

Product Development Process At Tier 1 Automotive Interior Supplier: Achieving A Lean, Flexible Organization To Increase Competitiveness

The Challenge: BigAuto is a leading automotive interior supplier with over 10,000 employees and multiple design centers and manufacturing plants worldwide. It is a recognized leader in its business, and supplies components for a number of different OEMs on five continents. BigAuto's competitive arena has intensified recently as a number of new competitors have entered the market. In addition, customers are demanding faster response time and support for their lean operations from suppliers. BigAuto's response to these changes was to aggressively expand its customer base while pursuing a vision of an entrepreneurial, lean and agile organization with an affordable cost structure. We were charged with the task of helping management create a transition path to move operations to the vision.

The Partnership:

Analysis: Along with senior executives, our team quickly decided that product development was the right place to start, given its high impact on the overall product realization chain. We performed a diagnostic study of the operations that uncovered several key problems adding unnecessary time, cost, and quality problems to the process:

- Performance metrics were reactive in nature and did nothing to improve performance
- Engineering resources and focus were on the end of the design process where many errors and problems were uncovered
- Resource allocation mechanisms were not flexible enough to adapt to changing customer needs
- There was a great deal of dead time and long iteration loops in the development process, amplifying the effect of any mistakes or changes in customer requirements
- Support groups, like Purchasing and Marketing, were not effectively helping the cross-functional product development teams, leading to poor resource utilization and low efficiency throughout the development process

Strategy: To address these issues, we recommended a path of action, including:

- Implementing a balanced set of in-process, predictive performance metrics for product development
- Clarifying and communicating cross-functional roles for Engineering and the support groups
- Developing structures and techniques for allocating resources in a flexible manner and for quick discovery and response to design problems
- Creating an explicit decision process to handle changes in an efficient manner.

The Results: Tangible improvements for BigAuto as a result of the study include:

- The ability to proactively prevent time and cost overruns and to ensure high-quality product
- A reduction in the amount of resources needed to manage and execute the design process, via increased efficiency, shorter iteration loops, and better resource allocation
- A more affordable product development cost structure; increased competitiveness

