



## The External Engineering Department: A Value for Product-Based Companies

### Key Points

- Turn-key, on-demand complement to in-house staffing.
- Services on a cost effective, flexible, as-needed basis.
- Benefits of the external engineering department for product-based companies.

Today's companies use external resources to provide a variety of professional services, with legal, advertising and payroll services being among the most common. Perhaps less common is the external engineering department, which can provide a turn-key, on-demand complement to the traditional in-house staffing model. A diverse, multi-disciplinary team can provide services on a cost effective, flexible, as-needed basis. This alternate staffing model has value for the start-up company, small and medium size businesses, the global enterprise, and everything in between. There are likely as many reasons for using an external engineering department as there are types of companies. Examples of the benefits for product-based companies using this type of external resources includes:

- Some companies may not have or need a full time engineering staff. For these companies the external engineering department becomes their engineering department, providing services and expertise only when the requirement exists, on-demand.
- Other companies may not have the engineering expertise on their staff for a specific task, especially if they don't routinely have a need for those skills. These companies will have the external resources perform specialized tasks such as Finite Element Analysis or Solid Modeling rather than invest the time and money to have this capability in-house.
- Companies may find their existing staff is a little short handed for a temporary period of time. Hiring additional people may not help in the short term, and may be unnecessary in the long term. In this situation the external resources can supplement their current staff to overcome the shortage.
- At times a little advice or a fresh perspective is all that is needed. An external resource can often consult on topics within their area of expertise.
- Larger companies often use external resources to work on projects not in the main stream of the company's current product line. Often these projects suffer from lack of attention because in-house staff must stay focused on the core products. This may be some preliminary work on a new idea, or the full project from concept to manufacturing implementation. The external resources provide the ability to have concurrent efforts on these projects without disrupting the priorities of the in-house staff.

Just as there are many reasons for using external resources, these external resources come in many types – the external engineering department being one model. For product-based companies, the external engineering department can be used for new product design, changes to existing products, and engineering support throughout the entire product lifecycle. Do your homework when considering the use of an external resource. Be sure they have the expertise, diversity and experience you need, and a reputation for providing creative solutions, quality work and timely results.

Ray Bryan, Trisha Ruby  
4/29/2011