

**From:** Dr. Victor Pinks II [vicp@tbc.net]  
**Sent:** Wednesday, September 17, 2003 11:29 PM  
**To:** NSTC\_RBM  
**Subject:** NSTC Research Business Models Comments  
Hello,

Below I am offering a collection of my better thoughts and comments on improving Research Business Models for the federal government. If my personal experience is typical, then I believe that your request for comments does not come a minute too soon. I am currently working with Battelle and TRECC (www.trecc.org) to secure and SBIR grant. The Battelle employees that are helping me echo emphatically that there are system problems. Here is one thing that scares me a lot. I have some very controversial research being considered, and no one with a credible background in the early stages of the process are sufficiently knowledgeable to know what to do with it. It's a good thing that I am patriotic because I will wait until the system is in place to put this through. It would be wrong commercializing it and tying it up as a trade secret. I know that I could get foreign funding but I refuse to. I think that our government fosters the growth of new ideas better than any other in the world. There is, however, a problem bringing good research to its fruition. One of the major problems is the technical illiteracy of decision makers in the funding process. Another is the way that special interests disrupt the innovation process to the point of causing a national security problem. The innovation process needs to be federalized for national security. I would be happy to help efforts to improve the system in any way if necessary.

In the spirit of helpfulness, I am submitting some information that I had written a few years ago in response to a call for papers for a National Innovation Summit on 11-29-99 sponsored by OSTP. The next two paragraphs are excerpts from a paper (mentioned further below by Levinson et. al.) that seem to still carry relevance even today. If I could, I would nominate Terry Levinson to head up a National Innovation System. I am including a pdf of this paper from that summit.



PATHWAY1.pdf (30 KB)

• **C** **reate a foundation that will collect the best attributes of multiple Federal agencies.**

An advocacy center for independent inventors needs to be created in a single, centralized locale,

rather than being distributed across a number of agencies. Centralizing this function and broadening

its mission beyond just energy strengthens its profile and allows the more efficient exchange among

multiple disciplines, rather than limiting consideration only to inventions that fit an agency's

mission. Moreover, a centralized organization can serve as a focal point to filter out inventions that

are not technically valid (for example, they may violate the laws of physics) -- not

dismissing any  
submittal perfunctorily, but giving each its just due. In addition, a centralized  
organization provides  
a less expensive means to deliver customized, tailored resources to both inventors and  
corporate  
America. Indeed, the core mission of such a centralized organization is to serve as a  
matchmaker  
between independent inventors and corporate America where their ideas would be placed.  
We recommend that this centralized organization be operated as a foundation for two  
reasons. First, a  
centralized foundation can attract the “best and brightest” of staff that would be  
contributed by  
participating agencies. Second, a foundation allows the contribution of private sector  
money to  
supplement the seed money provided by the Federal Government.

- **Establish a robust and timely value-added evaluation system.** A value-added  
evaluation  
system would weigh each invention on its own merits, by comparing each new idea to  
current  
practice within its respective discipline and judging its chances for commercial success.  
This  
approach contrasts sharply with other methods that toss all inventions submitted into a  
single  
“bucket,” then rank order them, and fund only the top few. This does not mean that the  
value-added  
evaluation system that we propose will not be selective -- after all, budgets and staff  
resources are  
limited -- just that each invention submitted will be evaluated fairly relative to its  
respective  
discipline.  
Furthermore, the turnaround time to evaluate a submitted invention must be reduced to a  
timeframe  
more acceptable to inventors. The earlier manifestation of the DOE’s Inventions and  
Innovation  
Program would often take more than 2 years to complete an evaluation; the goal was to  
reduce that  
time to 18 months. If the U.S. Patent and Trademark Office can reduce its pendency time  
to 1 year,  
then an evaluation system should be able to complete an evaluation in less than that time.  
The SBIR

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Program at DOE uses peer reviews to complete evaluations in less than 6 months. The  
peer review  
process in the Inventions and Innovation Program does it in 3 months. According to  
Gerald Udell<sup>4</sup>,  
head of the Wal-Mart Innovation Network, his evaluations of products designed to be

sold at Wal-Mart take 3 weeks. There must be some middle ground to allow for a customized evaluation in a reasonably short period of time.

