



CASE STUDY

AgWorks cuts costs in half by using Web**MAP** automated migration technology



Web**MAP** offers substantial savings vs a manual rewrite – plus has ongoing savings with Microsoft Azure implementation



mobilize.NET

+1-425-609-8458

info@mobilize.net

www.mobilize.net



AgWorks is a leader in providing agronomy software for farming operations and retail agriculture. They have developed a comprehensive agronomy solution for order management, inventory, crop planning, grower access and more. AgWorks customers are billion dollar companies and use the AgWorks software solution to handle millions and millions of transactions and billions of dollars.

AgWorks software needs to be bulletproof and cannot have any margin of error. The VB6-based, desktop application developed for managing farms and needs to be usable on a desktop as well as out in the middle of a field was cumbersome to install and support and didn't have the ability to run in the cloud.

After internal review of all the options available, they turned to Mobilize.Net's **WebMAP** to modernize the 137,000 lines of VB6 code, converting it to HTML5 for simple and flexible web deployment with a proven architecture that is cloud-ready.

Using **WebMAP** to convert source code automatically is 4 times less expensive than a ground-up rewrite. Additionally, new code on average contains 10- 50 bugs per 1000 lines of code (KLOC). As always, Mobilize.Net was able to provide AgWorks with a fixed-price project with a guaranteed delivery date, which they hit. Now AgWorks customers can use the AgWorks solution with little or no IT support and work from any connected or disconnected device.

Background

Headquartered in Davenport, Iowa, AgWorks builds software for ag retail operations. AgWorks handles agronomy operations for the nation's largest agronomy retail businesses which do fertilizer and crop.

protection sales and applications for farmers. AgWorks was founded in 1992 in Preston, Iowa and currently serves more than 450 ag retail locations in 27 states across the U.S. The staff at AgWorks has more than 100 years combined experience in agricultural retail ownership, operations, and farming. That experience provides the foundation necessary to create effective unified agronomy software.

VITAL STATS:

| LINES OF CODE | COMPLEXITY | DURATION | BENEFITS |
|------------------|---|----------|---|
| 137,000 VB6 code | Very high – required five 9s of reliability | 6 months | Successful migration in 6 mos vs \$1Million investment plus 1.5 years and a failed attempt at manual rewrite Deployment takes minutes vs weeks/months No retraining of agents because UX stayed consistent Internal resources focused on higher-value projects vs migration Costs cut in half |



Situation

A farmer by background, Greg Duhachek, CEO of AgWorks was in a tough situation. AgWorks' technology was written in Visual Basic 6.0 – a programming language that was not only obsolete and unsupported, but also hopelessly out of date with current technologies and nearly impossible to update.

"The world has gone to the cloud," said Duhachek. "We were spending so much time getting our customers updated that we knew we needed to get to a web application immediately." His team had spent a year and half and nearly a million dollars trying to re-write the app from scratch. Unfortunately, as with so many large-scale software projects, they were nowhere near complete and looking at years of continued development.

They needed a browser-based, cloud solution as soon as possible.

Solution

To modernize their critical application, AgWorks first reviewed all options and decided on Mobilize. Net's WebMAP offering to convert their existing code base.

The project involved creating an exact version of the existing application in HTML5 so it could be deployed as a web application hosted on Microsoft Azure so that it's available from virtually any browser on any platform.

Converting 137,000 lines of VB6 source code using WebMAP was no problem for Mobilize.Net, who relied on the two decades of experience converting millions of lines of source code to more modern platforms.



The end result?

A more efficient, easily deployed ag application that required no re-training of customers and which is re-tooled to handle future requirements.

Before and after screens of AgWorks application.

The application in HTML5 uses Kendo to ensure consistency from VB6 to HTML5 so that re-training costs are kept to a minimum.

