INNOVAPPTIVE

Refiner Enjoys Greater Maintenance & Warehouse Efficiency with Innovapptive Solutions

ABOUT THE CLIENT

Headquarters: U.S.

Industry: refining

ERP System: SAP

Overview

The client supplies refined products to rapidly growing metropolitan areas of the U.S. The company operates several small refineries outside of large cities that produce high-quality motor, aviation, and marine fuels.

Each refinery has an onsite maintenance team and spare parts warehouse. Reducing downtime is a top priority throughout the enterprise. The company headquarters handles spare parts and equipment purchasing for each of its refineries.

Challenges the Client Faced

One of the client's refineries was confronting several issues that stood in the way of more efficient maintenance and warehouse operations. Maintenance and the warehouse used a manual and paper-based process for notifications, work orders, rounds, spare parts fulfillment, as well as all inventory processes. This meant additional work for maintenance technicians and warehouse clerks, and information had to be written on paper forms and then manually transferred into SAP. This redundant process took these frontline workers away from their primary duties and negatively affected their productivity. The refinery often hired outside labor contractors to complete maintenance projects, straining the budget.
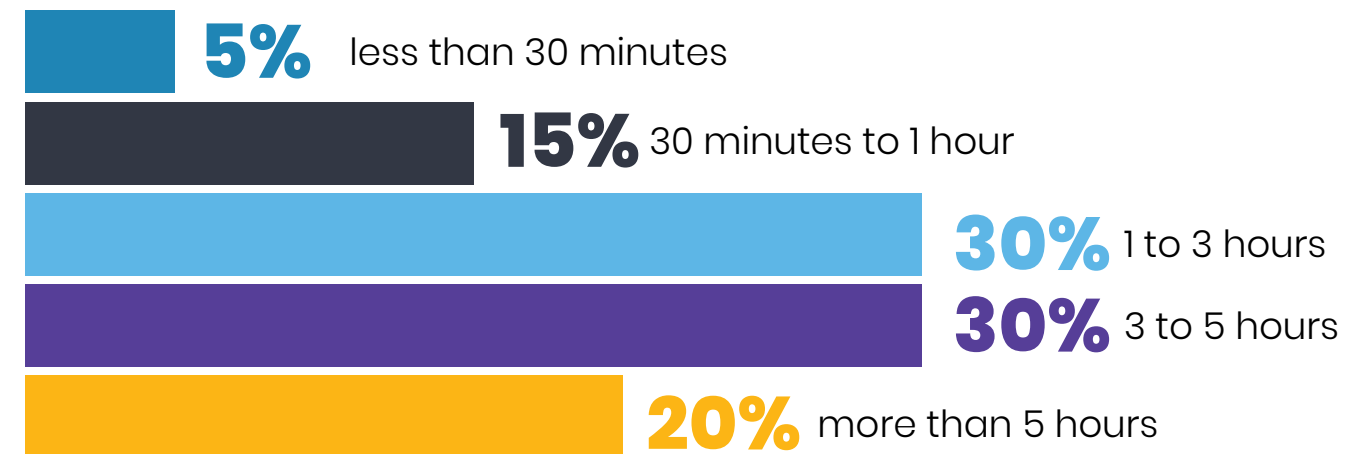
Unproductive tasks can cost a company as many as 19 working days per year for just one employee.

Asana, Information Age

Nearly 40% of industrial plants and facilities still use paper records for maintenance reporting.

Plant Engineering

Survey respondents reported that, on average, it took them this long each week to enter data into SAP:

5% less than 30 minutes
15% 30 minutes to 1 hour
30% 1 to 3 hours
30% 3 to 5 hours
20% more than 5 hours

Transforming SAP EAM User Experience Through Mobility for Maintenance

In addition, The paper-based processes meant that maintenance managers and supervisors had little or no visibility into the day-to-day work of their team. Management had to wait for data to be entered into the back-office system before it could be viewed and action taken. This meant the information could be hours or even days old when it reached decision makers and additional opportunities for human error increased the chances of inaccurate data.

Furthermore, paper-based forms limit the detail included in a maintenance work order. A manager couldn't attach critical information that could help technicians better perform a job, such as an SOP, manual, or equipment history. Those had to be physically printed and carried with the technician in a heavy, cumbersome "work package" to the job site.

Meanwhile, the warehouse suffered several redundant processes that impeded an efficient workflow and made it harder to fulfill spare parts orders from the field. This put the refinery at greater risk of costly downtime. The warehouse also wanted to improve its inventory accuracy. The paper-based legacy process allowed errors and inaccuracies to creep in, delaying turnaround time of cycle counts, throwing off the counts, and leading to understocks or overstocks.

