CUSTOMER STORY

Chinese Academy of Agricultural Sciences

builds big data applications for smart agriculture with Qlik

"The Qlik solution is characterized by accessibility and low training costs, which play a significant role in the acceleration of agricultural data insight. It establishes big data applications for smart agriculture."

Cui Yunpeng, Researcher, Agricultural Information Institute, Chinese Academy of Agricultural Sciences

Creating a smart agriculture application

The largest employer of scientific talent in agricultural science and technology in China, with over 5,000 professional employees, the Agricultural Information Institute of the Chinese Academy of Agricultural Sciences (CAAS) is a national innovation center for agricultural IT. It monitors agricultural information, risk analysis, food safety, and data acquisition. Promoting the development of smart agriculture can cut costs and boost efficiency and quality in the development of agriculture and rural areas.

CAAS is in the process of refining big data for smart agriculture through its own application. Developed by CAAS, the application handles heterogeneous data resources from a variety of data sources including local governments, commercial databases, and Internet of Things (IoT).

"Data resource issues have been addressed during the build process but more pressing is the choice of data processing and analyzing tools," says Cui Yunpeng, Researcher, Agricultural Information Institute, Chinese Academy of Agricultural Sciences.

The business intelligence (BI) products previously deployed by CAAS were seen as inadequate. They were generally limited to static data analysis and visualized representation, making it difficult to fulfill in-depth data interaction and analysis. CAAS wanted more specialized and powerful functionality.

Solution Overview

Customer Name
Agricultural Information Institute, Chinese Academy of Agricultural Sciences

Industry
Public Sector

Geography
Beijing, China

Function
IT, Supply Chain Management

Business Value Driver
Reimagined Processes

Challenges
- Previous solutions weren't adequate for the scalability required for a big data application
- Systemic performance issues with mass data processing
- Opportunity for mapping and report generation to be improved

Solution
CAAS leveraged Qlik Sense to accelerate the building of big data applications for smart agriculture.

Results
- Fully mining value from data: users can explore the connections between different datasets to draw conclusions quickly
- Significantly improved performance, geographic information processing, ease of use, and reduced data analysis time from a few months to less than a day
- Accessibility and low training costs reduce the time spent by users on data insights

With such a huge volume of data, CAAS was concerned about performance load. "We hope the BI products will accelerate the calculation and representation of the mass of data as well as improve the efficiency of data analysis. We also need to fulfill the cleansing and conversion of complex data sources and offer sub-module functions, such as professional mapping. These functions are essential to the platform," Cui Yunpeng explains.

AI to drive agile data analysis

CAAS selected Qlik after an appraisal of BI options from multiple vendors. Seen by CAAS as a benchmark for the new generation visual analysis platform, Qlik Sense helps users make better decisions based on the solution's unique association analysis engine, advanced AI and a scalable multi-cloud architecture.

"Qlik Sense satisfied our demands for enhanced big data processing and data management," states Cui Yunpeng.

Qlik Sense supports in-memory computing, demonstrates outstanding performance and enables quick calculation and representation of mass data, he explains: "Qlik Sense provides a strong data management function which supports our administrative applications. This is highly beneficial to us."

In addition, the scalability of Qlik Sense enables users to perform any analysis via an open API development package and bring them into other applications through its embedded analysis support.

Qlik helps CAAS to unleash the power of agricultural data

Qlik has helped CAAS to deliver big data applications for smart agriculture, allowing it to fully-mine value from a wealth of data.

Qlik Sense is equipped with exploratory and interactive data analysis capabilities to enable users to easily merge and load data, create intelligent visualization files, and drag and drop them to build a variety of analytical applications. Users can explore the connections between different data, draw conclusions quickly and obtain flexible and in-depth data insights.

The advanced analytics platform also improves the efficiency of data analysis. The use of Qlik Sense as the data center significantly improved performance, geographic information processing, and ease of use. Time spent on data analysis has been shortened from a few months to less than a day.

The solution is also accessible, adds Yunpeng. User adoption has been widespread. The simplicity of Qlik Sense enables users to quickly familiarize themselves with the functions of the platform, and independently conduct their data exploration.

"We see the engagement with Qlik as long-term," says Yunpeng.

The keys to success

Usage of Qlik has increased the efficiency of data analysis

<1 Time spent on data analysis shortened from month to less than one day

"Qlik Sense offers significant improvements in performance, geographic information processing and ease of use compared to the BI products we used before."

Cui Yunpeng, Researcher, Agricultural Information Institute, Chinese Academy of Agricultural Sciences

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About Qlik

Qlik's vision is a data-literate world, one where everyone can use data to improve decision-making and solve their most challenging problems. Only Qlik offers end-to-end, real-time data integration and analytics solutions that help organizations access and transform all their data into value. Qlik helps companies lead with data to see more deeply into customer behavior, reinvent business processes, discover new revenue streams, and balance risk and reward. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

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