

Supply Chain Contingency Strategy



Challenge

- After facing service impacts due to Hurricane Sandy, Papa John's Pizza wanted to develop a supply chain contingency strategy that would minimize service impacts due to a disaster situation that shuts down one or more facilities for an extended period.
- Their distribution network includes 11 facilities spaced throughout the United States; a long-term facility shutdown would significantly impact regional demand servicing and operational cost
- Additionally, production and inventory would be under significant strain due to inventory perishability and space requirements

Response

- Performed a detailed assessment to determine disaster risk probabilities and quantify business impacts of disruption
- Modeled the supply chain network for high risk and high impact contingency scenarios
 - Fleet Analysis
 - DC-to-Store distribution alignment
 - Production and inventory requirements
- Evaluated the contingency supply chain networks in comparison to the fully operational network metrics in order to minimize cost and service impacts

Result

- Provided fleet capacity analysis based on variability and due to impacts of natural disaster.
- Identified ideal distribution alignments that would maintain service levels at optimal cost
- Determined network-wide adjustments to production and inventory requirements that negated impacts to demand fulfillment
- Developed a plan of action to mitigate service disruptions that defined required logistic capabilities as well as rapid response timelines