

CASE STUDY

Sunstate Equipment Co.

Enhancing Enterprise Efficiency With an Agile Workflow



“Zend Server has been so well received and accepted throughout the company. The fact that we were able to leverage our existing business logic via PHP was huge.”

Richard McCarroll, Application Development Manager, Sunstate Equipment

Industry

- Equipment rental

Challenges

- Heavy reliance on manual processes and paper forms
- Lacked visibility into enterprise-level metrics
- Sought to update a trusted but aging workflow

Solution

- Zend Server
- IBM Power Systems servers with IBM POWER8 processors
- IBM i Operating System

Results

- Antiquated manual processes replaced with web-based applications and handheld tablets
- Significant gains in efficiency and flexibility

Modernizing a Proven Process

Sunstate Equipment is one of the top 10 equipment rental companies in the US, providing everything from hand tools to heavy machinery for construction, industrial, and special event companies.

To manage workflow, the company used a reliable but outdated combination of IBM i “green screen” applications and manual, paper-based processes. This situation required mechanics to leave their work bays just to look up inventory, check in returned equipment, and manage repairs — after waiting in line at a single common workstation. In addition, Sunstate Equipment had no enterprise view of operational process and no visibility into critical metrics for its 62 locations.

Making Workflows Mobile

Sunstate Equipment leveraged Zend Server and IBM to develop a fully modernized solution without abandoning existing IBM DB2® database tables or the business logic from the original system. To guide this transition, local trusted development partner Innovative Software Solutions (ISS), which specializes in the construction rental industry, provided additional resources.

On the software side, the Zend by Perforce PHP application development platform was ideal because it is delivered natively on Linux and IBM i environments. On the computing side, Power Systems servers with IBM POWER8® processors improved speed by an estimated factor of 10. The result is a comprehensive, high-performance material management system (MMS) that can streamline workflows for inventory, procurement (including purchasing and distribution), repair, maintenance, and sales. In addition, Sunstate Equipment mechanics now use hand-held tablets and an intuitive touchscreen GUI to perform tasks that they previously had to complete using the one shared workstation.

Driving Enterprise Efficiency

With the solution developed with Zend Server, mechanics are significantly more efficient. Using their mobile tablets, they can order parts and initiate work orders from anywhere in the facility. They can also record important notes, so they no longer have to write them down on paper and then manually re-type them at a later time.

Sunstate Equipment is also realizing rapid ROI for its new solution. At its Phoenix location, Sunstate Equipment has increased insight into labor tracking and the status of open orders, without interrupting work. In addition, fleet uptime has improved, deliveries are faster, and there are fewer “rush” charges. Most importantly, the company can turn the fleet over more quickly, making more of its inventory available to rent. These benefits are possible because equipment is now automatically tracked as it moves between the wash rack, repair shop, and ready line. And purchase orders are also created automatically.

“The look and feel of what we have developed with Zend Server is incredible. The ease of use and the amount of information we were able to provide on the screen has amazed everyone.”

Richard McCarroll, Application Development Manager,
Sunstate Equipment

Getting Old Equipment to Auction Faster

More recently, Sunstate created an application for the fleet department to streamline the process of auctioning off old equipment, which also improves fleet management. Today, if a piece of equipment meets certain thresholds, the app automatically flags it to be auctioned, and a user can schedule the auction date. This fleet application ties into the MMS app, which allows users to inspect equipment that has been flagged for auction, because it must undergo a thorough inspection before it is sold. This whole process was originally handled via spreadsheets, which were emailed between members of the fleet department.

More Efficient Access to Important Data

Sunstate is using Zend Server to host some REST web services that simplify communication with its Microsoft CRM. Developers created the services using the Zend Framework 3 skeleton application, which is running on IBM i. The services make it possible for the CRM system to seamlessly obtain data from the IBM i system about sales representatives and quotes — a process that was previously supported by third-party middleware that was time-consuming to maintain.

Looking to the Future

Sunstate is looking to modernize other workflows with Zend Server and PHP, such as the reservation process that people use to rent equipment. Under the current process, a customer phones a location, requests a rental, and the order is then entered into a legacy green screen application. The top 10 equipment rental companies in North America are also using this same 20-year-old legacy system for orders. By modernizing its rental process and IBM i system with PHP and Zend Server, Sunstate can expedite ordering and deliver a better customer experience with minimal investments.