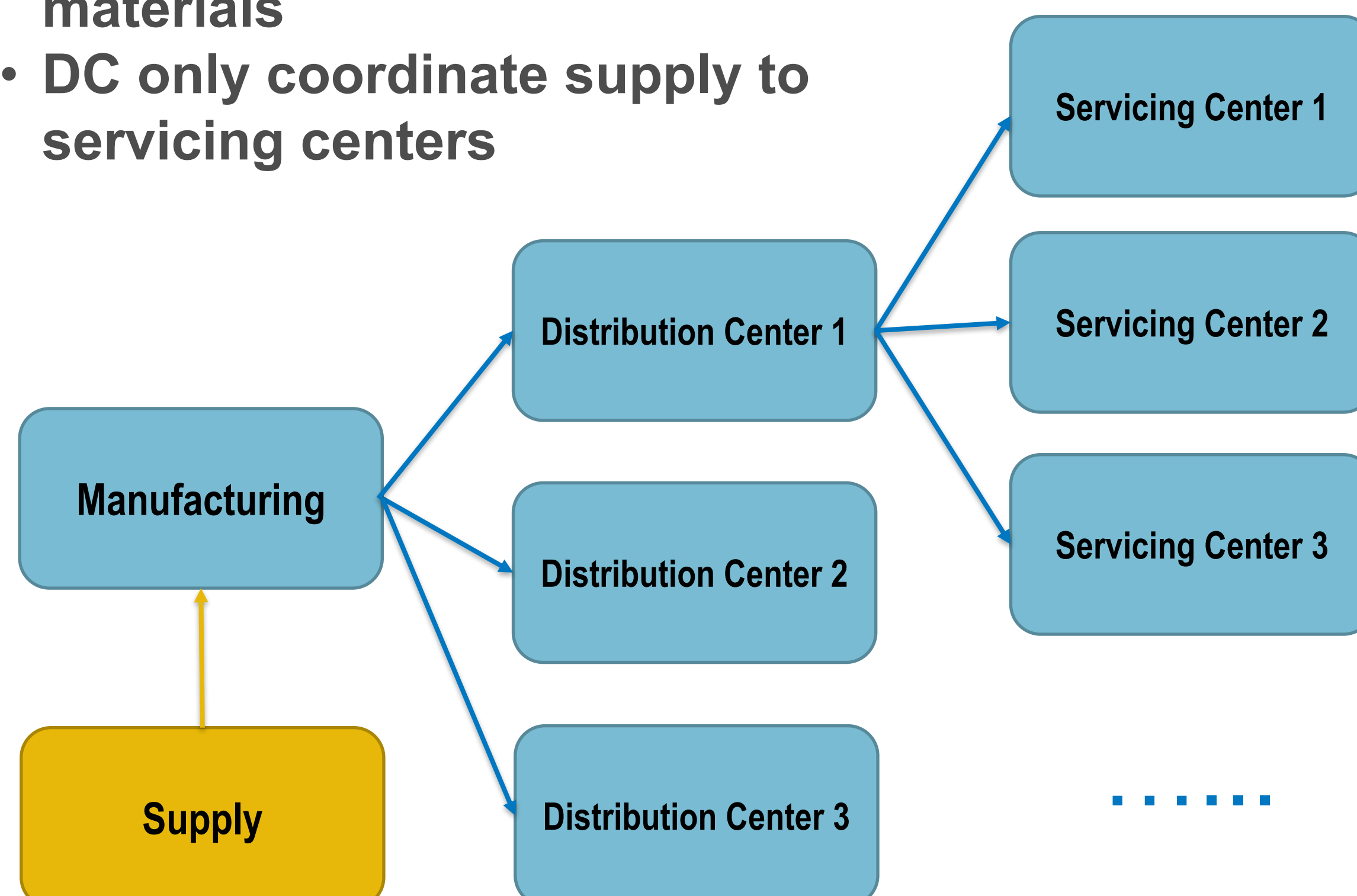
Key Question / Hypothesis

Will centralized control at strategic nodes enhance inventory in global supply chain?

