Advanced Manufacturing Collaborative
Innovation Ecosystem Working Group
November 16, 10:00 - 11:00am
Zoom Conference

Minutes

Attendees:
Carlo Canetta, MITRE Corporation
Israel Soibelman, Lincoln Labs
John Killam, MassMEP
Robby Bitting, MassChallenge Boston
Laura Teicher, Forge
Megan Marszalek, MassTech Collaborative
Julie Chen, UMASS Lowell
Liz Reynolds, MIT

Absent:
Joseph Kunze, SI2
Venit Nijhawan, Mass Ventures

Staff:
Farhad Vazehgoo, MassTech Collaborative
Cassidy Ferguson, MassTech Collaborative
Meghan Abella-Bowen, MassTech Collaborative
Helena Fruscio-Altsman, MA EOHED
Scott Martin – MA, EOHED

Welcome and Introduction
Farhad Vazehgoo welcomed attendees & a roll call was taken.

Approval of minutes: Farhad Vazehgoo & Julie Chen
A motion to approve the September minutes was made and minutes were approved unanimously.

Review and Discussion Innovation Ecosystem Heat Maps

Farhad Vazehgoo led the discussion on the Innovation Ecosystem heat maps.

Start-ups
- Challenge is translating technologies into manufacturing products
- Inventors tend to move elsewhere to establish their business
- How relative is it to understand how new technologies and start-up think? Is it different than what is happening in other states?
    o Ohio & Colorado have said they face the same challenge but we don't have data from other states.

- - Don't think we're worse than other states, but are there area where we can be better.
    - Ripple effect if you can get startups to scale up here. Robotics is shifting, with big pull towards Pittsburgh. From a competitive point of view, there are several areas to strengthen. What's going on in the robotics startup landscape? How can we grow those companies here?
- Forge has access to data from a national assessment tool that compares states on various indicators: The data is not granular, but does show that MA is not number 1 in startup activity, but is number 2 in R&D activity. However the data is not able to be broken down by industry segment.
- How does our strong innovation ecosystem connect with our manufacturing world? Do they intersect? How can we be more intentional about that as a state? Buffering a weakness or boosting a strength? Is this worth paying attention to?
- On the defense side, it's the commercialization that's the issue. Lots of startups & innovation with R&D.
- What do we know about a company's life cycle? Once companies become identified as a startup, once they're counted in the metrics, what happens to them? How many don't make it to manufacturing? Most startups fail. If we could increase the base from 50% drop out (or whatever %), then we would see more startups succeed, then more companies would be likelier to stay if startups here get a lot of support & success at growing. The industry groups have a big role in this, need to do a better job of defining what their stakeholders need to succeed.
- Startups don't have the bandwidth or enough people because everyone is already doing something, can't engage with industry groups.
- Prototyping is a place we could work with Startups more. For example, Lincoln Labs started bringing DOD projects into MIT where capstone project work with a start-up to focus on a startup company sponsor's problem. Could we do something similar for manufacturing? Could we reach deeper into universities?
- Need to pick people at the right stage, prototyping vs pilot, etc. Could populate a list through universities. Figure out where they are, how to help bend the decision to manufacturer in MA.
- Reluctance to invest in manufacturing because time to payoff can be 2-3 years whereas apps are lower risk & faster payoff.
- Where on TRL? Basic?
- More like 4-7. Now more VCs focused on manufacturing. Could go to incubators & accelerators to see who's succeeded as well as universities. Could look at every VC investment at MA companies & identify which are manufacturers over the last few years. Would probably miss things if we looked just at VC. Could snowball it. Could get to something a little more systematic. Look at whether the funding was series A, B, etc.

SMEs

- The first three columns (Academia, FFRDC, and State/Fed Govt.) are the same for both start-up and SME.

- For SMEs capital is an obstacle.
- Accelerators and Incubators currently don't play a big role with SMEs.
- We need to help companies scale (Entreprenuership)
- MTC recently did entrepreneurial analysis and sees a huge gap in companies 4-6 years old. Would help if there were more model incubators to fill that gap.
- Identify our top 3 questions. Are these the right questions? Which ones do we care the most about?

Next Steps
- Need to refine the heatmaps and then validate the "Why Statement".
- Review heatmaps, make edits, & send to Farhad.

Materials and Exhibits Used at this meeting:
- Draft Minutes – September 21, 2020 Innovation Ecosystem meeting minutes
- Presentation: Innovation Ecosystem Working Group, November 16, 2020