

Improving supply chain performance

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IMPROVING SUPPLY CHAIN PERFORMANCE ORDER PICKING AND SERVICE NETWORK DESIGN

Farzaneh Rajabighamchi

1. An optimal walk in the grid graph that visits every node at least once, will not use any edge twice, or more, in the same direction.(Chapter II)
2. If an optimal walk in a warehouse with grid graph uses an edge(aisle) twice — in opposite direction, using two paths P_1 and P_2 , then these two paths have no vertices in common. (Chapter II)
3. In a scattered storage system, the seeming disorder hides an organized efficiency in the complex warehouse environment. It significantly reduces travel distances, enhancing overall operational efficiency.(Chapter III)
4. There is a beauty in guided local search, where the wisdom of heuristics lights the path to optimal solutions in the intricate maze of problem-solving. (Chapter III)
5. Adding the express service mode with reasonable price to the transportation system, decreases empty truck load drastically.(Chapter IV)
6. Adaptive strategies to address demand uncertainty enable the supply chain to respond proactively, minimizing risks and improving overall responsiveness.(Chapter IV)
7. Restricting the hub capacity results in longer transit time and higher fleet size. Efficient management of hub capacity within the supply chain optimizes hub operations and contributes to enhanced network performance. (Chapter IV)
8. An hour saved at the non-bottleneck is a mirage.

- Eliyahu M. Goldratt, The Goal

9. Almost all quality improvement comes via simplification of design, manufacturing, layout, processes, and procedures.

- Tom Peters

10. “Amateurs talk strategy. Professionals talk logistics.”

- Napoleon