- Aggregated sourcing and supply at global distribution centers

Current Mode

- Manufacturing sites source all materials
- DC only coordinate supply to servicing centers



The Problem

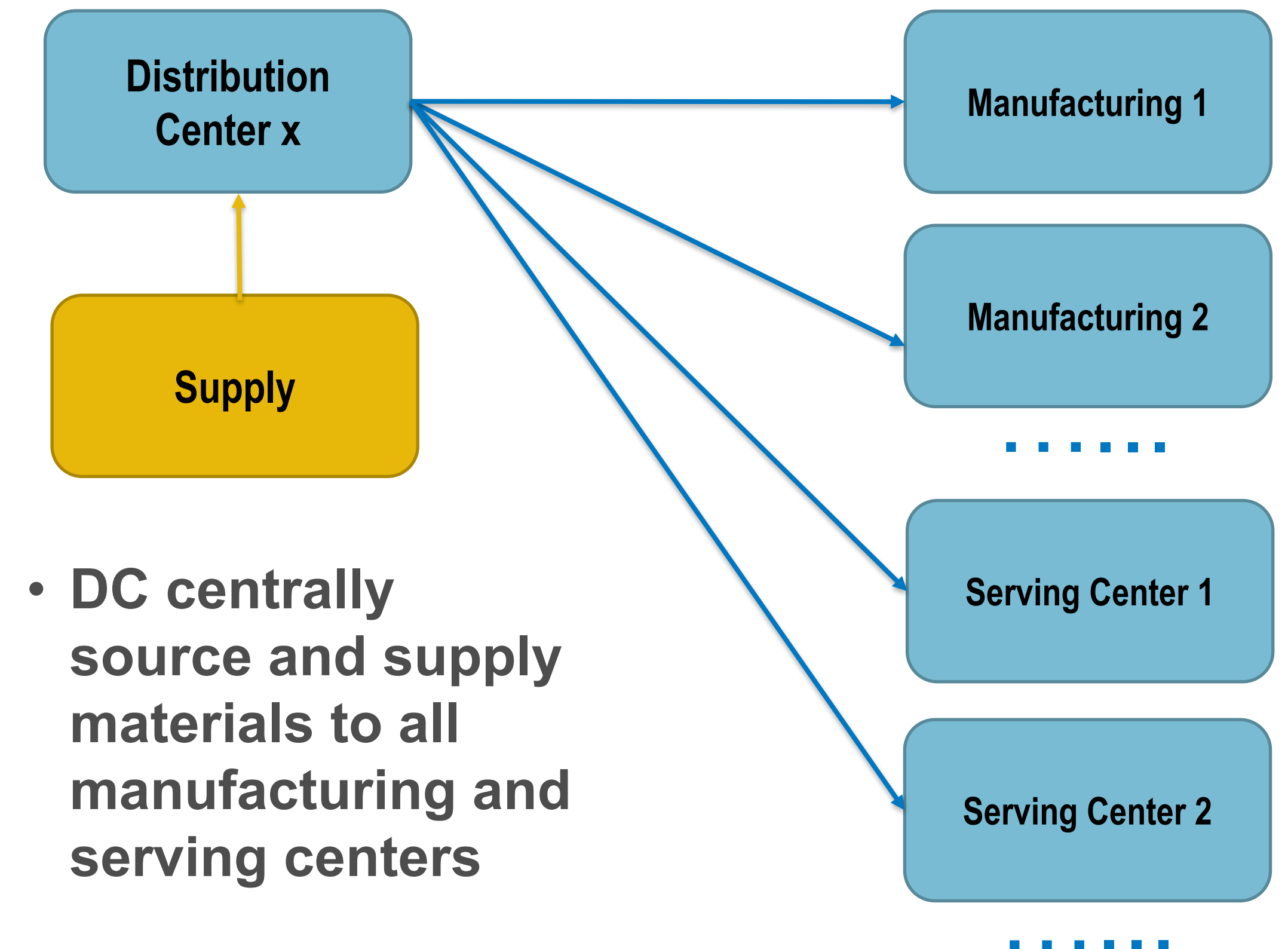
In current model:

- Inventory have to go through the manufacturing echelon
- DC only coordinates for the demand at servicing centers
- Lost opportunity for synergy

Methodology

- Use Clark Scarf method to simulate the future model
- Compare future model with the current model based on total relevant inventory cost, i.e. safety stock and shortage cost.
- Transportation costs are considered outside project scope

Future Mode



- DC centrally source and supply materials to all manufacturing and serving centers

Target Deliverables

- Assess ABC company's future supply model
- Visualize optimal inventory level at each echelon
- Identify critical processes and impacts through in "what-if" scenarios

Boxi Xu



Patrick Scott

