R&D spending – How much is enough?

Innovative Thermal Solutions, LLC

The past couple of newsletter articles have been devoted to the value of innovation and how important innovation and new products are to survival in a flat world. So are there any guidelines on how much a company should spend on innovation as measured by R&D spending? Booz Allen Hamilton published an interesting report late last year, titled "The Booz Allen Hamilton Global Innovation 1000: Money Isn't Everything" (Full report here). Their central conclusion was that more R&D spending does not correlate with improved business performance. Here are the basic conclusions from the report:

Money doesn't buy results. *There is no relationship between R&D spending and the primary measures of economic or corporate success, such as growth, enterprise profitability, and shareholder return.*
Size matters. *Scale leads to advantage. Larger organizations can spend a smaller proportion of revenue on R&D than can smaller organizations, and take no discernible performance hit.*
You can be too rich or too thin. *Spending more does not necessarily help, but spending too little will hurt.*
There isn't clarity on how much is enough. *Instead of clustering into any coherent pattern, R&D budget levels vary substantially, even within industries. This suggests that no single approach to spending money on innovation development is universally recognized as the most effective strategy.*
It's the process, not the pocketbook. *Superior results, in most cases, seem to be a function of the quality of an organization's innovation process – the bets it makes and how it pursues them – rather than the magnitude of its innovation spending.*
Collaboration is key. *The link between spending and performance tends to be strongest in those areas most under the control of the R&D silo, such as product design, and weakest in those areas where cross-functional collaboration is most difficult, such as commercialization.*
These findings conjure up familiar images of frustration. Hardworking R&D teams invest time and money in the wrong projects; manufacturing, marketing, and sales drop the ball on winning products and services; and senior executives and policymakers simply throw more money at research and development in the mistaken belief that it will make a difference. When it comes to innovation investment, it appears that in many cases, less may be more.
Two things jump out at me from their conclusions. First, while the data shows that spending a lot on R&D doesn't guarantee successful innovation and the resulting business growth that innovation drives, the data clearly shows that **spending too little on R&D does correlate very well with poor business performance.** Second, **properly managing the innovation process is more important than how much you spend.**
The report goes on to say:
Based on in-depth observations of real-world innovation practice and our analysis of the Booz Allen Global Innovation 1000, we find that effective innovators do four things well:

1. ***Align innovation strategy with corporate strategy.*** *It is surprising how often this alignment does not take place. When it does, it gives all functional silos an incentive to support the corporate strategy.*
2. ***Make the right bets.*** *This imperative requires managing not only the portfolio of projects and technologies that will maximize tomorrow's profits, but also the portfolio of business models the company fields to bring these*

Innovative Thermal Solutions, LLC
3402 Chase Rd
Adrian, MI 49221
www.InnovativeThermal.com

Phone: (517) 424-7107
Fax: (775) 854-4076
E-mail: info@innovativethermal.com

   products or services to market. Any choice of a project to "greenlight" should be evaluated in the context of both customer needs and development costs.

3. ***Manage the pipeline with speed and efficiency.*** *It is critical to have clear processes both to manage the innovation effort (e.g., program management standards) and to support it (e.g., knowledge management).*
4. ***Recombine your "organizational DNA" to drive results.*** *An organization's DNA, as defined by a body of recent research at Booz Allen Hamilton and elsewhere, includes its structures and systems, and the degree of alignment of these elements with strategy. Companies should ask themselves: Are incentives in place to reward desired performance? Are governance and decision making protocols clear and consistent? Does the structure of reporting relationships enable streamlined processes and support the company's strategy? And are there clear channels for sharing knowledge and innovation and productivity?*

What they are really describing are the key elements of "lean development".

So there is the raw essence of using innovation to drive business performance.
One – make sure that you devote some money and resources to R&D and innovation.
Two – Be sure you manage your innovation effort effectively. How it's managed is more important than how much you spend.

Innovative Thermal Solutions, LLC
3402 Chase Rd
Adrian, MI 49221
www.InnovativeThermal.com

Phone: (517) 424-7107
Fax: (775) 854-4076
E-mail: info@innovativethermal.com