

# Kansas



## ADVANCED MANUFACTURING INSTITUTE

Engineering Success

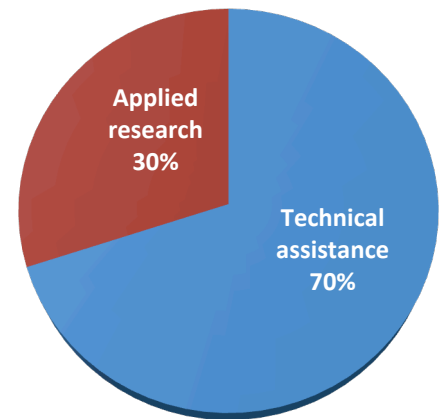
### Kansas Opportunity Innovation Network | Advanced Manufacturing Institute

The University Center at Kansas State University, hosted by the Advanced Manufacturing Institute (AMI), established the Kansas Opportunity Innovation Network (KOIN). Its mission is to enhance the global competitiveness of rural businesses by providing access to innovative ideas, new markets, expertise, capital, and collaborations, independent of close geographical proximity. KOIN developed new regional innovation tools and uses this knowledge to support local and regional businesses and to identify and exploit business growth opportunities through in-depth market analyses that complement the large-scale new product development services for which the AMI is widely known. These complementary services allow AMI/KOIN to enhance the global competitiveness of rural/distressed companies and regions in Kansas.

#### Activities

In support of its mission, KOIN's strategy includes profiling the innovation competencies, assets, capabilities, and needs of regions,

communities, and local companies to scout new opportunities (especially global opportunities) outside existing markets where clients may have little to no connections. KOIN also maps networks of technology providers, expertise, capital, and potential business partners possessing complementary competencies who can enable center clients to respond in a competitive manner to readily connect and combine opportunities,



companies, communities, and regions in innovative ways. KOIN's work has included a quantitative key industry analysis and a quantitative regional innovation assessment for Kansas counties. One study mapped where workers reside versus where they are employed to illustrate that regional

#### University

Kansas State University

#### Center Director

Brad Kramer & Jeff Tucker

#### Center Location

College of Engineering

#### Center since 2005

#### Center Activities

- Feasibility and market assessments
- New product development
- Assessment of regional capabilities
- Connecting resources
- Applied research in regional networks

#### Clients

- Existing businesses
- Start-ups
- Local and regional governments
- Community development organizations

#### Assessment Techniques

- Feedback from staff
- Feedback at regional workshops
- Client satisfaction surveys
- Case studies

#### Contact Information

[www.amisuccess.com/](http://www.amisuccess.com/)  
[BradleyK@k-state.edu](mailto:BradleyK@k-state.edu)  
[jtucker@amisuccess.com](mailto:jtucker@amisuccess.com)

interconnectedness produced unique data visualization of industry concentration, including location, number of firms, employment, and sector. KOIN supports community and regional strategic planning, and conducts feasibility analysis and business plans for proposed accelerators and redevelopment sites.

KOIN continues AMI's long history of early-stage development services to companies. AMI has technical expertise and equipment for

prototype development and testing to bring competitive products and services to market. Because KOIN spans the boundaries between economic development organization and new product development, it is able to make connections between companies and opportunities that may have been missed.

**Leveraging** KOIN at AMI leverages a wide variety of partner organizations that also support the Center through matching

funding. Partners include the University, the state department of commerce, state community development organizations, local and regional planning authorities, and local workforce investment boards. KOIN also leverages university data sources and faculty expertise. In addition, students serve as interns in the Institute, providing services to clients and receiving real world experience. KOIN has also leveraged other federal programs such as the National Science Foundation's Partnerships for Innovation grants.

*"The Center has shown outstanding leadership. The connections they make are invaluable and the data analysis they provide really allow people to see what is going on in their region."* --Center Client

## Success

### Leveraging AMI's integrated technology development and business development planning services

The Advanced Manufacturing Institute (AMI) has a long history in working with existing manufacturers and entrepreneurs in new product development. AMI strives to put new innovations into the marketplace by not only focusing on the technical aspects of product development, but also by determining whether there is a significant market for a product, identifying the target audience, generating specific plans to develop

a business opportunity, and helping entrepreneurs and existing businesses be successful in executing business plans. An example is AMI's work with DT Search and Designs and Kansas Livestock Association to form Kansas Environmental Management Associates (KEMA) to sponsor the project and commercialize the technology. AMI started by developing a phosphorus recovery process on the bench in a laboratory. Upon success, AMI created a pilot scale version that operated on a K-State feeding operation pond, and then moved to a fully automated farm-scale process

at a feedlot in Kansas. The system AMI implemented helps feedlots cost effectively remove phosphorus to meet EPA regulations and the granules that are produced allow for more efficient phosphorous distribution.

**AMI has shown how expanding its mission to focus on market feasibility analyses, technical feasibility analyses, and making connections around the country as well as in Kansas has positioned AMI and its clients for success.**