



Accelerating Field Service Productivity

How IT and Field Service Leaders Can Collaborate to Build a Better Mobile App





In a highly competitive marketplace with growing customer expectations, providing a positive field service experience can be a crucial differentiating factor for business success. Respondents to a recent study conducted by the Technology & Services Industry Association list three strategic imperatives for field service organizations: accelerating connectivity, aligning the organization, and moving beyond break/fix. Yet respondents also say labor costs are their greatest challenge.¹ So, how can they improve service without increasing headcount?

While many companies have adopted mobile field service apps to overcome some of these challenges and improve service, these apps often fall short. Multiple point solutions can mean switching between apps—or even devices—during a service call. Sometimes, service technicians still need to resort to paper-based processes, such as capturing customer signatures. Or the mobile app may not connect to the company's systems of record, which can lead to out-of-date information or require additional steps, such as manually checking parts inventory.




¹ ["The State of Field Services: 2021,"](#) Technology & Services Industry Association, February 10, 2021.

“

In a highly competitive marketplace with growing customer expectations, providing a positive field service experience can be a crucial differentiating factor.



What companies need is a solution that lets them quickly develop and deploy intuitive mobile apps that connect seamlessly with their IT backbone. The solution also needs to be flexible enough to keep up with the frequent changes organizations experience and, most importantly, one that helps service technicians tackle each call with speed, efficiency, and quality. The results can transform a field service organization:

Increase productivity		Technicians can complete more calls per day.
Improve customer service		Issues are resolved in one call, and service windows are narrower.
Increase revenue		Armed with the right customer information, technicians can also quote new business during calls, helping to increase sales.

In this ebook, we'll take a look at the variety of challenges that field service and IT teams must overcome to create really effective mobile field service apps.

We'll show you what a solution to these challenges would look like and how it would meet the needs of both field service departments and IT teams alike. We'll compare the pros and cons of the common approaches companies have taken. And finally, we'll demonstrate how a modern application development platform can overcome these challenges to fully meet the needs of both field service management and IT teams to produce transformative results.

Three (really big) challenges to overcome

1 Technical challenges. There are some clear technical challenges in delivering a great mobile field service application. The app must be able to exchange data with your field service management and ERP applications as well as with your other systems of record. At the same time, it must be capable of working in locations without a steady network connection and syncing data with your enterprise systems when back online. The time it takes to provide the app should be as short as possible, and future changes, such as new features and capabilities, should be straightforward to implement. Apps need to be easy to distribute and use, but also secure.

2 Organizational challenges. While everyone wants to do the best job they can to propel the organization forward in its digital transformation, they each have their own goals, KPIs, and priorities to meet, some of which might be in direct conflict with one another. In addition, siloed functions typically limit collaboration between the IT and field service management teams, resulting in apps that weren't quite what was expected—or needed.

3 Financial challenges. Underlying all of these challenges, of course, is money. Any mobile app solution needs to produce positive financial results in the form of increased profitability, meaning lower operating costs and/or increased revenue opportunities. What's more, every department has their own budgets to adhere to, and companies must allocate their limited resources according to strategic priorities.

The right platform will address these challenges and fulfill the needs of your field service and IT teams alike to make your organization's field service department successful now and in the future.





Tip

Make sure your solution reduces development time and eliminates technical debt down the line, which, on average, accounts for a staggering 41% of enterprise IT budgets.³

Field services and IT should work together

When choosing a mobile field service management solution, it's important to bring both field service and IT teams to the table.



Field service users



IT developers

Communicate your needs to the vendor and to your IT partners to ensure that the solution will meet your needs. For instance, you might want to talk about your need for offline access and integration with current technology, such as ERP and FSM applications. Be involved in the development, testing, and implementation phases.

Evaluate different solutions to ensure you can deliver what field service needs, but also make sure that it's flexible, secure, and scalable enough to meet your needs. You also want to make sure it reduces development time and eliminates technical debt down the line, which, on average, accounts for a staggering 41% of enterprise IT budgets.²

Only a solution that meets the needs of both business and IT users will be the right fit for your business.

² ["The Growing Threat of Technical Debt,"](#) OutSystems, June 2021.

³ Ibid.

Breaking down barriers, fostering collaboration, and minimizing costs

Now that we understand the different challenges most companies face, we can formulate a clearer picture of how to reach a solution. First and foremost, any solution you decide to go with to deploy mobile field service applications must address the challenges previously listed and also fulfill the needs of both your field service and IT teams. In other words, it's not just about what you build but also how you build it. Here's a more detailed look at the requirements each team is looking for:



For the field service team

The field service team's overarching goal is to maximize customer service by making it easier for its technicians to do their jobs quickly and do them right the first time. Your technicians need robust mobile apps that are intuitive, with an easy-to-use interface and a single pane of glass into all the information they need to do their jobs well, including customer account details, driving directions, parts availability, step-by-step technical instructions, and access to assistance via preferred messaging platforms. It should eliminate app- and device-switching in the field by consolidating disparate tools into one app on one device of choice. And by providing a great employee experience, field service managers can more easily recruit, onboard, and retain the talent they need.



For the IT team

The IT team needs speed, flexibility, and security. As requests for digital projects pour in from every corner of the organization, they face a growing application backlog, while development talent is both costly and scarce. They need a way to configure and/or build and deploy robust, secure mobile applications quickly and cost-effectively without sacrificing quality or best practices. The solution should also make it easy to connect these mobile apps with existing field service management and ERP applications, as well as other corporate systems of record and exchange data in real time. In addition, it should facilitate the creation of custom applications that developers can quickly and efficiently update as business needs change.

