

PART
1

AUTOMATING YOUR FIELD FORCE

Paper vs. Automation

From the editorial staff
of Mobile Enterprise



1

TAKEAWAY

To determine whether or not it makes sense to switch from a legacy paper-based system to automating your field force, first assess the day-to-day needs of your mobile workers.

The global mobile worker population exceeded a billion people in 2010, according to a recent report from VDC Research. That growth, research director David Krebs wrote at the time, reflects “the increasingly flexible, distributed and dynamic workflows occurring in virtually every industry sector.”

But those mobile workers are surprisingly ill-equipped.

According to VDC, the level of penetration of enterprise mobility solutions among mobile workers is between 5 percent and 15 percent, depending on the regional market.

“This represents an immense opportunity for enterprises (when considering the potential productivity improvements associated with enterprise mobility solutions) and enterprise mobility solution providers,” Krebs wrote.

If you’re considering taking advantage of that opportunity, however, it’s crucial to take a step-by-step approach.

Step one is simply to determine whether or not it makes sense to switch from a legacy paper-based system to a mobile solution. In most cases, that comes down to assessing and understanding the specific needs of your workers.

In doing so, it’s crucial to ensure that you can see the forest for the trees.

One mistake many enterprises make is to try to solve just one

problem, or provide one piece of functionality, without looking at the big picture – say, providing workers with GPS.

According to a recent study by McKinsey & Company, 90 percent of corporate investment in GPS is wasted – many companies simply provide employees with the navigational aid without examining how it fits into the worker’s overall task-by-task process.

In a case like that, it may actually be more cost-effective to stick with a paper-based process. If you’re deploying a mobile solution without making sure that your employees can actually benefit from it in a tangible way, that could just be money thrown away.

Instead, take the time to map out a day in the life of one of your employees, and look for the key tasks – and combinations of tasks – that provide challenges in terms of time and efficiency.

You might find, for example, that combining inventory management with GPS tracking could enable you both to dispatch drivers and to track the location of all inventory in real time. By doing so, you’re optimizing several processes, rather than just giving drivers access to a map of their destination.

So instead of providing technology and then figuring out where it fits, do the reverse – understand what your employees are doing on a task-by-task basis and what problems or challenges they face, then

determine the best technology solution to those problems.

If you do so, the benefits can be enormous, covering a wide variety of functionality:

- **Inventory management.**

An office equipment servicing company recently met with Honeywell Scanning & Mobility to discuss the possibility of switching from a paper-based system to rugged devices. The company has more than \$2 million worth of equipment out on trucks at any given time, but because the on-truck inventory is managed with paper, it's impossible to know where that equipment is at all times. Using mobile devices instead, the company can track all equipment in real time.

- **Equipment manuals.**

Rugged devices can also assist that company's employees in several other ways. Instead of having to pick up a thick paper manual that's taking up room on the passenger seat of his truck, a field worker can pull up that manual on a mobile device, then enter a search term to find the information he or she needs instantly.

- **USB diagnosis.**

With a USB diagnostic port, a field service worker can simply plug into a piece of equipment, and that equipment can self-diagnose any issues. No paper process can match that for efficiency, accuracy, or ease of use.

- **Dynamic scheduling.**

Employees' schedules and work

assignments can be managed efficiently using mobile devices. The right application and the right devices can eliminate any need for employees to call into a dispatch center to check, change or update their schedules.

- **Customer service.**

Several aspects of the customer service experience can be greatly improved by being able to accept payments in real time using a mobile device, providing line-busting, efficiency enhancements, and improved accuracy.

- **Maximizing speed and minimizing errors.**

This may well be the most compelling benefit of all – a 2008 study published in the journal "BMC Medical Informatics and Decision Making" found that it took almost 1.5 times longer to gather research data on paper than it took to do so on a PDA. More importantly, gathering data on paper, the study found, resulted in eight times as many errors as doing so on a PDA. Similarly, in a 2008 study published in the journal "Annals of Family Medicine," 35 percent of paper forms were found to have errors of omission, while only 3 percent of forms gathered electronically did.

According to a recent Aberdeen Group report, organizations that provide their field service teams with the knowledge, information and tools to deliver, meet and beat customer expectations are able to retain 93 percent of their customers, compared to a 77 percent retention rate for all others, and ex-

2

TAKEAWAY

- **In considering what functionality to automate, look at the challenges that your workers face first, then try to find the best technology solutions to solve those problems.**

3

TAKEAWAY

Make sure you're seeing the forest for the trees — instead of just looking at individual processes, consider how various technologies can work together to solve several problems at once.

hibit a 74 percent level of workforce utilization in contrast to 60 percent for all others.

Still, if you look at your employees' needs and the potential sources of improvement and decide that automating your field force is the right way to go, there are several other challenges to consider.

Many companies have considered deploying laptops, and then turned back to pen and paper simply because a large mobile device like a laptop isn't a good fit for a technician who needs to squeeze in behind an air conditioning unit or a large copier — when a smaller mobile device could be a perfect solution.

The same can also be true of smaller devices. If access to the details of a 500-page manual is a key part of a worker's daily requirements, then a device with a tiny screen would be just as inappropriate for that worker as the bulky laptop would be for the copier repairman.

Choosing between a rugged and a consumer device, selecting the right form factor for the job, and optimizing each device's functionality can all be key to the success or failure of your deployment. In future white papers, we'll consider the best way to make those decisions as you move forward.