Over the last decade, the manufacturing sector has been under constant pressure to not only maintain but increase its competitiveness in the global marketplace. Advances in new and emerging technologies, process integration, and organizational optimization have enabled companies to dramatically improve the performance of their production processes and supply chains. But for companies who want to win in this increasing competitive sector, creativity and innovation is required.

Eco-Composites LLC, a startup product development company and manufacturer of products produced from industrial recycled plastics, understands the value of this competitive edge. Addressing the need for re-usable materials for high value applications, Eco-Composites develops sustainable products, substituting materials to gain “closed loop” benefits and increasing the value of recycled materials, in a number of industries.

In February 2008, Eco-Composites contacted InnovationWorks, an innovation coaching program of The Right Place, for assistance with their product development and manufacturing processes. “Being a product development company, ideas and innovation are not a problem. Qualifying and quantifying marketable products and ideas are,” explained Carey Boote, President of Eco-Composites.

The InnovationWorks team met with Eco-Composites to review their products and processes. It was soon determined that a new program recently launched by the Manufacturing Extension Partners (MEP) and the National Institute of Standard and Technology (NIST) would address their product development and innovation issues. The Merwyn Innovation Acceleration Program, a new service offered by the Michigan Manufacturing Technology Center-West (MMTC-West) is an early state innovation sales forecasting system that helps innovators reduce risk of failure and better focus their energies on the key areas of variation and uncertainty.

“We have looked for key tools to increase the impact for our new product releases, and the Merwyn Innovation Acceleration Program was that tool,” explained Boote. “The information and exercises were extremely effective in helping us define a clear message about the three products we put through the acceleration program.”

Representatives from Eco-Composites attended the first Merwyn Idea Translation Workshop, hosted by MMTC-West in West Michigan. During the workshop, the company worked with MMTC-West consultants to translate their most recent product idea, the Eco- Pot, into quantifiable data required to run a Merwyn Business Simulation. The results of the simulation provided Eco-Composites with a comprehensive overview of their innovation in one easy-to-understand and communicate research report; including how much they might sell, the quality of the idea, innovation readiness and proprietary protection and royalty rate expectations.
Based on the results of the simulation, Eco-Composites was able to reasonably forecast a $1.1 million average first year in sales with an aggressive high-end potential of up to $26 million. This information was provided in a sales forecast matrix based on two variables; the level of sales and marketing support and the percentage odds of selling the product. The simulation report also provided a complete sales matrix for international markets in Canada and Europe.

More importantly, the report generated sales forecast information based on alternative product development approaches. This information reviews two major areas of the product development process, the Marketing Concept and Product/Service Improvement, and provides data based on the impact each has on the development of the Eco-Pot. Using the previous table of sales forecast data, the report identifies the possible impact of focused improvements made to either the marketing concept or the product itself.

Based on the results of this information, Eco-Composites was able to determine that focusing their efforts on the marketing concept could increase their $1.1 million realistic annual forecast to $1.7 million, a 55 percent increase. Focusing their efforts on further Eco-Pot improvements could increase their realistic annual forecast to $1.4 million, an increase of 27 percent. Finally, if the company focused their efforts on improving both areas, the resulting annual forecast increases to $2.2 million, an increase of 100 percent.

Using the results of this report, Eco-Composites was able to focus their attention and capital on those aspects of product development that would return the most impact. The company also used the results of the report to effectively apply for grant funding and other additional funding channels to increase the capital support for the product.

Creating “eco-effectiveness” has been the focus of business for Eco-Composites since the origin of the company in 2001. The company initially developed, marketed and produced a recycled plastic Guardrail Spacer block for highway construction. Product development continues today, designing sustainable products, substituting materials to gain “closed loop” benefits and increasing the value of recycled materials, in a number industries.

**Eco-Composites LLC**  
845 Allen Drive  
Holland, MI 49423  
**Established:** 2001  
**Employees:** <5

**Products:** Paper Roll Plugs, Packaging Inserts, Structural Supports, Spacers, Molded Pots, and Bio-Degradable Components

**Industries:** Office Furniture, Automotive, Paper, Horticulture / Agriculture, and Plastics Processing