Finally, to create the best solutions in the shortest amount of time, the field service and IT teams need a solution that lets them collaborate freely across the application development lifecycle. By collaborating efficiently and effectively, the overall cost in bringing to market a well-designed, custom mobile field application that meets the needs of all stakeholders is minimized.



“If the purpose of a mobile field service application is to differentiate your business from your competitors, COTS isn’t necessarily the best way to go about it.”

Why traditional approaches continue to fall short

Historically, companies have tried a number of different solutions to solve the challenges associated with bringing to market custom mobile field service apps, but they often don’t meet the full range of needs of both the field service and IT teams.

Here are the advantages and disadvantages of these common approaches:



Commercial off-the-shelf software (COTS)

Field service management is a mature software market, so there’s no lack of commercially available solutions for helping manage field operations. Many of these COTS solutions also include the ability to create mobile applications. These have the advantage of being readily available for rapid deployment and, if they’re part of a system you already own, are a low- or no-cost solution.

However, these applications are typically “one size fits all.” COTS is rarely customized to your industry and certainly not to your organization’s way of working. If the purpose of a mobile field service application is to differentiate your business from your competitors, COTS isn’t necessarily the best way to go about it. In addition, you’re dependent on the vendor for new features, and it can be difficult to migrate your company data from a proprietary solution once implemented. Similarly, the ability to share data with your existing tech backbone depends on the vendor’s choice of integrations, not yours. If your current software isn’t supported, you’re out of luck.



No-code solutions

It's tempting to consider no-code development platforms that make it easy enough for so-called "citizen developers" in the business to create software on their own. Like COTS, such a solution can be deployed relatively quickly and without IT department intervention. But that's where their advantages end.

No-code applications are rarely robust or scalable enough for enterprise applications, and they'll have limited features. Security could also be an issue, depending on the platform's capabilities, and connecting with other software is likely to be difficult, if not impossible.



Traditional software development

Coding custom mobile field service applications using JavaScript, Python, or C/C# lets you develop a truly differentiated, customized solution with every feature you need and full connectivity with your enterprise systems of record. You own what you build, and there's no vendor lock-in to worry about.

But traditional application development is a slow process, requiring months or even years to fully deploy. It's also cost-prohibitive. Building apps requires an in-house team of developers with deep knowledge of multiple technologies and programming languages. Custom-coded software can also be difficult to update: There's a potential you'll fall behind the pace of change and/or accumulate technical debt trying to keep up. Security can also be an issue. While you can build in any security feature available, these quickly become outdated as hackers find new vulnerabilities to exploit every day.

None of the solutions described above truly meet the requirements of *both* the field service management team and the IT team. So where does that leave organizations looking to improve field service team's productivity with custom mobile apps?

The solution: A modern application development platform

A modern application development platform can deliver all the functionality that field service teams require while giving IT teams the speed, flexibility, and security they need to customize and continually maintain a portfolio of applications that are robust and up-to-date. Here's what an advanced modern platform offers:

✓ For the field service team

This solution creates robust, scalable, and secure mobile applications. It can connect to any database or other system of record, adding capabilities to legacy applications as needed while presenting data from multiple sources in a single pane of glass. This solution gathers updated data in real time, providing field service agents with key information, such as parts inventory, maps, and customer details.

If it's beyond the reach of cellular or WiFi networks, it can still work, and it will sync changes once network connections are restored. A modern application development platform can leverage powerful automation to eliminate manual processes such as signature capture, data entry, and parts ordering. It can provide field service technicians with detailed service instructions, including videos on demand, as well as enable chat via any communication platform to enhance collaboration.

✓ For the IT team

A modern application development platform speeds time to value with visual, model-driven processes, prebuilt patterns that can be reused, and AI-powered tools that accelerate the entire application lifecycle. It allows multiple developers to work simultaneously without creating conflicts, and it enforces good data hygiene, governance, and best practices, such as multilayer and modular architecture and built-in enterprise-grade scalability and security. These features let your IT team create an entire portfolio of inter-related applications with reusable modules to avoid duplication, increasing efficiency. It also helps eliminate the massive financial drain of technical debt.

✓ For the whole company

Using a modern platform saves everyone time and offers a faster ROI. By facilitating collaboration between developers and the field service team, there is less wasted time refining and communicating requirements and getting alignment. Business users can follow, or even express, the app's logic on the visual interface, which resembles a flow chart. And modular development means developers can share functioning components with business users for early testing and incremental review before delivering the final application, saving time and reducing risk.





Accelerate Field Service Productivity with OutSystems

Field service agents are quite literally the face of your company, so you want to give them the most effective tools possible to enhance every customer's experience. A modern application development platform can help your IT and field service teams collaborate on and create great mobile field service applications that truly differentiate your business from your competitors. You'll be able to leverage field services as a revenue generator rather than treat it solely as a cost center.

For companies that want to accelerate their field service teams' productivity, OutSystems offers a modern platform for quickly developing and deploying best-in-class mobile field service applications that save you time and increase service quality. Unlike other approaches, OutSystems enables companies to quickly deploy and easily maintain mobile applications that are customized for the unique needs of their changing business, while also mitigating risk. A variety of application templates and code accelerators let you easily add the features you want, like work order management, remote communication and collaboration, and integrated data and information management.

[Learn more about how OutSystems enables field service businesses like yours to rapidly develop, deploy, and maintain custom mobile apps that meet your unique field service needs.](#)

Visit outsystems.com/AccelerateFieldServiceProductivity

