

Field Service Leaves Paper Behind

Change management and business process mapping are crucial for easing the transition from paper to automation in the field.

Field service automation technology has been a boon to many. But for organizations transitioning from manual, paper-based processes or from older automation systems, those benefits are only realized after a complex and sometimes difficult transition.

To smooth that transition, field service organizations must understand that staff members and business processes have to evolve with their technology infrastructure. “The more a customer embraces the fact that field force automation is both a technology as well as a staff- and culture-focused endeavor, the more they proactively manage and succeed,” says Peter Gibbs, CEO of TouchStar.

Companies need to establish clear and measurable KPIs (key performance indicators), agreed upon by all stakeholders, so they can measure current operational performance and establish goals for the new automation system. “This is not an easy step, but it pays to do it right,” says Israel Beniaminy, senior VP of product strategy with ClickSoftware Technologies. “Otherwise it becomes difficult to say, even in retrospect, what the solution was to deliver and whether it had succeeded.”

It is important to develop a detailed change management plan. Upgrading from decentralized, manual processes to a centralized, automated system will have a significant impact on the way almost everyone in the organization does their job. In order for an automated system to be effective, previous business processes must change. “Compose a project team to include representation from each department and ensure that each resource participates in the project to understand the business process mapping for the company and how each department’s processes impact the organization as a whole,” says Debbie Gardiner, VP of customer service at Nexterna.

Business Process Mapping Key To Field Service Upgrade Success

Apart from selecting the right solution, the

biggest challenge most companies face will be in managing the business process changes required by the new technology. These changes can often be difficult for employees, particularly experienced staff members. “Customers using paper-based systems often rely on the knowledge their existing resources have gained on the business and their operation,” Gardiner says. “Knowledge transfer to automated systems can be challenging in that employees need to understand that their insight, properly implemented with the automation, ensures business processes are followed.”

Employees may resist the more centralized nature of automation systems. “Many paper-based systems have a loose, decentralized character. Tasks are managed separately within each district, and the operational details are often up to the individual person, team, or crew,” Beniaminy says. “Thus, migrating to an automated solution requires a substantial change in mindset.”

End users may not trust the new system to make correct “decisions” during day-to-day operations. In some cases, they may have a point — the early stages of an automation project will reveal natural flaws that are part of any organizational transformation. The key is to quickly address those issues in a transparent fashion. “Involve the key stakeholders, show them the ‘What’s In It For Me’ factors, treat their objections seriously, and obtain their trust for the overall process,” Beniaminy says. “They shouldn’t blindly trust that the system is always right, but they should trust the organization to fix problems and continually improve the system.”

Organizations, particularly large ones with multiple departments, have to map business processes, then consolidate and standardize those processes into a manageable consensus. A well-designed pilot program will help ensure the new solution is properly configured to meet the company’s goals and will be accepted by employees in the field. “Mobile



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Technology Update

users require applications that are optimized for the way they do their jobs," says Debbie Geiger, VP of marketing at Astea International. "Lengthy data entry is not a realistic expectation when somebody is using a handheld device standing in front of a customer, for example. The technicians will also need training and support as they adopt the new processes."

In the back office, companies will face new challenges related to data security (particularly in wireless systems), adherence to new business rules, and establishing reliable integration with a host of other enterprise business systems. "One of the biggest changes that the office will see is an increase in the speed and volume of field service data coming into the back office, and it will arrive in real time," Geiger says. "The field service operation will begin to rely less on person-to-person voice communications and more heavily on wireless electronic data."

Field Service Integration Challenges

A field service automation solution may need to integrate with a number of existing business systems, including ERP (enterprise resource planning), CRM (customer relationship management), accounting, payroll, inventory, fleet maintenance, and logistics solutions. For many users, particularly those with older or highly heterogeneous back end solutions, this integration will typically require some sort of middleware. "A well-tested implementation process, in conjunction with supplementary middleware, typically simplifies what has historically been a complex and time-consuming component of mobile computing implementations," Gibbs says. "A sophisticated bridge between these applications not only exchanges the necessary data between various systems with the mobility application, but it can also supplement necessary field process rules and data, along with offering a common middleware database, to

provide a new source of powerful and timely enterprise KPI reporting."

Other integration challenges may include integrating on-premise and hosted solutions, real-time responses that involve interaction of multiple systems or integrating with homegrown systems with little documentation or that are based on nonstandard or out-of-date technology. "To cope, recognize them and plan for them, possibly via a phased approach in which integration is extended in several stages," Beniaminy says. "The best practice is to 'think process': create scenarios taking an end-to-end view of all that needs to be done, and then map the processes and solutions. Integration requirements derived from such thinking have a much lower chance of having 'holes' in workflows or data definitions."

The solution vendor should take the lead in developing and maintaining the connections between these systems. "The deployment of integration should be seamless to the users providing automated alerts and reports on any issues/successes," Gardiner says. "The IT staff is not responsible for maintaining or supporting this infrastructure; the service software provider is."

For a field service deployment to be successful the software/hardware should be scalable and flexible. Choose a vendor with a significant customer base in your industry (to ensure updates will be made to the solution) and one that can help guide you through any challenges.

Both the IT staff and field service management should have a voice in selecting and designing the new solution. "Make a commitment that includes dedicated resources with the authority to make change and the foresight to embrace the change that will come with the implementation," Geiger says. "Focus on defining the service management problems you face, and then implement a solution that solves those problems." ●

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