



# A Global Sales System API Platform

## SUMMARY

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Our partner was in the process of rewriting the sales system responsible for all North American seed sales. As part of this effort it was necessary to integrate with several dozen internal systems ranging from inventory management, production, accounting, marketing and more. They also had several third parties that required access to the system's data as well.

## SOFTWARE DEVELOPMENT APPROACH

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### API AS A PRODUCT

Rather than implementing one-off integrations with each disparate system, the team built a suite of generic, domain focused APIs that could be leveraged by all systems.

### EVENT DRIVEN ARCHITECTURE

Whenever changes occurred in the source system, events are sent to other services so they could fetch updated data without resorting to nightly load processes.

## SOLUTION

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- CI/CD pipeline hosted in Azure DevOps that was able to deploy multiple times daily.
- ASP Dotnet Core API hosted on Azure App Service and backed by Entity Framework Core with SQL Server
- Azure Service Bus for events
- Azure functions written in NodeJS to consume events and integrate with other systems.

## BENEFITS

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- Additional clients can consume data without requiring API changes.
- Consumers are notified when data changes, removing the need for costly and complicated batch processes.