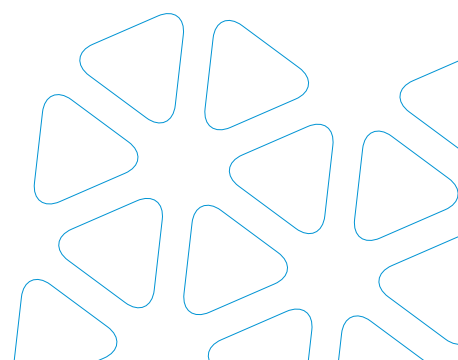




Farmers Edge: Protecting Agricultural Data

A STORY OF OWNING CHANGE

A global leader in digital agriculture, Farmers Edge implements a robust disaster recovery solution powered by Google Cloud.



Farmers Edge Owns Change

To aid in their mission of modernizing the agriculture industry, Farmers Edge wanted to optimize their disaster recovery (DR) solution by utilizing a wider range of Google Cloud services. They sought an expert to ensure they managed their network according to industry best practices.

THE CHALLENGE: EGGS IN ONE BASKET

Disaster Recovery for Regional Outages

Farmers Edge develops tools designed to drive the agricultural industry forward through data. Their platforms provide farmers with everything from soil reports to weather alerts to real-time equipment monitoring. Critical to their mission? Data accessibility and stability. If their platform goes offline, farmers are left in the dark. To mitigate risk and improve their ability to recover from an outage, Farmers Edge needed a more advanced solution capable of restoring multiple terabytes of data per service region. This included a Filestore environment and several Google Kubernetes Engine (GKE) applications and Cloud SQL instances.

As a [Google Cloud Premier Partner](#) with an Infrastructure Specialization, TEKsystems had both the technical knowledge and real-work experience to make it happen.

OUR SOLUTION: PREPARE FOR THE WORST

Automation and Data Redundancy

Prior to our partnership, Farmers Edge had the infrastructure in place to handle a zonal outage. They wanted to refine their processes and gain the ability to bounce back from regional outages quickly. Our team focused on automation to reduce the need for manual input. We introduced data redundancies and made key system changes to improve their overall recovery time. We designed a Helm Chart to declare the backup and restore process for all nonstandard workloads within the Kubernetes ecosystem.

POWERFUL PARTNERSHIP: AVOID OUTAGES OUTRIGHT

Reducing RPO and RTO

To optimize this DR solution, we performed a deep dive into their network architecture. We wanted to understand their unique outage concerns and build a high availability (HA) system to decrease their risk of downtime. Farmers Edge put together a dedicated team to work directly with our experts. This was incredibly helpful—they provided us with the necessary context when we encountered unexpected complexities. Our teams worked in tandem, creating a responsive task force equipped to fill skillset gaps or handle changes in scope.



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“As a global leader of digital agriculture technology, Farmers Edge partnered with TEKsystems to enhance and improve our disaster recovery program powered by Google Cloud. We are extremely happy with TEK and the team on leveraging Google Cloud-native technology and services to enhance our DR plan. This ensures that our growers’ customer experience remains uncompromised and seamless.”

—Manoj Regmi, VP of Technology at Farmers Edge

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Real-World Results

Now Farmers Edge has the power to get their services back online faster during a downtime event. They can address resource-specific outages, avoiding previously necessary regional shutdowns. Should an outage occur, their risk of downtime will be greatly reduced, and their data backups will be protected. Through the power of Google Cloud, we reduced their Recovery Point Objective (RTO) by implementing a process to automatically check for replication lag before database replica promotion. Their Recovery Point Objective (RTO) point is now just under nine minutes.

Think: improved reliability and greater customer satisfaction. As stewards of the agriculture industry, they can continue to collect data until the cows come home.

8.41 minutes

RTO point achieved

99.995%

HA achieved

About TEKsystems and TEKsystems Global Services

We're TEKsystems. We accelerate business transformation for our customers. We bring real-world expertise to solve complex technology, business and talent challenges—across the globe. We're a team of 80,000 strong, working with over 6,000 customers, including 80% of the Fortune 500 across North America, Europe and Asia, who partner with us for our scale, full-stack capabilities and speed. We're strategic thinkers, hands-on collaborators, helping customers capitalize on change. We're building tomorrow by delivering business outcomes and driving positive impacts in our global communities. TEKsystems is an Allegis Group company.

Learn more at [TEKsystems.com](https://www.teksystems.com).