## **3M COMPANY** Streamlining Demand Planning

## Student Team:

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## **Project Sponsors:**

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3M is a global manufacturer of products across multiple industries, grouped into five business groups: Industrial, Healthcare, Electronics and Energy, Consumer, and Safety and Graphics. The company generates over \$30 billion in revenue due to fundamental strengths in technology, innovation, manufacturing, global reach, and brand. The Automotive Aftermarket Division (AAD) manufactures products for each stage of the automotive repair and refinishing process.

The abrasives product portfolio supply chain, the focus of the team's analysis, was often placed under enormous pressure due to episodic demand spikes. The supply chain was not well planned for this erratic demand, leading to increased backorders, production overtime, and superfluous expediting costs. The team was tasked with identifying the SKUs that drove this sales variability. These findings were to be used to help AAD improve their current demand planning process to decrease backorders, overtime, and expediting costs.

The Tauber team performed an analysis of historical sales for 3000 abrasive SKUs between January 2015 and February 2017, identifying multiple SKUs that consistently drove demand spikes. The team also developed a capacity planning tool and associated training documentation that, along with the key SKUs, were communicated to the production facilities to enable them to level load the facilities in preparation for demand spikes. The Team designed a new business process to better align sales, marketing, demand planning, and operations to establish proper metrics and information sharing across all functions. This process ensures coordinated procurement, production, and logistics operations to support sales efforts.

Utilization of the team's findings and implementation of the new business process will drastically increase supply chain responsiveness and is expected to lead to an estimated one-time cash savings of \$2M-\$6M in safety stock reduction for the abrasives portfolio and annual cost savings of \$1M-\$4M in overtime and expediting fees.