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What follows is an ongoing correspondence between myself and Levinson. Also my overview of the papers previously submitted to the National Innovation Summit held by OSTP on 11-29-99 - comments submitted to Dr. Neal Lane. I have an electronic copy of most of the submitted papers if anyone would like them.  
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Subject: RE: National Innovation System  
Sent: 12/14/19 2:53 PM  
Received: 12/16/99 11:32 PM  
From: Levinson, Terry M., tlevinson@anl.gov  
To: 'Victor Pinks II', vicp@tbcnet.com

Dr. Pinks, I cannot tell you how much both Tom Snyder and I appreciate the e-mail message that you sent us today. The fact that our thoughts resonated with your experience means that we are truly on track. The next step, however, is the difficult one--getting anyone to listen.

For your information, the reason for my passion on the subject is that until 3 1/2 years ago I managed the original manifestation of the Inventions and Innovation Program at DOE. I know first hand the problems that independent inventors face, and the current manifestation of the program hasn't a clue as to what they need. Since my retirement from DOE, I have tried to sell this program to other places where it could fit, but to no avail. Inventors have no champion. They are viewed as weirdoes. People looked at me as if I were unclean when I said that I had worked with inventors. Every state wants economic development as long as the ideas come from straightline thinkers who don't keep asking questions. Enough complaining. You can see why I wrote what I wrote.

The paper from the National Council on Entrepreneurship is the closest in thought to ours. All inventors, however, may not be entrepreneurs; all entrepreneurs may not be inventors. Both areas of expertise require different skills, and it is rare to find all the necessary skills in one person. The thought in their paper, with which I totally agree, is

that  
the  
commercialization track record of SBIR companies should be taken into  
account when SBIR awards are made. DOE has been doing this for many  
years,  
but not all agencies do.

As far as the Summit is concerned, I did attend the entire 1 1/2 days.  
I  
managed to get presidents of two inventor organizations invited so we  
were  
able to make a strong case for the perspective in the ANL paper. No  
one  
in  
attendance was ever asked if he or she had even read the papers, but I  
made  
the point whenever I spoke in the breakout sessions that I had co-  
authored  
one of them. When the reports from the breakout sessions were given on  
the  
second day to the entire 200 people or so who attended, the message  
from  
my  
two plants and myself came through: We need inventors!

My next step is to try to have a more active role in what the final  
report  
of the Summit has to say. I'm touching base with my contacts and hope  
to  
be able to be involved. We'll just have to wait and see whether I'm  
able  
to  
be successful.

Thank you again for caring.

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-----Original Message-----

From: Victor Pinks II [mailto:vicp@tbcnet.com]  
Sent: Thursday, December 16, 1999 2:17 AM  
To: Terry M. Levinson; Thomas C. Snyder  
Subject: re: National Innovation System

Hello,

I wanted to give you some unsolicited feedback regarding your white paper submitted to the recent OSTP Innovation Summit. I was unable to attend, however, I made some effort to offer input by sending e-mail directly to Dr. Neal Lane reflecting upon my experiences as an independent research start-up. The bottom line is that your paper, in my opinion, offered the most realistic approach to the innovation quandry this nation is experiencing.

I have included the e-mail relevant to your proposal below. I support your efforts and would like to know if you did attend and/or have any perspective with regards to the success of the summit.

I appreciate any feedback.

Sincerely,

Vic Pinks

Next begins my letter to Dr. Lane  
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Subject: Summary on Call for Papers re: National Innovation System  
Sent: 11/27/99 7:03 AM  
To: Dr. Neal Lane, innovationsummit@rand.org  
Robert Wilson, rwilsol239@aol.com

Dear Dr. Lane,

I wish you the greatest success with the upcoming innovation summit Nov 30 & Dec 1st. I have taken time to review all of the downloadable white papers at the Innovation Summit web site and would like to give you my point of view as a small research start-up. I do this in the spirit of national concern and hope for all innovators that issues will be explored in a selfless manner. The greatness of the United States can be seen in the way we look at ourselves and our problems. Eventually the direction we are to take will come into focus as we bravely tackle the tough questions with vigorous exchange and hope for sustained freedom and prosperity.

