



Improving Delivery Through Engineering Practices

SUMMARY

Source Allies collaborated with the client to strengthen delivery practices, improve technical execution, and support the development of critical features within the platform's soil and field management capabilities. The engagement focused on increasing predictability, improving cross-team collaboration, and modernizing key parts of the application.

APPROACH

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- **Scalable Data and Mapping Capabilities:** Enabled the storage and visualization of GeoJSON datasets to support accurate field mapping and agronomic insights, improving how users interact with complex spatial data.
- **Modernized Architecture and Performance:** Contributed to breaking down monolithic components and improving performance through techniques such as memoization, while also enhancing server-side caching strategies.
- **GraphQL and Developer Efficiency:** Implemented and maintained GraphQL APIs and introduced code generation practices to streamline development and improve consistency across the application.
- **Testing and Standards Alignment:** Helped establish clearer testing practices and aligned development with existing component libraries and design systems to ensure consistency and quality.
- **Improved Team Coordination:** Supported better communication and predictability in a siloed environment, helping teams align on priorities despite shifting resources and seasonal business demands.

SOLUTION

The team delivered a set of GraphQL APIs and frontend capabilities that enable crop consultants and growers to view soil sample data and manage farm and field information through an intuitive, map-based interface. The solution was built using React with TypeScript, Node.js, Apollo GraphQL, and AWS, and required close collaboration across agronomy, data, and design teams.

Results

65%

Fewer bug reports for teams adopting the testing practices

77%

Higher sprint completion rate than the department average

30%

Faster cycle time than the department average