AG TECHNOLOGY SECTOR

2025 KANSAS AG GROWTH REPORT

OVERVIEW

Agricultural technology is a growing field, and Kansas is home to many agricultural technology companies that vary widely in their size and specialization. Entrepreneurs have great ideas and work to implement them to encourage growth in agriculture across every acre in our state.

Potential exists for new, innovative ideas to take root in Kansas and develop into successful businesses. Advances in technology that reduce costs and increase productivity are key to long-term agricultural growth in Kansas. Unmanned aerial systems (UAS) technology in particular is increasingly important as farmers and ranchers work to implement precision technologies into their management practices. A strong innovation culture positions Kansas as an excellent area for development. Youth entrepreneurship programs at the secondary level have continued to grow in the state, encouraging young Kansans to create and market new advancements in technology contributing to the growth in agriculture.

Kansas is home to multiple manufacturers of agricultural equipment and technology companies that support development of agricultural technology. The state's commitment to soil and water conservation creates a need for new and expanded water-saving technologies to increase efficiency in the region. The strong customer base of farmers and ranchers makes Kansas a prime location for advancements in agricultural technology. Drone imagery is one such advancement which is highly detailed yet limited in its coverage area.

CHALLENGES

Alongside the vast potential for the agricultural technology industry there exist some challenges which could present barriers to growth, including statewide expanded and reliable connectivity. Engaging the agricultural industry in new technologies or new innovative ideas can be difficult, especially with limited data to prove a return on investment for the producers. Similarly, new products and technologies face uncertainty in regard to policies and regulations which might limit their acceptance. Ag tech companies are often brand-new enterprises, and the financing of start-up companies generally occurs outside the traditional finance arena where much of agriculture operates.

STRATEGIC GROWTH

Agricultural technology offers huge potential for growth, with unlimited possibilities. To foster this potential will require ongoing input and discussion among key partners as a long-term strategy for growth is developed to guide the industry. Additional resources that encourage business growth could be directed toward agricultural companies. A strategic growth plan created out of collaborative efforts from both public and private stakeholders will be key in the growth of this industry.

Kansas
Department of Agriculture

APPLICATIONS

Technology is growing in prominence across Kansas agriculture. Across all sectors, technology is present in some way, shape, or form. Producers have tech at their fingertips through robotics, livestock reproduction, plant biotechnology, satellite remote sensing, monitoring feed intake, and many more applications. Precision agriculture used in irrigation and robotic milking in dairies is ever-present across the state.

Ultra-high frequency ear tags and readers are used for traceability. Traceability is used as a national tracing system for livestock species such as cattle. Technology makes it possible for producers and industry organizations to track diseases and find the origin in order to prevent the disease from spreading. Applications like U.S. CattleTrace have established Kansas as a leader in traceability.

New developments of technology are also a topic of research with the hopes of conserving water in regions of Kansas that face water hardships, and especially for use in dairies and areas of high feed usage. Technology also plays a key role in foreign animal disease preparedness, biosecurity, and Secure Food Supply plans.

STATUS

Advancements in digital and concrete technology leads to increased agricultural production and/or production at a lower cost and the most efficient use of natural resources. Technology companies may produce the next great application to organize data or a physical product that reduces water use. With larger data usage available, there has been more collaboration between smaller and larger companies to solve problems across agricultural sectors and in turn increase profitability. Companies are also partnering with public, private, and university entities to conduct research and gather other great ideas.

Many 4-year, 2-year and technical colleges and universities provide opportunities for students to have exposure to technology and entrepreneurial ventures. In June of 2024, Fort Hays State University, North Central Kansas Technical College, and Northwest Kansas Technical College formed a strategic affiliation for close collaboration allowing for expanded education and training experiences. The three institutions came together under the Fort Hays banner to better serve the region's people, businesses, and communities. Beginning in the fall semester of 2025, a new precision ag technology program is being offered by Flint Hills Tech in Emporia; the program offers an associate of applied science degree and a technical certificate option.

In September 2023, the Kansas State University Institute for Digital Agriculture and Advanced Analytics, or ID3A, was launched as an affiliate program to foster collaboration across K-State's campuses, colleges and departments. The interdisciplinary institute, established under the Next-Gen K-State strategic plan, connects faculty and researchers focused on solving complex food, water, energy and environmental challenges through robotics, automation, computer vision, machine learning, remote sensing and data analytics. The ID3A affiliate program expands opportunities for innovation and collaboration. These initiatives will build a community for addressing future food and agricultural challenges through research, teaching and engagement.

Pairing the prevalence of the agricultural industry with Kansas' pro-business climate and Midwest values makes Kansas a prime location for entrepreneurs to create or expand their businesses. With expanded reliable connectivity, potential exists to create an environment for growth in technology and a pro-entrepreneurial culture that can establish Kansas as the Silicon Valley of agricultural technology.

In 2025 and into 2026, the Kansas Office of Broadband Development will have invested more than half a billion dollars ($661.9 million) in broadband to connect more than 100,000 homes and businesses. This work is being done through a combination of nine federal and state programs. Through those programs, there are currently 98 projects across the state working to implement digital opportunities and infrastructure. Between the digital opportunities and the infrastructure programs, KOBD has awarded grants intended to benefit all 105 Kansas counties.