## Industry 4.0 Technologies Ecosystem Working Group

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

Meeting #2 Summary Notes: Brainstorm how to Build the Ecosystem

April 14, 2021

- Industry 4.0 technologies are coming. Some regions will be capable and compliant and some regions will not be ready. How does Middle Georgia become capable and ready for Industry 4.0 technologies?

- It can often be difficult to grow talent from the ground up. People learn on the job. The region can leverage the RAFB and Fort Benning bases to grow talent in these technologies

- Until a few years ago, RAFB was institutional. Now with new technologies, the base is interested in building capacity and a culture of entrepreneurship and innovation.

- From the TAG perspective, the aeronautical space is where Georgia leads. There is a need to get these 'good news' stories about successes out.

- Tradeshows to educate and inform students what industry is doing around Industry 4.0 technology could be a useful way to spread the news of success

- The New England Regional Defense Industry Collaboration (NERDIC) project that Future iQ is working on is cited as a good example of building an Industry 4.0 ecosystem. They are producing an ecosystem approach which could be replicated in Middle Georgia. https://www.ccat.us/nerdic/

- There is a need for more industry members to be involved in the ecosystem who are already using the Industry 4.0 technologies.

- Does this look like a 'one stop shop' or a regional ecosystem? The region already has access to 9 innovation centers, RAFB and universities.

- There is a need to ascertain 'what do we need to learn' and then focus on hiring the talent who can work in the Industry 4.0 technologies within companies in the region. Hiring could be out of state or homegrown

- TAG Georgia believes that MGA could focus on AI, but would welcome more involvement from Middle Georgia via the Middle Georgia Chapter of TAG

- Incentives are need to attract people to work and live in Middle Georgia, or to start up their own businesses within the region.

  - The Savannah Economic Development Authority (SEDA) has established a new Savannah Technology Workforce Incentive to lure out-of-state technology workers. The program reimburses individual moving expenses up to $2,000. https://www.forbes.com/sites/brendarichardson/2020/06/18/savannah-georgia-is-offering-a-relocation-incentive-to-lure-tech-workers/?sh=5677615dcb4b

- GTRI are providing Industry 4.0 teacher training and internships with TAG

- How do we push Industry 4.0 into Economic Development? There is a need to think about the Industry 4.0 readiness within the region's industrial base.

- The Creative Coast organization in Savannah is a good example of bringing together creatives, technologists and entrepreneurs to 'create, code and collide'. https://thecreativecoast.org.
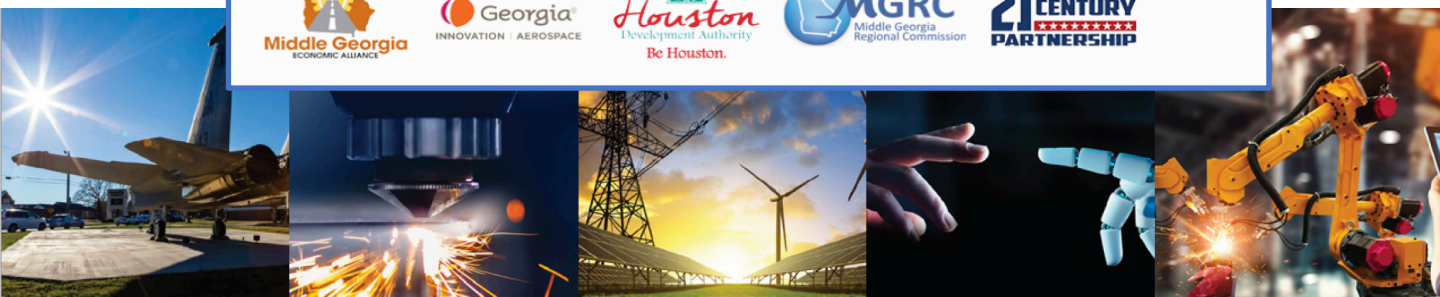
Software Engineering Ecosystem Working Group

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

Meeting #2 Summary Notes: Brainstorm how to Build the Ecosystem

April 14, 2021

- There is a need for excellent talent but also a need to bring in organizations who will hire this talent

- iDream Educational Services is a non-profit organization in the region that has youth STEM programs, camps, and training. https://www.idreameducationalservices.com/

- There is a need to engage the companies and to be able to articulate what they need from future talent.