What the Client Wanted

The refiner realized their legacy paper-based process was no longer up to the task and were doing more to impede operations than help. The client determined that digitizing its supply chain and plant maintenance functions offered the best solution to its challenges.

The company had previous experience with two digital inventory applications in the headquarters and at another of its refineries. Unfortunately, it was not a good experience. For one, system crashes and outages were common.

The client sought a mobile maintenance and warehouse management solution that could tie the two departments together and allow greater collaboration between them, the SAP back-office system, and the company procurement office.

For frontline workers, it wanted a mobile-first solution that would not only connect workers but also:

- Increase efficiency

- Make it easier to perform mission-critical tasks

- Reduce time spent on non-value-add tasks

- Provide instant access to documentation in SAP

- Facilitate better communication and collaboration

- Be intuitive and easy to use with little to no training

- Offer a superior user interface and user experience

- Decrease onboard training time

Why the Client Selected Innovapptive

The refinery considered six vendors during its digital transformation initiative. The client selected Innovapptive for its projects because only Innovapptive offers:

- A connected solution featuring mobile device-based applications tied directly to SAP

- 100 percent fit with the requirements and specifications

- A long-term roadmap and alignment for implementation

- Flexibility to accommodate their unique requests
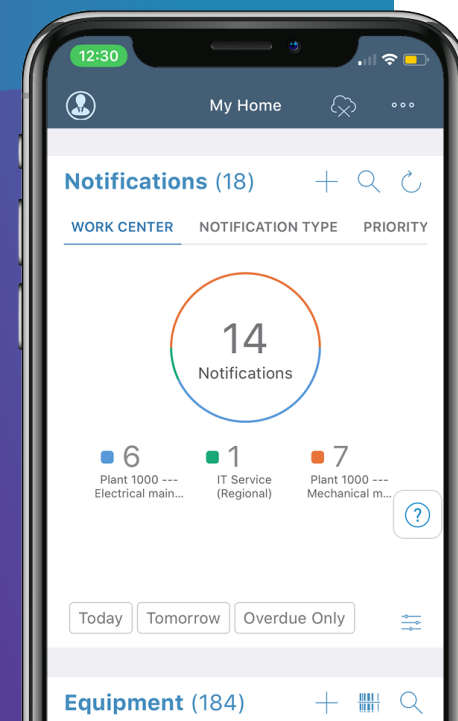
Solutions

Innovapptive provided the refinery with two integrated mobile applications:

mWorkOrder provides an end-to-end work management application that supports preventive and predictive maintenance strategies that let maintenance teams move away from the inefficient and reactive "run-to-fail" approach. Frontline workers using mobile devices such as smartphones, scanners, tablets, and wearables fulfill maintenance work orders and perform inspections, operator rounds, equipment checks, etc. With these devices, operational data automatically uploads instantly to SAP. Eliminating manual data input boosts wrench time. It also cuts administrative costs.

mWorkOrder also increases communication between field technicians and supervisors. Managers can create and issue digital work orders and follow the progress in real time. Supervisors instantly receive work order updates and can send push notifications to their employees' mobile devices to notify them immediately of tasks or other information.

One of mWorkOrder's advantages is the ability to create emergency work orders in seconds without having to chase down others in person. Time is crucial during emergencies. Quick remedial or corrective action can mean the difference between a short, inconvenient production outage and a costly and lengthy unplanned downtime incident. When equipment breaks down, an authorized user can create, issue, and assign a work order on the fly. Technicians are immediately alerted to make appropriate repairs, minimizing risks and wasted time.

mInventory integrates third-party barcode scanners and peripherals (or even the device's camera) to deliver a more efficient and accurate inventory-counting process. Gone are the cumbersome paper forms, tally sheets, and tickets that lead to frustrated employees, missing information, and incorrect counts. Instead, workers use a digital process to count, with continuously updated totals. This capability delivers accurate, verified data to key stakeholders, enabling them to make more informed, knowledgeable warehouse management decisions in real time.

