



Field Service in the Cloud:

How DISH Network and Sound United turn field service into a competitive differentiator.



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Digital marketing and online customer service are broken, and Jay Baer brings the repair kit. Jay is the President of Convince & Convert, a New York Times best-selling author of five books, and the host of the Social Pros podcast, part of his Convince & Convert podcasting network. He's also an avid tequila collector, and a certified barbecue judge.

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Seismic shifts are happening in field service.

With the rise of connected devices and the Internet of Things (IoT), field service organizations and employees find themselves in a world they do not immediately recognize, but are tasked with adapting to.

It's projected that by 2025 there will be more than 21.5 billion connected things in use, actively, across the world. By this estimation, there will be a 10 percent increase in active device connections by 2025.¹

Clearly, consumers love 'smart things.' Whether it's the refrigerator that knows when to put mayo on the shopping list or the toothbrush that snitches on you by telling your dentist when you forget to brush your teeth, IoT is only getting started—and there's no stopping it.

As more smart devices come online, the chances that they will need resources for troubleshooting or to address operational inconsistencies. Naturally, this will directly impact your field service group.

This need has not gone unnoticed by industry analysts and executives. In fact, the global field service market is estimated to be worth \$4.45 billion by 2022—an increase from approximately \$3 billion in 2016.²

While all of this anticipated growth may seem like great news for your field service group, there are a few Catch 22s to deal with.

To do that, let's explore the latest research around customer experience (CX), changing customer and employee expectations, and how that is impacting the role of field service.

We'll also look at some of the technologies that will propel CX forward as well as get to know some of the companies who are currently leveraging CX technology to produce a field service experience customers love and their employees benefit from.

¹Knud Lasse Lueth, "State of IoT 2018: Number of IoT Devices Now at 7B—Market Accelerating." iot-analytics.com, August 8, 2018.

²"Field Service Management (FSM)—Global Marketing Outlook (2016-2022)," Marketing Research Report (March 2017), Statistics Marketing Research Consulting, strategymrc.com.



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How Field Service is Changing

Challenges Faced

The first set of challenges plaguing field service are directly related to the very devices that have provided an opportunity to the field service industry. With the increasing complexities and near ubiquity of IoT devices, field service teams must now determine how they can better manage a new set of customer expectations—expectations driven by the digital age.

Thanks to these connected devices and the IoT, automation and increased mobility have become a part of everyone's lives. And while predictive intelligence and artificial intelligence (AI) haven't yet formally introduced themselves to consumers on a large scale, these technologies will only add to the ever-evolving complexities and challenges field service faces.

The second set of challenges deals with employees.

While there is an increase in demand for technical service, companies are dealing with demographic shifts. Skilled Baby Boomers are retiring, and replacement workers from Generation X and Y are in short supply. To add to that is the long learning curve that those who are interested typically have to face. Add to this the impetus that secondary schools put on white-collar jobs, and there just aren't as many people who want to train to do this work.

But the greatest obstacle field service teams must overcome is overall issue of CX itself.

Just as we've seen across other industries, CX continues to be the preeminent driver for differentiation. To improve and advance the customer's experience, innovation is required to meet customers' evolving expectations.

Many organizations are operating under an older field service model—**52 percent** of field service team **still organize/delegate work and perform functions manually**. However, by 2020, **mobile apps will be used to drive over 75 percent of technical projects** in field service organizations with more than 50 users.³

Addressing and enhancing CX is a vital component of today's field service and logistics departments.

To fill these gaps, service leaders are looking at new technologies to capture and monetize tribal knowledge while attracting and training a new generation of tech-savvy field technicians. Companies realize they need to capture as much legacy knowledge as possible from their current workforce in order to train tomorrow's technicians.

Creating areas of differentiation that drive revenue is one of the main reasons field service is the new battleground in increasingly competitive markets. This modern service economy requires a holistic CX solution that combines IoT and data analytics precisely for asset- and service-intensive industries—all with optimized mobile service scheduling and knowledge management capabilities. The problem is that no many solution vendors can provide this.

³Jim Robinson, Jason Wong, Michael Maoz, "Magic Quadrant for Field Service Management," Magic Quadrant Report (September 27, 2017), Gartner Research, gartner.com.



