



Can Your Technology Clear the Innovation Hurdle?

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Product innovation is widely cited as a key component of any successful SBIR/STTR proposal. In fact, the term is sandwiched into the program's name "Small Business Innovation Research". Peruse any of the 11 federal agency websites, and you will find product innovation listed as essential review criteria. Hint — this is important!

The problem with "innovation" is that the term is ill defined and highly subjective based on who you ask and the websites you read. Don't attempt to Google your way to enlightenment, the path is a dark rabbit hole filled with INC. magazine quotes and flow charts that ultimately leave you pondering, "How can I tell if my product is innovative?"

Thankfully, SBIR.gov gives us clues on what they look for in an innovative product or service:

"The emphasis on innovation implies that you are proposing a novel approach to pressing problems or needs identified by an agency. The approach proposed should be unproven and involve an element of technical risk. You must clearly identify the innovation in your proposal. In order to demonstrate an innovation, you must show an understanding of the current state of the art. You must review the literature and contrast your approach with that of conventional wisdom."

Based on this statement we can break down their definition of innovation into three categories: relevancy, approach, and state of the art.

Relevancy. First and foremost, read each agency's mission statement. For example, the National Institutes of Health are concerned with "improving human health" while the Dept. of Defense focuses on "protecting the security of the country." When evaluating an idea for innovativeness, the NIH will base their assessment on a product's ability to improve outcomes related to human health. If you don't quite fit the mold, check out several different agencies and research their prior funding history.

Approach. How far along is your product in the commercialization process? If a product or service has already reached the market, is generating sales, or is available for purchase, then it is not appropriate for SBIR/STTR. The programs exist to de-risk new products and services in the earliest phases of development. The presence of technical risk means there is a high probability for loss or failure in the design, engineering, manufacturing, and reproducibility of a product; which may prove detrimental to the success of the business. Your company is too advanced if it has already overcome its biggest technical challenges.

State of the Art. Vitally important to your success in demonstrating product innovativeness, is your knowledge and understanding of the state of the art. Are you aware of other methods and

products being developed or deployed? Have you read and cited essential research within the field of expertise? Does the product or service show a *logical* progression and improvement beyond the state of the art? Will your research move the field of study forward, and add to the collective knowledge base?

More often than not companies fail to explain the relevancy of their product within the mission of the targeted agency, the degree of technical risk inherent in the product, and its improvement over the state of the art.

In the end agencies are looking for moonshots and dreamers, big hairy audacious goals and cutting edge technology, products that are not merely evolutionary but revolutionary.