



Does your company need to prioritize new product development? Do ideas for new products get stalled during the long step between design and production? Could a streamlined product development process—one that reduces time-to-market and cuts costs—help elevate your company to the next growth level?

Doing more with less is a mandate for virtually every firm, and innovation is crucial to long-term survival. Lean Product Development (LPD), a strategic part of the Manufacturing Extension Partnership's Innovation and Growth Services, applies the waste-elimination philosophy of lean to the product development process, allowing firms to reduce time to market, development expense, and other product development risk, while improving resource utilization and product costs.

Companies that embrace LPD have reported up to a 50% reduction in launch schedule, dramatic improvements in gross margin, and enhanced customer satisfaction.

Using a proven step-by-step methodology, LPD integrates powerful waste-eliminating tools into any product development process. This highly-individualized process focuses on:

- Creating cultural change while positioning your company to grow and increase profits by utilizing a more streamlined and effective product development process
- Helping you overcome time-to-market, portfolio management, design and development resource, and new product cost challenges
- Transforming the small and mid-size manufacturer's enterprise via the delivery and execution of LPD tools, methods, and strategies.

These methods can easily be scaled to your company's size and are recommended for manufacturers who are new to product development or trying to improve their current product development process.

Developing a new product is exciting and risky, but with LPD, you can learn to reduce the risk so you can enjoy the excitement — and the payoff.

NEXT STEPS



100 Bureau Drive
Gaithersburg, MD



(800) MEP-4MFG (Brian Lagas)



mfg@nist.gov



www.nist.gov/mep

LEAN PRODUCT DEVELOPMENT



NEW PRODUCT DEVELOPMENT STRATEGY PAYS OFF

Composite Technology Development, Inc. (CTD) custom designs, manufactures and tests innovative materials and products for the energy, defense, and aerospace markets. A woman- and minority-owned small business, CTD receives numerous grants focused on developing and commercializing products needed in the government arena. Founded in 1988, CTD is located in Lafayette, Colorado, and has 30 employees.

Situation. Through a combination of novel materials and insightful engineering, CTD has developed many new technologies and products that meet true market needs. However, with staff focused primarily on development and innovation, the company needed help getting products to market quickly and efficiently to maximize profits. CTD approached Manufacturer's Edge, a NIST MEP affiliate, for guidance and expertise in product development, commercialization processes and program management methods.

Solution. Manufacturer's Edge led the staff, with a series of training including leadership, engineering, product development, sales, Rapid Cycle Product Introduction (RCPI), Project Management workshops and Lean/Six Sigma. Of those RCPI sparked a fundamental change in how the company develops new products: all development activities

are viewed through the lens of customer needs. Using RCPI methods, the company collected, analyzed and implemented customer needs in the product development process like never before.

Combining insights from RCPI and processes from the Project Management and Six Sigma workshops, the company launched its newest product, the Portable Array Module (PAM™) for Expeditionary Power, resulting in over \$11 million in new sales to the U.S. military. As a result of this success CTD formed a new company, Nishati Inc.,

**\$11 Million in new sales
Brought new product from concept
to market in less than 2 years**

which focuses on the solar power market and meeting the needs of the U.S. Military. CTD will be leveraging the Six Sigma training provided to help Nishati establish a Lean manufacturing process and institute quality procedures.

"The RCPI process was a key factor in CTD's ability to define the customer's critical requirements and to develop a product that met the customer's needs."

Patrick Hipp, Vice President, Business Development

JOIN THE DISCUSSION



Visit www.nist.gov/mep and join the conversation on MEP's *Manufacturing Innovation Blog* at nistmep.blogs.govdelivery.com.

WWW.NIST.GOV/MEP • 1-800-MEP-4MFG