I am offering my point of view as a single entrepreneur who has experienced the indifference of the national labs, the frustration of the universities and the self-serving interests of the venture capitalists. This is not a general characterization of these institutions but rather my single experience in a system unequipped to carry out it's well-intentioned plans to foster innovation in the interest of the

nation. Still, I am very hopeful and encouraged more now than ever. I hope that more independent innovators have responded to the call for papers than were represented on the web site.

As I see it, there are three types of proposals:

First (the majority) are the institutions promoting policies from a self-interest perspective only. You can expect everyone to approach the problem in this manner, however, others try to expand to the general problem of innovation reform. These papers offer opinions that can seem self-serving at times but do contribute to some consenses. I presume that they will become more valuable once the overall format of innovation change is agreed upon.

The second type are papers presenting new policies of national interest that could improve any system of innovation. For example, new statistical methods for evaluations (see American Statistical Association paper) or economic models for research funding decisions (see the Vonortas paper).

The last type take a big picture approach to the problem and offer a new plan for innovation reform. In my opinion, there was only one paper that fell into this category: "Pathways to Innovation" by Terry M. Levinson and Thomas C. Snyder (Argonne National Laboratory).

Over the majority of papers there was also some concensus. Specifically,

1) except for security reasons, that the United States must not take on a protectionist position with regard to the free exchange of science and technology for its' own good. It is better to become a stronger source of innovation to protect our position of world strength and enhance our global influence. 2) All agree that the patent laws must change to allow rapid commercialization while protecting all parties. Current laws are strangling the innovation process in it's sprouting stage. Innovation reform without patent law reform is doomed to fail. 3) All agree that the individual innovator and entrepreneur need help. As Levinson and Snyder assert, there is a way to make it work without operating like technical welfare.

In closing, I feel that the paper "Pathways to Innovation" by Terry M. Levinson and Thomas C. Snyder (Argonne National Laboratory) offers an important option. It proposes an organization independent of the universities, federal labs and commercial business.

Papers like JBX Technologies reflect the same frustration that I experienced with a national laboratory.

The First-to-file vs. First-to-invent arguments of Josh Lerner (Harvard)

are not a solution but rather an unnecessary step backwards in patent law and innovation reform. Universities and national labs are not motivated to change and have difficulty looking through the eyes of the entrepreneur. Good science begins and ends with the individual scientist. No matter what federal lab, university, corporate office, or garage coat rack they use. To refer to qualified independent innovators as "weekend hobbyists" is an unconstructive and cynical approach to a serious national research funding problem.

It was quoted that in his recent editorial in "Science" (Vol. 285, No. 27, August 1999, p 1353), Philip H. Abelson asserts that "the innovation index provides evidence that the United States may be living off assets that have not been adequately renewed. Further evidence that the individual innovator must become empowered by the federal government.

The Association of American Universities propose "first do no harm in a system that has been highly successful". I agree that the university and federal laboratory system should be a source of basic research and knowledge generation. The Cohen paper expands on an important concern that the privatization of information flowing out of universities into deepening ties with industry also poses hazards. Universities and national labs would like to keep the status quo for fear of funding shifts away from their interests. Again, there is little motivation to assist the entrepreneur as reflected by the poor performance of the majority of Technology Transfer programs in place.

The corporate world has enjoyed the free flow of SBIR and ATP innovation monies away from start-ups. They have taken advantage of grant renewal loopholes by creating annual funding budgets. Again, monies diverted away from innovation and start-ups. The National Commission on Entrepreneurship proposes that firms who win multiple SBIR grants should be required to provide data on past commercialization successes to break this cycle.

Finally, the "Pathways to Innovation" by Terry M. Levinson and Thomas C. Snyder (Argonne National Laboratory) plan seems to offer promise. I also believe that such an organization should empower the individual innovator with federal dollars which various agencies must compete for. It will not threaten the infrastructure of universities, national labs, industry, or state and local organizations. It will eliminate their 'sense of entitlement' to federal dollars and create a healthy climate of competition in a National Innovation System. As each innovator carries a federal 'bounty' to be captured by the competing agencies, motivations

will change. These institutions will find ways best suited for them to attract this federal money because good science still begins and ends the individual scientist and inventor.

I hope these comments are helpful.

Sincerely,

Vic Pinks

End of letter to Dr. Lane

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