



Five Ways to Improve Timing and Profitability When Bringing New Technology to Market

by Kevin Galvin, Advanced Purchasing Dynamics, Inc. 734-927-0836

Advanced engineering that brings new product to market is the growth and profit backbone for many successful companies. But lack of early involvement with purchasing can often add timing and cost to new projects.

When investigating the potential for new products, companies assess technologies and conduct market research to determine their ability to commercialize the items they have in their development pipeline.

Much work and significant expense goes into these efforts, including proof of design and proof of manufacturing demonstrations. However, oftentimes, a true understanding of the cost to produce a product and its market viability are not determined until a company is far down the road to an established launch date.

The role of Procurement is critically important in a company's process to investigate commercially viable new product offerings.

Beginning with an assessment of technology and the development of a commercialization roadmap, it's vitally important that a concept for the supply chain required to produce the product be established. This would include both a plan for make vs. buy and a clear awareness of the capabilities of the potential supply partners that would make up that chain.

While a company's engineering team will usually find suppliers that can support their design efforts and make components, those firms' abilities to produce the required volumes at the costs needed to make the project commercially acceptable may not be fully understood.

Advanced Purchasing Dynamics was recently engaged in the renewable energy field by a company that was considering whether or not to invest in a high-end solar cell project that could result in utility scale electricity.

Though this technology would yield higher efficiencies than current solar products, efficiency alone would not make it competitive with traditional energy sources on a per unit basis. Large scale production with automated, highly reliable assembly of low cost components would be required to bring the concept to market.



ADVANCED
PURCHASING
DYNAMICS

Five Ways to Improve Timing and Profitability When Bringing New Technology to Market

by Kevin Galvin, Advanced Purchasing Dynamics, Inc. 734-927-0836

The company and its technology partner had a design, a manufacturing concept, and a group of suppliers that was helpful in supporting some of the initial component designs. Added investment to support the program was needed to meet the development milestones and the plan for volume launch; however, a Procurement assessment of the project had not been conducted.

And while a demonstration field was being constructed to validate design and prove manufacturability, the market price for competing technologies was dropping, thus challenging all cost assumptions, most of which had not yet been validated.

APD conducted supplier assessments, gathered and challenged costs from various sources, including those that Engineering had identified, and enlisted the support of some major system suppliers to investigate cost down scenarios in an effort to make the project viable.

With the aid of APD, cost assumptions were challenged, design alternatives proposed and logistics plans modified. Nevertheless, a complete review of the revised BOM with costs showed that the project would not be commercially viable in the ever-changing and highly cost sensitive renewable energy field.

But, the project was not scrapped. The technology is leading edge and, given the right combination of improvements to design, manufacturability and supply chain, it may very well yield positive return on investment and prove to be an efficient and effective source of electricity.

The firm has taken a different approach towards the product development and enlisted the support of a couple of key partners to look at all facets of the design, manufacturing strategy and supply chain.

A focus on component costs with full recognition of required volumes and the ability of suppliers to produce those requirements at acceptable prices is a major part of this new exercise.

This new look at the product and its market potential includes a Procurement element that was missing when the road to commercialization was begun more than two years ago.

While following a new product development process that included Procurement two years ago may not have insured success, it undoubtedly would have saved time and money (and stress) associated with changing direction late in the process.

Copyright 2010 Advanced Purchasing Dynamics, Inc

Contact us at 734-927-0836 or visit www.apurchasingd.com



Five Ways to Improve Timing and Profitability When Bringing New Technology to Market

by Kevin Galvin, Advanced Purchasing Dynamics, Inc. 734-927-0836

What should CPOs do to avoid incurring the costs and timing delays experienced by our client? Five things that we would have recommended to this firm if we had been engaged from the beginning of the project, and steps that CPOs of all companies with advanced R&D activities should follow are:

- Conduct quarterly meetings with the Chief Technical Officer (CTO) of the company. The CTO should have a technology roadmap that identifies projects and the plans to prove commercial viability. Even if such a plan does not exist, regular meetings to gain an awareness of potential new products will help to create a vision for the future supply chain.
- Focus an element of your organization (one or more individuals) on advanced product development. Identify personnel with the skill set to work in conjunction with your firm's advanced technology group and assign them the task of managing projects with attention to market potential, supplier selection, cost, investment and timing.
- Understand what supplier capabilities will be required to support new projects and determine whether or not your existing supply chain has those capabilities. If not, then lead the process to identify potential suppliers and select the best option.
- Establish firm supplier development contracts that identify roles and responsibilities. Performance expectations and technology ownership must be clearly understood.
- Closely monitor program development and supplier performance against expectations.