

Industry 4.0 Technologies Ecosystem Working Group

Focus on building regional capability and readiness for Industry 4.0 technologies.

Meeting #1 Summary Notes: Assimilate data and analysis
March 31, 2021

- From extensive research in Task 1's Industry• 4.0 Readiness and Disruption survey and subsequent focus group sessions and interviews, it has been highlighted that the Middle Georgia region is currently slow in both using and being prepared for a number of Industry 4.0 technologies.
- Manufacturers are trying to 'work out' Industry 4.0 technologies. The pandemic has increased automation and the need to learn about and use these technologies. Trajectory and velocity are critical.
- There is a clear need to adopt and produce knowledge of Industry 4.0 technologies in the region especially for Cloud Computing, Software and Data Engineering and Cybersecurity, but also focusing on the emerging demand areas of Artificial Intelligence and 5G / Internet of things.
- There is value in improving and enhancing the quality and content of Industry 4.0 technology training in the education system, from K-12 through to post-secondary educational institutions (Technical colleges and Universities).

- There is a need for all educational levels to teach cutting edge technologies as this is the workplace of the future for many Middle Georgia students. This will help retain these talented people in the region, once industry connects with the educational institutions via internships, and beyond.
- There is a need for 'demonstration projects' and one place to go to view these projects i.e.) innovation centers. Demonstration projects would involve bringing in industry people to demonstrate new technologies.
- It was noted that GTRI and MERC are at the leading edge of looking at Industry 4.0 technologies and communicate well about what they are doing. The good news stories are critical in attracting and retaining talent and innovators. Macon Start Up week builds traction.



WELCOME TO THE THE MIDDLE GEORGIA INNOVATION PROJECT

Software Engineering Ecosystem Working Group

Focusing on building local capability for software engineering and creating a relevant industry cluster

Meeting #1 Summary Notes: Assimilate data and analysis

March 31, 2021

- The ultimate objective of the Middle Georgia Innovation
 Project is to build innovation and develop a road map for Middle Georgia to become a 'Software Center of Excellence'.
- Robins Air Force Base (RAFB), through its missions, is a
 major demand driver of innovative software and data
 engineering capacity in the region. It is a key anchor and
 employer within the region. Supporting the needs of the
 base are critical to the long-term sustainability of Middle
 Georgia.
- There is a stated objective in the region to build economic diversification, that leverages the concentration of assets at the base. The logical step is to build an 'off-base' ecosystem of businesses with strength in data sciences and software engineering that can serve future needs and drive innovation.
- Partnerships between industry, education, government and RAFB could provide the 'go to' group to trigger the 'Software Center of Excellence'. However, this partnership building must be planned and intentional.
- It was noted that it would be important to collaborate with the Center for Software Innovation (Middle Georgia State University) and this could help solve software challenges.
- It may be an aspiration to create work ready and homegrown talent and retain such talent. There needs to be a spectrum of work ready skills in software.
- If there is a desire to have a concentration of excellence, how is this different to a baseline level of competency?
- Funding is an issue and how to attract venture capitalists. There is a need to create the innovation culture and then invite the funders. There is a need to take Firestarter Lab and grow it.

- Currently venture capitalists cannot identify who to fund. There is a need to get young businesses ready to get in front of venture capitalists.
- There is a need to build an intentional industry cluster at a grass roots level such as the TAG Middle Georgia Chapter. There are lots of silos in sectors, however there are instances of cross pollination.
 - The Middle Georgia State University Tech entrepreneurship programme will be pending approval in the fall.
- What could the ecosystem look like?
 - Meetings which include all sectors to fill the gaps.
 - At a software level and education the OEA funded NERDIC project was cited as a good example by Future iQ.
 - Mentorships
 - Example given of hiring graduates from STEM who are now working in Synergy center.
 - Carnegie Mellon did a good job of retaining women in STEM, as noted by Future iQ
 - Internships from Georgia College and high schools collaborating with RAFB has been very valuable in relation to students' access to technology
 - If we are building an ecosystem there has to be a targeted audience. There is a dichotomy between the base and outside of the base
 - Example given by Angie Gheesling of a meeting held in 2019 where everyone showed up from the education system as well as industry. The meeting was about curriculum development. Also, the New Science aptitude assessment for high school females.













Focus on building a connected ecosystem that fosters start-up and entrepreneurial culture.

Meeting #1 Summary Notes: Assimilate data and analysis

March 31, 2021

- From research carried out to date in Task 1, Task 2 and the working group phase which constitutes Task 3 of the project, it has been established that there are a concentration of existing innovation centers and partnerships that exist around the Universities and RAFB.
- However, to create a connected 'innovation start-up' environment in the Middle Georgia region the existing innovation centers need to connect with each other in addition to the day-to-day inspiring work that the centers are already carrying out independently.
- No comprehensive network exists for innovators in the region to come together and share ideas. There is a need for a single 'go to' organization to tap into for information and mentorship. Examples of the Advanced Technology Development Center in Atlanta and the SCAP Incubator in Savannah were noted as state-wide examples of such organizations.
- Atlanta companies are in much closer proximity to students/innovators and ideates. Proximity issues which spark creativity is currently a problem in the Middle Georgia region.
- There needs to be more 'maker spaces' to bring entrepreneurs together.

- There is a lack of entrepreneurial 'vibe' or mindset and the region is culturally more 'job-centric' than entrepreneurial. There is a need to create more mentorships to encourage this mindset and vibe.
 - There is a lack of private investment/venture capital and funding from start up to incubation. This impacts on the speed and scale up from innovation to commercialization. There is a need for a clear pathway to get an 'idea into production' and then scale up.
- Macon and Warner Robins host a fledgling start up culture and have a reasonable degree of entrepreneurial business dynamism, which could be harnessed as part of an innovation start up culture.
 - The pandemic has created a more level playing field regarding access to technology. Students have been given the chance to use technologies and platforms such as zoom, which can be used for student entrepreneurs to develop their own start-up business ideas.
 - With the use of platforms such as zoom, the gravity towards Atlanta has been removed. With remote working simple start-up ideas can be packaged and promoted.

