

Joy Global uses Prometheus Mobile to save time and improve data accuracy

Founded in 1884, Joy Global is an American-based mining machinery manufacturing and servicing company with reaches across the world. As a Fortune 1000 company, Joy Global is committed to solving mining's toughest challenges through world class products and direct service.

Joy Global manufactures and provides service for original equipment and parts for use in a variety of mining applications. With an expanding product line and continuous expansion into emerging markets, the company's vision is to be a world class service company delivering the most reliable and productive products, systems and solutions that solve mining's toughest challenges.

The Challenges

Joy Global operates using a direct service model, servicing the same equipment that it manufactures and sells to customers. Through its Equipment Life Cycle Management offerings, Joy Global partners with its customers to provide Maintenance and Repair services at the customer site where the equipment is operating or at one of its global service centers. Joy Global crews rely on SAP SM (Service Management) as their main system to identify, plan, schedule, and execute maintenance related services.

"The challenge we face is that our customers equipment is operating at the bottom of a mine where there is limited if any connectivity to our ERP system" says Mark Schmidt, Senior IT Applications Manager at Joy Global.

Prior to a mobile solution, maintenance activity performed on the machine or machine related problems that needed to be reported were written down and then provided to others for entry into SAP. With data capture done remotely from the ERP and the challenging dynamics of mining operations, this leaves ample room for transposition errors and loss of data. "When data finally got into the SAP system, a lot was either lost or prone to error in translation" Schmidt reflects.

Having complete and accurate maintenance data is pivotal to Joy Global's success as the mining industry's direct service provider. It helps the company optimize customer equipment availability, and to stay competitive within this essential sector of the business. For example, the company's SAP system includes

a Service Management module, complete with functional locations and equipment data, representing equipment operating at each customer site. This sets the foundation to ensure data accuracy, and a high level of quality service for their customers. However, the missing piece was getting maintenance information in and out of SAP so that maintenance personnel had data when and where they needed it.

The Solution

Due to the company's need to capture maintenance data offline and its desire to provide the highest level of service to its customers, Joy Global's IT department partnered with the business team in Chile to ensure business processes were clearly identified and to evaluate Mobile solutions that would seamlessly integrate with SAP SM and be adaptable to their SAP ECC6 environment. The company also wanted a solution that could eventually be used to provide similar efficiencies for their internal plant maintenance operations.

As a global company with specific local needs, the company began its mobility efforts by piloting several different mobile solutions at a local site in Chile. As employees progressed through each pilot, they also kept the company's core global methodology, IPSECA (identify-plan-schedule-execute-close-analyze) in mind, as they wanted a solution that could make improvements at every stage

Joy Global's Chilean site's reasons for implementing Prometheus Mobile for iOS:

After evaluating several solutions and how each would fit into the company's core methodology, Joy

Adaptability
to ECC6

Improved flow of
information in and
out of SAP

Offline
functionality

Scalability

Global's Chilean site decided on implementing Prometheus Mobile for iOS for several reasons, including adaptability to ECC6, offline functionality, scalability, and the improved flow of information in and out of SAP. "Having the ability to work in disconnected mode in Mobile was very important," Schmidt notes, and adds that being able to search and find equipment information while offline is equally important.

The Results

Using Prometheus Mobile means that Joy Global employees are now able to log data at the source instead of waiting until they have connectivity to their SAP system. This ensures accurate, full capture of essential data. The improved data includes work orders, notifications, time confirmations, and more.

“When you look at the identification side of things, we’re getting better information inside of SAP,” Schmidt says. Since implementation, Joy Global has seen better data, which has led to improvements in its work identification and notification processes.

Besides more timely and accurate data entry, Joy Global has also benefited from a unique position as a close partner to Prometheus Group, often requesting features that get deployed as a global product update. As one of Prometheus Mobile’s first iOS customers, Joy Global employees have worked alongside the Prometheus team to continue improving the product for all Mobile users. For example, the now-popular offline document syncing feature was originally developed after workers at Joy Global shared the need with Prometheus developers. Schmidt notes that the relationship Joy Global has built alongside Prometheus has “been a very good relationship... we can provide feedback to improve the product.”

“Prometheus has been very responsive to what we’ve been looking for,” Schmidt adds.

Joy Global was also the first company to utilize Prometheus Mobile in a language other than English. Their Mobile system is fully translated into Spanish, which allows workers to move through their native workflow without delay. This translation inspired Prometheus, and the solution has now been translated into three other languages.

Now, with a complete Mobile solution deployed at all locations (recent implementations with the Windows version of Mobile) in Chile that provide Maintenance and Repair Services to customers, Joy Global is achieving improved data capture, its maintenance personnel are more efficient, and can access information such as inventory quantities and documents while offline. Furthermore, the company evaluates user adoption by measuring how many notifications are being created through the mobile app. With these numerous successes, Joy Global now looks forward to expanding their mobile efforts to other sites across the world.

Joy Global’s Results

Complete and accurate maintenance data in SAP

Less time spent entering data into SAP

Partnership with Prometheus Group to develop new features

Improved maintenance efficiency

Improved offline data capture