This screenshot shows the 'Before' version of the AgWorks application. The window title is 'New Document' and the document ID is '626384'. The 'Originated at' field is 'Day Warehouse (Location: DAVENPRT)'. The 'To' field is 'ABBEY BANCA'. The 'Type' is 'Customer operation' and 'Delivery Ticket'. The 'Product Name' table has columns for 'Product Name', 'Quantity', and 'Lot'. The 'Misc.' section includes 'Created on: 10/10/2016 4:33:21 PM', 'By: admin', 'Modified on: 10/10/2016 4:33:21 PM', and 'By: admin'. There are checkboxes for 'Invoiced', 'Delay Invoicing', and 'Direct Shipment'. A 'Quantities were changed' checkbox is checked. The 'PO' and 'DOL' fields are empty. The 'View' section has 'MIS05' selected. The 'Print' section has 'Print Prices' and 'Print Charges Log' checked. The 'OK', 'Print', and 'Cancel' buttons are visible at the bottom.

This screenshot shows the 'After' version of the AgWorks application. The window title is 'New Document' and the document ID is '192009'. The 'Originated at' field is 'Day Warehouse (Location: DAVENPRT)'. The 'To' field is 'ABBEY BANCA'. The 'Type' is 'Customer operation' and 'Delivery Ticket'. The 'Product Name' table has columns for 'Product Name', 'Quantity', and 'Lot'. The 'Misc.' section includes 'Created on: 10/10/2016 2:07:48 PM', 'By: admin', 'Modified on: 10/10/2016 2:07:48 PM', and 'By: admin'. There are checkboxes for 'Invoiced', 'Delay Invoicing', and 'Direct Shipment'. A 'Quantities were changed' checkbox is checked. The 'PO' and 'DOL' fields are empty. The 'View' section has 'MIS05' selected. The 'Print' section has 'Print Prices' and 'Print Charges Log' checked. The 'OK', 'Print', and 'Cancel' buttons are visible at the bottom.

Hvard and Soft ROI Summary

Hard ROI

Centralized automated deployment

Before WebMAP

Decentralized, manual deployment VB6 app required manual installation by IT staff which took weeks and in some cases months since many employees work from home.

After WebMAP

Unified, cross-platform codebase with ability to deploy at the touch of a button, in minutes, even seconds.

Benefits

Four-fold savings over prior implementation.

Reduced support

Outdated VB6 code on old PC systems required more people, bug-gier, outdated system with security vulnerabilities.

Centralized, automated deployment plus access to newer, more secure technologies cut down support and maintenance requirements. System no longer vulnerable to malware.

Increase in productivity for support and development teams over previous labor-intensive processes requiring significant staff time.

Successful migration

Spent 1.5 years and \$1 million on a failed manual rewrite

6 month effort with Mobilize WebMAP and have a fully converted native code application

Annualized savings: \$25,200 per year. Highly labor-intensive manual deployment was eliminated.

Soft ROI

Solution flexibility and extensibility

Before WebMAP

Brittle system with limited ability to make significant feature additions
Competitors were able to move quicker.

After WebMAP

Ability to quickly update and deploy the app, from planning to development to deployment, yielding direct insight into business performance.

Benefits

Improved performance of business.





Quotes and Observations

"Mobilize tools create readable, maintainable, quality code," said. "Mobilize uses familiar architecture and patterns which made it easy to immediately step into the code."

Matt Gropel,
Director of Technology at AgWorks Software

"Mobilize technology is actually cheaper than a manual rewrite in time and dollars. It cut our costs in half."

"Mobilize has done so many modernizations – they have a total command of the modernization domain space."

Greg Duhachek,
CEO at AgWorks,



LET US DO
THE MIGRATION FOR YOU.



YOUR APP. NEW. AGAIN.

**With thousands of projects and billions of lines of code converted.
Mobilize.Net is the global leader in application modernization.**

To learn more about how Mobilize.Net can help you
move your legacy code to the future, call today.

||mobilize.NET



www.mobilize.net

+1-425-609-8458

info@mobilize.net