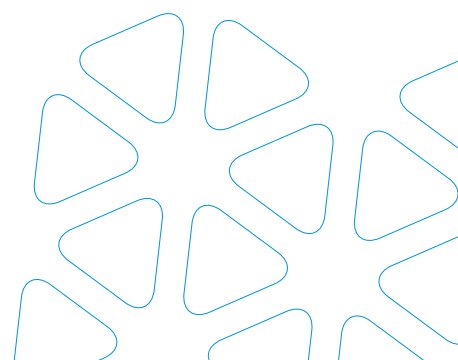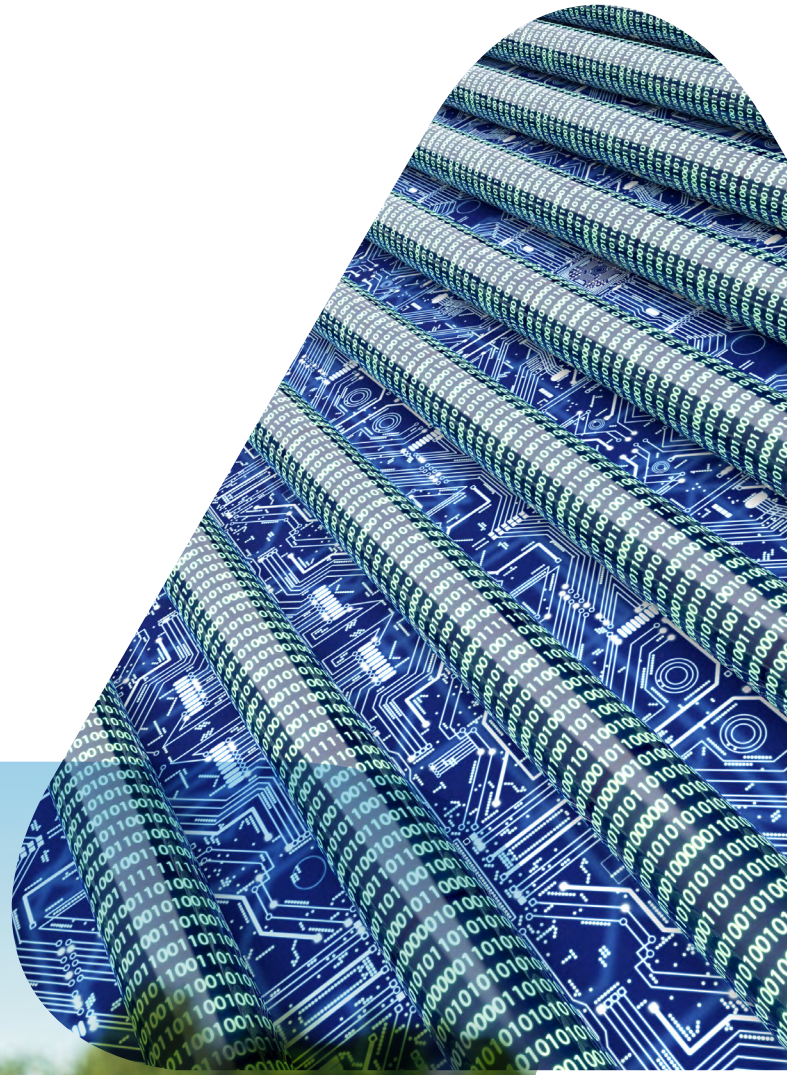# TEKsystems®

Farmers Edge: From Farm to Data Table

A STORY OF OWNING CHANGE

Agricultural software solution provider modernizes their data capture process to boost security, accuracy and speed.

Farmers Edge Owns Change

Farmers Edge is working to modernize the agricultural sector by fueling farmers and agricultural businesses with rich data pulled from field equipment and the environment. The information they've amassed through their years of industry experience is a valuable asset, and they wanted a more efficient way to monetize their anonymized and aggregated data.

THE CHALLENGE: AUTOMATING AND CONSOLIDATING
Modernizing Processes With Apigee X

In the beginning, Farmers Edge used a manual data capture process to obtain information from their customer base. They did the internal work to modernize this process by building a custom web application to capture enhanced data. Think more efficiency and higher value. To modernize this application according to best practices with an optimized API strategy, they needed a partner with a proven track record in cloud native app development and data management.

Farmers Edge also wanted to consolidate the data they stored in multiple databases and NoSQL Elasticsearch clusters. Conventional methods for sharing delta files across environments can be inefficient, which the consolidation process would improve. To enhance their data quality and prepare it for monetization to partners in their network, Farmers Edge wanted to ensure they were deploying the most secure data management solution. Enter TEKsystems.

OUR SOLUTION: ANALYTICS HUB EXCHANGE
Consolidating Data in Google BigQuery

The optimized version of the application Farmers Edge developed had multiple requirements. Building the application within the Apigee X hosting environment gave them the ability to secure, monetize and throttle API calls. They wanted to augment the existing application with REST APIs, which would standardize the data being sent while protecting sensitive client information. To ensure a high level of security, we also implemented OAuth 2.0.

To consolidate their data, we leveraged the power of Google Cloud and established an effective serverless data streaming pipeline to consolidate everything in BigQuery. To accommodate dynamic data needs and simplify the pipeline, we opted for the BigQuery JSON datatype in our design. Google Analytics Hub provided Famers Edge with a reliable solution for secure data exchange across organizations, all backed by the robust capabilities of BigQuery.

POWERFUL PARTNERSHIP: SHARED COSTS
Sustainable Data Sharing

Our proficiency in customer experience and application development played a large part in the success of this project, as did our extensive work in data engineering and cloud solutions. We took a consultative approach, helping our customers define their desired outcomes and building a roadmap to get them there. Together, we built a robust and efficient solution that optimizes cost and performance.

Real-World Results

Today, Farmers Edge has a fully modernized web application deployed in the Apigee X hosting environment. The application captures data from the farmers they support with greater accuracy in less time. The APIs that enable the application provide security, and the ability to monetize and throttle excess API calls. This will ensure a high quality of service to customers and partners.

With their data consolidated through BigQuery, Farmers Edge now operates efficiently on the Google Analytics Hub data exchange. Empowering Farmers Edge with the ability to monetize and leverage the power of data across the agricultural ecosystem will help the industry continue to grow into the future.

↑ Increased data accuracy	↑ Increased collaboration	↓ Lower maintenance costs

"At Farmers Edge, we're dedicated to enhancing our customer experience through platform modernization. Collaborations with esteemed enterprise partners like TEKsystems ensure growers and partners enjoy exceptional service. With cutting-edge capabilities like BigQuery, Vertex AI and Apigee powered by Google Cloud, we're leading the charge into the next generation of modern data technology, preparing for the [Gen AI] revolution. This partnership empowers us to deliver enterprise-grade tech solutions, setting new standards for innovation."

—Manoj Regmi,
VP of Technology at Farmers Edge

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**.