

How Stronger Digital Connections Enable Field Service Teams to Manage Today's COVID-19 Challenges and Tomorrow's Opportunities

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Today, companies are operating with a modernized digital core that has laid the foundation for agility, innovation and growth. There are similar trends at work in other asset-heavy industries such as telecom, utilities, construction, and oil and gas. However, all these transformation journeys have come with challenges, and the global COVID-19 pandemic has made addressing them even more difficult – and more urgent. Continuity of operations is threatened by widespread absenteeism among service agents, technicians, management, and support staff due to illness and quarantines. Also, the pandemic has created uncertainty and confusion among

customers, which are turning to service and support functions for answers – answers that today are often in short supply.

Fortunately, those transformations, once begun, will allow many companies to implement advanced technology solutions that will allay customer concerns and ready themselves for whatever lies ahead. Companies that aggressively and innovatively build a resilient business model will become even more competitive after the pandemic recedes.

One way to create this kind of resiliency is to implement systems that provide online connections among technicians, assets, customers and the broader ecosystem of providers and field service organizations to effectively manage the current crisis. This kind of connectivity can also strengthen their organizations and the services they provide in the longer term. Let's look at each part of the field services picture more closely to see how using technology effectively can bolster them.

Connected Technicians: Tools for Improved Collaboration and Remote Service

The best field service technicians are strongly dedicated to their customers. But during the crisis, service organization leaders must remind technicians to practice self-care before they focus on the customer.

With that condition met, the COVID-19 crisis is a good time for field organizations to open up different modes of service delivery to reduce redundant travel and social interaction among technicians, customers and the public at large. This is where technician collaboration systems enter the picture: they offer the ability to enable any technician to respond to any kind of service call. As such, they become an essential means to manage heavy call loads from a crisis like a pandemic.

Tools that serve customers from a distance – such as remote assistance calls and technologies that enable technicians to collaborate from afar – enable companies to serve customers without making a site visit. Using augmented reality and virtual reality technologies, experienced technicians in one part of the world can assist relatively inexperienced technicians in other parts of the world in real time. Messaging and visual collaboration tools can help technicians complete their assigned service tasks and preempt future service issues, thereby reducing the total number of site visits.

Take, for example, the telecom and utility industries, which are among those that are making it possible for all of us to work from home. They are also two of the most asset-intensive industries, with billions of dollars of equipment in the field that supply broadband service and power to homes. The sudden shift to remote work has placed extreme demands on those industries' field workforces, as well as enormous pressure to make sure their networks keep operating in the face of increasing usage and wear and tear. Given these constraints, 100% first-time fixes become necessary due to limited access to customer locations and a drastic reduction of service workers on the ground.

With a limited workforce and a mandate for a 100% problem fix-rate for each service visit, every field technician ideally should know how to fix every problem in every situation. Of course, that is unrealistic. So, how should a company solve this seemingly intractable business problem?

With many companies now operating with a modern digital core, they can tap into their intelligent and connected technologies to provide the muscle and brain for advanced remote assistance solutions. Some of these capabilities already exist within many enterprise customer service/asset maintenance applications, including:

- In-app assistance that lets technicians initiate and manage calls with a central off-site team
- Collaboration tools allowing technicians to live-stream from the service location
- Call-in-context solutions bringing up all relevant information when technicians call the back-office

These solutions allow technicians to leverage their company's global knowledge base for expertise while that company can maintain previous levels of service with a much leaner workforce.

However, the true remote assistance game changers are solutions that incorporate augmented reality (AR) and mixed reality (MR) into everyday devices such as smartphones, while integrating seamlessly with the enterprise's service management/asset maintenance solutions. Special AR/VR devices, while requiring additional investment and training, can be configured to meet industry-specific requirements and to operate in remote locations with suboptimal network coverage.

Connected Assets: IoT Technology Lets Companies Remotely Monitor Critical Systems

Equipment breakdowns in a crisis could be disastrous. For example, a key piece of equipment that suddenly shuts down in a hospital's intensive care unit could harm the health and safety of frontline medical staff and patients.

Technologies like digital sensors embedded in equipment and connected via IoT enable field service organizations to head off such equipment failures. They can remotely monitor the performance of equipment in the field at all times and ensure fixes are in place before catastrophic failures happen.

Take, for instance, hospitals that need negative pressure rooms to treat patients infected by COVID-19. IoT connections in their HVAC systems make the proactive monitoring and fail-safe operation of these rooms possible.

When an organization must dispatch field service technicians, those who are plugged into connected systems are only sent out if they have the right parts and knowledge. Reliance on this triage information can also reduce the time technicians have to spend onsite to resolve service issues.

Connected Customer: Resources to Empower

In a crisis like COVID-19, it's not enough to have routine operations in place at customer contact centers. This not only goes against public health mandates, it leads to overworked people, frayed nerves and too many service professionals without the latest accurate information.

Instead, organizations need to design ways to make information and updates available to customers around the clock, through multiple channels. Field service leaders should assess the ability of their firm's customers to resolve certain issues without a site visit – for example, whether they can access product and service knowledge, conduct real-time remote collaboration with service professionals and direct parts shipments to make repairs.

It also helps to have customer employees who are trained to deal with their vendors' equipment issues. While many customers have expert users on staff, their suppliers' field service organizations can help by identifying these experts and formalizing a relationship with them. Field service teams can reinforce this relationship by providing formal training and establishing a base of in-house expert users within the customer's workforce. Such in-house experts become customers' first line of defense for situations that need immediate attention.

Connected Ecosystem: Enable Customer-to-Customer Ties to Share Regional Resources

Success and containment in crises like COVID-19 depend not on just how one organization responds, but on how multiple organizations work together to meet the challenge.

The need for collective action requires field service organizations to have processes and systems that enable collaboration across the customer base. By easily sharing ideas, the expertise of knowledgeable people, and critical equipment parts in a region, the entire region can access local resources until external reinforcements arrive. For example, if a medical device company can help customers access each other's collective stock of critical supplies or staff expertise, all of them would benefit.

Enabling a Truly Agile Service Delivery Ecosystem

Although many organizations are building intelligent solutions offering remote assistance, including AI-assisted asset inspection by connected workers, these solutions may not work fast enough. The real value in terms of service continues to be compromised with a lean field force and a home-grown solution takes time that most companies cannot spare right now. That's why many are exploring strategic partnerships with leading technology organizations to provide solutions with out-of-the-box integration with leading service management and asset maintenance platforms. These partnerships offer solutions that can be deployed in one to two weeks.

Pandemics like COVID-19 are a once-in-a-century occurrence. Most organizations discovered they are not prepared to deal with crises like this. Another discovery? A well-connected field service organization is essential to keeping their customers' operations going. And those companies with a digital edge in field service are even more valuable to customers right now. In fact, those companies with a strong digital technology foundation combined with continual improvements will become even more indispensable as the economy adjusts to this new, remote way of doing business.

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