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To: nnmi_comments
Cc: amnpo
Subject: NNMI Comments.

Even though General Electric is not (by any measure) a “Small- or Medium-sized Entity”, I wanted to send in a brief note to amplify some of the reasons for why I am an advocate for the NNMI initiative within GE.

For all of my almost 20 year career, I have worked for GE in their manufacturing technology (MT) teams. In each of the organizations I’ve been part of (incl Global Research, Aviation, and Energy), working to develop and improve new manufacturing capabilities for new AND existing products has been a primary part of what our team does.

Further, even though, I’ve worked around well-established, legacy technologies like conventional machining, shot peening, and surface finishing. In my experience, there is still no shortage of challenges to solve that fall into the gap between R&D and available commercialized tools.

Even for a company like GE with the expertise and resources that we have available to us, it can often be difficult to justify and marshal the resources that some manufacturing challenges require...

- We don’t bring the perspective of all potential beneficiaries to THAT MT development need. Even if we (incorrectly) assumed we would get all of the demand for our products if we resolved some manufacturing tech challenge, we still don’t bring non-competitors’ perspective.
- We sometimes need an outside organization (like an S-M-E) who specializes in THAT MT technical area to help grow a non-product-specific technology that we may have done the basic R&D for. However, since it is not in our product-space we might not be efficient/effective at extending the technology capability beyond TRL3-4.
- Having a facility focused on application and commercialization of manufacturing technology research opens up additional off-production development and test capabilities.
 - In addition to the technology benefits, the availability of people who have experience solving challenging MT problems is improved. (e.g. AMRC and Fraunhofer IPT)

For the long term growth of US companies like GE AND FOR THOSE THAT DON’T HAVE resources on our scale, the NNMI concept is great idea. I believe the investment will have a significant and large multiplier effect on the US economy at all levels. In short, this kind of initiative will enable sharing of risks AND BENEFITS across the NNMI consortiums.

Whether a company is small or large; whether manufacturing is a primary product (machine tool OEMs) or just a necessary step to make the company’s products : a wide range of companies, including GE, will benefit from the NNMI’s.

Because of the range of products that GE makes, I believe that the benefits from the NNMI will start with the Pilot institute and they’re likely to continue for many, if not all, of the subsequent proposed NNMI’s. (Whatever manufacturing technologies are ultimately chartered at the other 15 NNMI’s.)

Regards,
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