



CREATING AN INDUSTRY ADVANTAGE THROUGH MODERNIZATION

How a manufacturer improved the customer experience by optimizing operations.

COMPANY:

The customer is a leading provider of automation, measurement, valves, and process control solutions. As such, a major portion of the business is servicing valves for pipelines used in industries such as oil and gas refining. The valves control the flow of fluid through pipelines and require routine maintenance to ensure safety. Valves are replaced at their customer's site and sent to be serviced. The valve must be inspected, refurbished and pressure-tested before returning to customers.

THE PROBLEM

The company must track customer's valves from the time they arrive in their facility until they are returned. Employees need to understand how many valves are in each portion of the refurbishment process, the sales team needs to be able to report estimated delivery times, and customers need access to view repair statuses in real time.

For the last 15 years, valve tracking was accomplished using a custom application housed in an on-premise server, accessing a single Oracle database. The application technology was no longer supported by Microsoft, making it difficult to maintain and support, and putting a major component of their business at risk. Running the critical application on-premise increased the likelihood of downtime and limited the ability to scale to meet current business demands. Additionally, application

platform was no longer supported and updated, making it difficult for the company to respond to operational and market needs.

THE SOLUTION

Catapult helped the company modernize this business-critical application in two phases, with an initial effort focused solely on moving the application to a modern, supported platform and a second phase to add enhancements and end-user functionality.

The first modernization phase was delivered in a traditional waterfall process to migrate the application into Azure. The application was completely rewritten using the .Net framework and hosted in Azure, improving responsiveness and supportability. The new application followed the existing business processes, reducing organization change challenges while improving the front-end user experience for employees and sales representatives. The new application added a web interface with data cleanup and search improvements to enable customers to check valve status themselves, eliminating the need to call sales reps and wait for responses. Users could also view and download testing reports for each refurbished valve.

After launching the modernized application, the company turned their sights on customer experience improvements

and enhancements to promote customer loyalty and provide a competitive advantage in the market. This second modernization phase was delivered in an agile fashion and involved business users directly in the process to ensure that the application met their new customer-experience requirements precisely.

The customer wanted to provide a new user experience to make it easier to find assets and follow valves through the refurbishment process. The upgraded application now allows users to store photos of the valves as they move through the process, documenting the problems uncovered during inspection and providing visual proof that the valve had been serviced. It also includes a dashboard with basic reporting and analytics for customers and sellers to quickly understand where their valves are in the refurbishment process. Catapult also added email and text notifications to the system to proactively provide customers with notifications when their valves are shipped. Catapult also created a third-party integration to make testing reports from outside sources available to end-users.

RESULTS:

- Enabled customer self-service, creating a competitive advantage for the market
- Greatly improved application performance and accuracy of searches
- Increased operating efficiency by eliminating the need for telephone calls for status checks
- Improved visibility into testing cycles
- Created more efficient report generation by updating logic
- Eliminated concerns over application downtime and vulnerability due to on-premise environment