

The background of the top section is a photograph of a steel mill. Large rolls of steel are stacked in the foreground, and industrial machinery and structural beams are visible in the background under bright overhead lights.

Zekelman Industries Replaces Legacy SAP Mobile App and Devices with New SAP Native Solution

Zekelman Industries, an international steel products company, was struggling to keep its SAP inventory management system running smoothly as the legacy mobile devices it was using were no longer supported or available on the market, and its legacy Windows CE mobile app was difficult and expensive to maintain.

Havensight Consulting teamed up with Barcodes, Inc. and Zebra Technologies to help the company migrate to new and widely supported Android mobile devices with a modern user interface and security, all while seamlessly maintaining integration with its existing business processes and SAP back-end connection.

PROBLEM

As an international steel products company with production operations across 17 different manufacturing locations in the U.S. and Canada, Zekelman Industries manages a large volume of raw materials and finished goods inventory. But this had become increasingly difficult due to the use of a legacy Windows CE app and legacy mobile devices that were no longer supported or sustainable.

Back in the 1990s, Zekelman custom-built and deployed a Windows CE application to help get inventory data and transactions into its back-end SAP system. It built many custom inventory transactions and SAP integrations which proved extremely useful and fit nicely into how the team did business then and how it does business today.

However, the Windows CE mobile operating system is no longer supported, which meant Zekelman's mobile security was dangerously outdated. Moreover, it no longer had Windows CE development resources on hand to extend and update its custom application, troubleshoot and fix things, or retire transactions and features that were no longer required.

Additionally, the company's legacy devices were so outdated that its preferred hardware could no longer be repaired or purchased on the secondary market as refurbished devices. As its devices inevitably broke down and couldn't be replaced, Zekelman no longer had enough hardware to equip all of its mobile users.

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Quick Summary

COMPANY

Zekelman Industries, the largest independent steel pipe and tube manufacturer in North America

PROBLEM

A legacy Windows CE mobile app and legacy devices were being used to manage SAP inventory transactions, but the app was costly to maintain, devices were no longer available, and the company could no longer equip its 400 mobile users with the right app and hardware.

SOLUTION

Zebra Android mobile devices and a new mobile app from Havensight provided a modern and more secure user experience while maintaining the company's existing SAP integration.

RESULTS

- New Zebra Android mobile hardware
- New SAP-compatible inventory management app
- Faster, easier, more accurate inventory transactions
- Vastly improved and easier experience for end users
- Full integration with existing SAP back-end processes
- Major security improvements for devices and authentication
- Future-forward solution with long-term support
- No licensing fees or limits on the number of users or sites

PROBLEM *(Continued)*

Facing an inevitable need to upgrade and replace legacy hardware, Zekelman was assisted by Barcodes, Inc., a Zebra Technologies channel partner. Zekelman made the commitment to switch to Zebra Android mobile computers, which are known for their excellent scanning capabilities and deliver a modern and improved user interface along with new and robust security and authentication. But Zekelman also needed a new application that was compatible with its new hardware, and it didn't want to lose all the work it had done to make SAP available to field workers.

Zekelman asked Havensight Consulting, a company with over 20 years of SAP mobile app development experience, to create a mobile software solution that would take advantage of its new Zebra Android devices but maintain the existing SAP integration it had built and which aligned extremely well with its business processes. It felt confident Zebra's mobile devices could leverage its existing SAP integration framework while eliminating Windows CE development requirements. Zekelman also wanted Havensight to create an app that its own internal developers could support moving forward.

SOLUTION

Havensight Consulting began the project by using its proven project methodology to identify the scope and requirements, which included a desire to simplify screens, consolidate data, and deploy new inventory transactions while creating a new mobile solution to address the company's hardware, security, and long-term support challenges.

This led to a proof-of-concept phase in which Havensight built various screens, forms, and logic that Zekelman wanted to validate on Zebra devices to get a feel for how the app would look and function on its new hardware.

Once these initial concepts were approved, Havensight started developing the new mobile solution using their pre-built Mobile Inventory Templates (MIT) as a starting point. The templates leverage SAP's UI5, an HTML5 framework that makes it easy

to create cross-platform, enterprise-grade web applications efficiently. This technology also allowed the new mobile app to connect to the SAP back end Zekelman already had in place, to ensure continued support for its existing integration.

Havensight was able to quickly configure app screens, workflows, business concepts and validations on the Zebra devices that all aligned with Zekelman's SAP back-end integration using their pre-built application templates. This way, Zekelman's inventory and transaction data was clean and would post properly when sent through Zekelman's existing SAP infrastructure.

Havensight applied its development and configuration "sprints" approach, attacking the largest needs and pain points, trying to get the most complex things done first. Then it worked out less complex functionality and other improvements. Along the way, Havensight's developers identified and capitalized on several opportunities to streamline and simplify app screens, forms and logic by eliminating functionality which was no longer needed.

After thorough testing and user acceptance processes, the solution was deployed to Zekelman's production operations, with Havensight providing end-user training, knowledge transfer, and go-live support.

RESULTS

Once the rollout and training were complete, Zekelman was able to equip its mobile users with new Zebra Android mobile devices and an updated, improved, and modern mobile app. The app is helping them perform inventory transactions and manage inventory faster and more efficiently than ever before while still taking advantage of its SAP business processes.

By using their SAPUI5 MIT templates, Havensight was able to quickly create a new user interface that supported those physical processes while streamlining the mobile management and execution of related SAP transactions. The template's flexibility allowed Havensight to create new screens, new menus, and a host of additional improvements which resulted in a truly user-friendly experience.

For example, Havensight implemented new audio sounds to signify transaction successes or failure, and these sounds are now loud enough to be heard over the noise of nearby vehicles or heavy equipment. They also used a new palette of colors which helps users see information and transactions better when they're working outdoors in all different lighting conditions.

RESULTS *(Continued)*

Additionally, Havensight optimized app button sizes so workers are able to easily press them while wearing gloves, and they configured Zekelman's mobile devices to alert users when the last thing they scanned is recorded in the app. Improvements to Zekelman's mobile efficiency and user experience have been so significant, the company is already thinking of additional ways to build on this success and take things further in the future.

Havensight also worked with SOTI, Zekelman's mobile device management software provider, to ensure that the new app can be updated and managed across all of Zekelman's sites and devices through SOTI's centralized tools and interface.

Most importantly, Zekelman has transitioned from Windows CE devices and applications to Zebra Android devices and SAP native apps with Havensight's Mobile Inventory Templates. This has allowed Zekelman to significantly boost its device and authentication security while ensuring that its hardware and software are supported and can be developed and maintained for years into the future. In fact, Havensight is now working with the company's developers to make sure they will be able to take ownership of support for the app in the future.

Once the initial implementation services were provided, Havensight's prebuilt Mobile Inventory Templates (MIT) for SAP allowed Zekelman to minimize the long-term costs of its solution. It now owns the mobile app, there are no annual licensing or subscription fees, and it can be used for an unlimited number of users across an unlimited number of sites with no additional costs.

To learn more about developing custom SAP mobile apps and solving your biggest mobile hardware and software challenges, contact Havensight Consulting now to schedule a free consultation and start a conversation.



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