

## Network Optimization At Large Consumer Goods Packaging Manufacturer: Determining Plant Closures And New Asset Placement

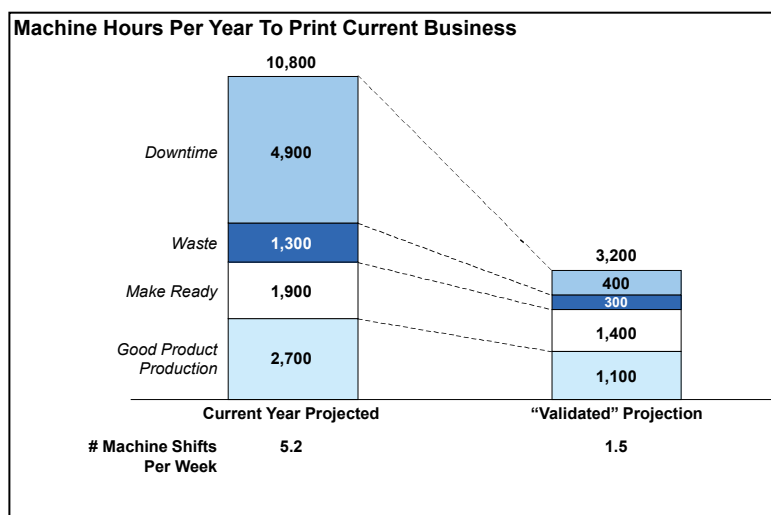
**The Challenge:** PackageCo (a \$500MM consumer products packaging division of a multi-billion dollar global packaging conglomerate) had excess capacity in its manufacturing network (rigid carton and flexible) due to shift in market trends and increased cost pressure. While management was leaning towards closure of the lower volume facilities located in Mid-Atlantic states, they had not yet fully assessed the closure scenario, which was complicated by the recent purchase of a multi-million dollar flexible printing machine slated for placement in one of the two Mid-Atlantic facilities. Gotham was brought in to help sort through the closure options and determine placement for the new printing asset by building the business cases.

### The Partnership:

To properly define the scope of the project, preliminary analysis focused on examining current and projected sales volumes and packaging manufacturing capacity throughout the network to confirm the two facilities in question were not required and to identify the issues specific to each plant that would need to be addressed in closure--the first plant had two separate revenue streams, one a declining legacy business and one new growth business; the second plant was the original planned location for the new asset.

For both business cases, we developed a fact base and analyzed operations vis-a-vis four key requirements:

- Capacity and loading for each affected plant (the two closure candidates and the plants that would have to absorb their business after closure)
  - Project volumes for each line of business
  - Determine capacity of each conversion asset type
  - Consider loading scenarios for end state
- Customer logistics and risk for affected plants
  - Identify top customers by aggregate sales for previous two years
  - Review each customer for risks with sales executives
- Cost savings scenarios:
  - Profile current cost structures, including hourly rates, number and type of personnel, and overhead requirements
  - Evaluate each customer's jobs for cost changes in the post-consolidation world (on different assets)
  - Evaluate freight cost differences
  - Identify closure cost savings, including overhead, leases and depreciation
  - Estimate other offsetting costs, e.g., increased management requirements in other facilities
  - Analyze each viable consolidation scenario
- One-time costs and saving scenarios:
  - Review assets for write-off in closed facilities
  - Calculate one-time severance and technology transfer costs
  - Estimate required plant improvements for remaining facilities.



In addition to the business cases, we developed migration plans and recommended an alternative location for the soon-to-arrive new asset.

**Results:** In aggregate, the two closures provide PackageCo with \$6.3MM of annual savings for a one-time cost of \$9.3MM. This translates into a 1.5 year payback for the initiative, well within the guidelines for capital projects. Both closures were announced within weeks of the Board's decision after the business cases were presented.