

## DIGITAL AGRICULTURE AND ADVANCED ANALYTICS



Public and private investment in K-State's researchers, facilities and students leads directly to new business ventures, job creation and personal income growth for Kansans. Data generation and digital solutions are the foundation of growth in agriculture today, and K-State is out in front.

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K-State leads the global food system in creating and embracing leading-edge methods that are driven by data, analytics and decision making in near real time.

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### **Enhancing current capabilities**

K-State leverages its computing capacity and artificial intelligence research — as well as expertise in advanced breeding techniques and integrated cropping systems — to attract outside investment and help Kansas become the global leader in digital agriculture and advanced analytics, or DAAA.

### **Leveraging geographic advantage**

Kansas is uniquely positioned to become the worldwide nexus for the development and deployment of DAAA systems. Our state's extreme variability of climatic and production conditions makes Kansas a model for U.S. and global dryland and irrigated agricultural regions. K-State owns or leases nearly 30,000 acres of land, making it an ideal laboratory for developing DAAA in the most challenging environments.

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### Increasing institutional coordination

Collaboration with units across K-State and with other Kansas institutions — such as geographic information systems and remote sensing with the University of Kansas and robotics with Wichita State University — maximizes economic impact of DAAA research, teaching and training activities.

### Integration across disciplines

DAAA advancements made across the university are transforming food production from reactive to predictive, giving farmers, ranchers and other producers what they need to make better-informed and more profitable decisions. By unifying core disciplines, K-State magnifies our assets for global prominence.

### Hardware and software development

K-State leads in the development of new sensors and other point-of-decision crop and livestock tools: portable computing, enhanced battery and power delivery systems, software development and integration of existing equipment.

### Workforce development

K-State communicates private-sector demands for a digital agriculture workforce to better inform the state's educational system. This includes working closely with other organizations on K-12 STEM education to produce a computationally literate workforce. Our initiative in DAAA will grow existing Kansas businesses, attract new, outside investment and create family-sustaining jobs to advance Kansas beyond its current national rank as a Top-15 technology state.

### The bottom line

K-State's plan for economic prosperity will allow K-State to increase the important work that is already being done and will support the creation of **3,000 direct jobs** and **\$3 billion in direct investment** in the state within the next 10 years.

Find K-State's full plan for economic prosperity in Kansas, plus short-term progress updates and a benchmark dashboard, at

**[k-state.edu/economic-prosperity](https://k-state.edu/economic-prosperity)**