Goods Receipt and Goods Issue represent two critical warehouse functions. mInventory automates and simplifies these vital tasks. Now, warehouse clerks can receive goods and process them without touching or filling out paper forms. They can immediately scan the incoming items and enter information into the back-office system via the good's barcoded label. Or, if the incoming goods lack barcodes, mInventory can use Optical Character Recognition (OCR) technology to scan whatever comes with the item to create a label at the point of application and a record in the back-office system. Goods Issue aligns in real time with SAP to identify and track items. Since frontline workers enter all information, tasks take less time and are without the errors found in paper-based forms and data entry.
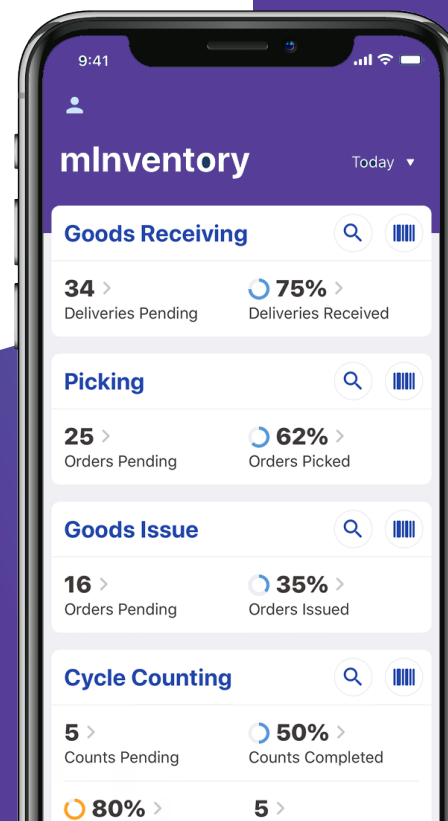
Results

After adopting Innovapptive's mWorkOrder and mInventory mobile-first solutions, the client reports it has seen:

- More hands-on tool-time
- Increased inventory accuracy
- Decreased inventory spending
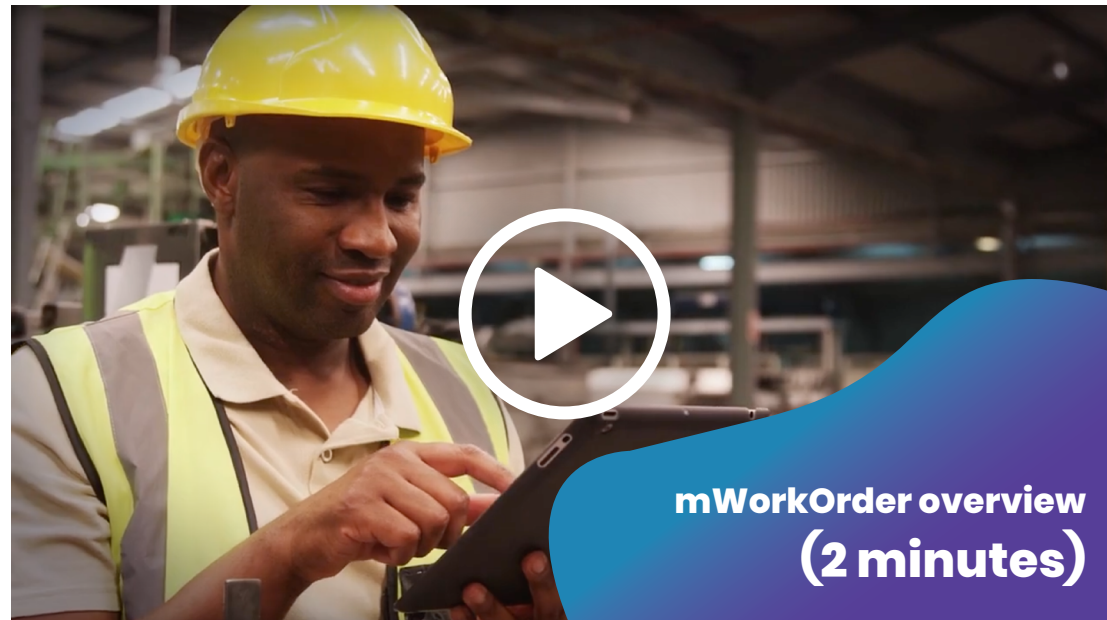- Reduced or eliminated human error
- Lower external labor costs

The refinery projects that over the next five years that this digital transformation effort will show a:

$30 million return on investment

20%+ increase in efficiency

30% drop in unplanned downtime

View these informative videos to learn more about Innovapptive's solutions.

mWorkOrder overview
(2 minutes)

Connected Worker Platform

mWorkOrder product tour
(30 minutes)

mInventory overview
(2 minutes)

Agenda

mInventory product tour
(30 minutes)

Want Greater Efficiency and Productivity? Give Us a Call

Innovapptive's mWorkOrder and mInventory are mobile-first applications that are intuitive and easy to use. They're digital transformation solutions that will improve your frontline workers' lives and are products they'll want to use, ensuring a positive rate of return for you. To learn more about how Innovapptive and our mobile work order and inventory solutions, schedule a free demo today or call **844-464-6668** to speak to an industry expert.

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