- The New North was cited as an organization in Wisconsin, which has had success in building clusters through mapping out what the system currently looks like, then bringing in partners to see where they fit into the map. This mapping shows where the gaps are and where gaps need to be filled. https://www.thenewnorth.com and https://dpi.wi.gov/pathways-wisconsin

- MGA has been good at building out (i.e.: Mercer/Middle State University. However, how do we hire professors to teach software engineering if there are not enough students interested in this field

- Currently there is a huge demand for computer science teachers in K-12. It is hard to attract teachers from Atlanta to move to Middle Georgia. There is a need to identify students who want to stay in the region and give them the software skills that they can get a job at RAFB or outside of the base

- As RAFB is the largest employer in the region, how do we know the skills that they are looking for? Is there a need for an adjacent body outside of the Base?

- How do we bring in the resources to create the "Software Center of Excellence" and keep STEM students in the region? Internships are very important to retain STEM students in the region

- There is a need to grow the talent pipeline before attracting the relevant companies to the region or does industry come first and talent will then fill the jobs?

- There is a need to grow both supply and demand. There is a need to create a paradigm about the region and capacity for software skills. There is a lot of STEM skills needed in the Healthcare and Agriculture areas

- There is a need to bring together banking, healthcare and FinTech into a synergy. This would help retain and attract talent

- The HR professionals group – SHRM – could be a good starting point in the region. It may be necessary to ask them who companies hiring in the region

- Opportunities will grow to help companies who need to get Cybersecurity compliance. There will be roles in these companies for cybersecurity talent

- The company Tyonek has found it difficult to hire engineers to work in the region. The company has brought engineers to the region via paying for their travel to interviews and driving them around the whole region to show the attractions of moving to the region.

- Middle Georgia has the assets with 9 innovation centers and the educational institutions. The region should grow its own talent and recruit at the same time. The region should also grow its own industries and attract new industries

- The 11 Middle Georgia counties need to look at themselves aesthetically regarding the quality of life that they could offer people moving to the region for work or people considering staying in the region. The message also needs to reach elementary and middle schools. https://youtu.be/-gkL_1ErsZQ

Start-Up Innovation Ecosystem Working Group

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

Meeting #2 Summary Notes: Brainstorm how to Build the Ecosystem

April 14, 2021

- There is a need to start with the end in mind with tangible goals regarding how to support the start-up innovation ecosystem. There is a need to generate more interest in youth and build skills that are needed. Need to promote programs which directly relate to 'tactile' as well as 'virtual' workplace skills.

- Collaboration continues to be a key theme and the necessity to ensure that the wider Georgia organizations and industry are working with the Middle Georgia innovation centers

- The Middle Georgia region has to ascertain what the region needs for and from entrepreneurs and innovators

- Innovators need a larger wealth of knowledge about who to connect to regarding other innovators and who to connect to regarding funding

- Many innovators are interested in 'getting started' but need some direction.
  - The Veterans Business Outreach Center (VBOC) can offer some resources - https://www.sba.gov/page/veterans-business-outreach-center-vboc-program
  - The Kiva platform is useful to view as an example of no interest loan crowd funded solutions. https://colab.co/kiva/

- It is necessary to create an 'innovation campus'. People want proximity and an interesting environment to live and work within. Examples given of Augusta and Cincinnati where there is a combination of private/public partnerships and innovation spaces close to amenities such as restaurants and coworking spaces.

- Is there a natural 'corridor of innovation' between Macon and Warner Robins?

- Project Synergy cited as a recent example of a collaborative effort between the Middle Georgia community, congressional members and RAFB. https://www.robins.af.mil/News/Article-Display/Article/2554040/project-synergy-a-win-win-for-air-force-robins-middle-georgia-communities/

- Curriculum development is currently being carried out in Middle Georgia high schools and colleges to meet employer needs. The next step is that the whole Georgia region takes on this curriculum

- An example was given about the Boston Innovation District which was put in a derelict place of the city and an elected official acted as 'cheerleader' to build a robust innovation space.

- There is a need for a 'Resiliency Check list' for businesses. This can ensure that they are legal and can manage a crisis. Go to https://startingblockchattanooga.com for more information

- It is essential to put people together to address and issue and harness potential. This can be realized in a 'co-create' atmosphere. Hacking Health cited as a global organization building innovative ecosystems. https://hacking-health.org

- Future iQ noted that there were three themes so far via the brainstorming meeting:
  - Human component – enthusiasm, strong leadership, mentoring and voice of success
  - Physical proximity, domain and the notion of a corridor
  - Creating connections so collisions that occur are creative.

- There is a need for mentors who have been successful to teach innovators

- Who and what entity will run the ecosystem? It needs a dedicated person or entity to concentrate on building this ecosystem

- The assets are already in Middle Georgia. The challenge is how to pull them together in one go to place. Currently there are 9 innovation centers and RAFB.