

GENERAL MOTORS – GPSC

THE FINAL COUNTDOWN: ALIGNING SUPPLY AND DEMAND FOR A BETTER BUILD OUT

Student Team:

Aniket Gur – Master of Supply Chain Management
 Jonathan Morof – EGL (BSE/MSE Industrial & Operations Engineering)
 Jae Young Park – Master of Business Administration

Project Sponsors:

Robert F. Harris – Sr. Manager of Supply Operations Processes and Systems
 Diego M. Operti – Manager of Specifications/Business Processes and Systems
 Anne M. Schneider – Director of Supply, Global Purchasing and Supply Chain
 Dave M. Vanstone – Manager of Cadillac Operations and Channel Management

Faculty Advisors:

Yan Huang – Ross School of Business
 Mariel Lavieri – College of Engineering

General Motors, a \$150 billion automotive company, aims to design, build, and sell the world’s best vehicles. The Order Fulfillment and Global Purchasing and Supply Chain (GPSC) organizations are working collaboratively to focus on the customer while reducing cost.

GM challenged the Tauber Team to develop a collaborative strategy for the last weeks of production for a vehicle, otherwise known as the build out, through development of a pilot strategy using the Cadillac SRX build out. The team interviewed experts across GM, including visits to Cadillac of Novi and the GM Ramos Arizpe assembly plant in Mexico, and thoroughly analyzed consumer and supply chain data for the SRX. The team’s new strategy reduces obsolete material cost while focusing GM’s final product offer on customer preferences. A four point plan details the new build out process: simplify vehicle, stabilize schedule, freeze engineering changes, and improve forecast. The table below shows this plan.

Focus Area	Improvements	Savings
Simplify Vehicle	Removed customer options based on consumer and supply chain data. Improved sales rate for final vehicles in advance of a new model launch. Reduced obsolescence risk on low volume parts.	\$9.2 M/yr
Stabilize Schedule	Extended frozen schedule window from 4 to 8 weeks, removing variability in supply chain and minimizing obsolescence risk.	\$3.0 M/yr
Freeze Engineering Changes	Suggested freezing non-safety engineering changes preceding build out. Saved labor cost of executing unnecessary changes.	\$2.4 M/yr
Improve Forecast	Recommended update of long term forecast to remove large errors. This prevents excessive safety stock which creates obsolescence.	\$0.8 M/yr

The key to implementing this project lies in communication between departments. GM shares one vision, but departments speak different languages with many acronyms. The Tauber Team developed a tool which can integrate the data necessary to bridge this language gap. Furthermore, the team created a project management plan to be used by a cross functional team which will implement recommendations for each subsequent build out. Implementation of all recommendations is projected to save GM \$15.4M annually across its supply chain for North American Assembly.