Shift in Customers & Operations

As the complexities of connected devices become more advanced and customer expectations shift, the way field service work is coordinated must change with it.

Traditionally, the focus was on centralized coordination, like a dispatcher for a taxi company. Much of the role of centralized dispatch was about directing expertise to the right job, meaning that all expertise was siloed.

In this scenario, I like to think of the taxi dispatcher as Danny DeVito from the TV show *Taxi* dispatching all of the field service workers, and now I'm sure you will, too. You're welcome.

If Danny DeVito knew that Customer A needed this sort of washing machine and Technician B has *this* sort of expertise, then we had to wait until they returned from another assignment before sending Technician B to Customer A's house. The result? A long wait time. Unfortunately, this is all many companies can offer today.

New technologies are becoming available that support bi-directional communication across an organization. With much of the field coordination coming from a centralized location, companies can make better, faster decisions with real-time information closer to the action.

So now that silos of knowledge are being broken, the field can use knowledge systems and collaboration tools that distribute a rare commodity—knowledge and expertise. Remote enablement 'creates' experts on the spot simply by connecting a centralized, historical, hands-on knowledge base to field technicians who may have never even encountered a particular product model.

Technicians will be completely omnidirectional. Input and output will come from all directions; machines will communicate health checks throughout maintenance, and subject matter experts (SMEs) will weigh in when difficult challenges are encountered. And the tech never has to leave the site. In addition, technicians will have full access to a company's back-office systems, allowing them to assume the role of anyone who might need to be involved in the service experiences. They will be able to fluidly change roles from field service technician, to sales rep, to contact center agent, to marketing representative.

These functions will create a perfect world for the independent, connected, and ultimately "autonomous field tech". They are no longer left alone and made to defend for themselves.



Example: Empowering a Field Service Technician

To give you an idea of how this will positively affect CX, here's how an independent field service technician will be able to operate after his organization leverages the consumerization of applications and the shared economy to their advantage.

In this real world example, my backyard smoker needed to be repaired, and I needed a technician to come out before a family get together. With yesterday's field service model, I would have had to wait for a technician with expertise in my specific smoker to become available in my area to inspect my equipment. I'm not sure if you know this, but I'm a certified BBQ judge, and I take my smoked meats seriously—waiting just isn't going to cut it.

However, with today's field service model, I can simply scroll through an app and pick the type of service I need. Once I've selected the service, the system will ping any available independent technicians in the area, with the right skills, right tools, and right parts to complete the job.

So voila. A technician in the area was alerted to my service needs and he is qualified to complete (which I am quite thrilled about.) He had to option to accept the job or let it go to another tech, although I had my fingers crossed he would accept. Just like with Lyft, I can see when my job is accepted, when the technician is en-route, and when he anticipates to be on site. Once the job is completed, I can rate him, which can impact future job assignments.

This real-time information allows companies to break down outdated silos and make better, faster decisions that get digital smokers fixed and make aspiring pitmasters (i.e. me) very happy.

With the right technology, armies of field service technicians can quickly respond to any number of requests in an optimized fashion without any centralized coordination whatsoever. And with all the internal challenges and increased customer expectations field service teams face, these tools couldn't be rolling into the market at a better time.



Why Technology Alone isn't Magic

I recently spoke to David Troll, VP of DISH Smart Home Services, and Robb Origer, VP of DISH In-Home Services, on the subject of technology and how it impacts service and CX.

For companies to create an ideal experience they need to align all of their tools with their internal procedures. "In today's modern, complex corporate environment," David told me, "you can't achieve your ideal outcomes without the technology, although the technology doesn't 'automagically' deliver the results without it being [part of] an integrated process."

David is absolutely right. Technology alone does not and cannot solve your CX problems. What it does offer your organization is the ability to create a customer experience that's so stupendous it transpires without the customer even knowing it's happened. Sounds like magic, right?

Well, that's exactly what another leader in CX, Sound United, did.

Sound United—CX So Good It Just ‘Happens’

Thanks to wireless speakers, many of us now enjoy beautiful, unfettered audio in our homes. This trend has been a boon for a company called Sound United.

Sound United has more than 200,000 customers of their wireless audio speakers. Considering that the company started with no internet-connected devices, this is astounding.

Continually updating and creating new way for customers to use the speakers is vital since many first-time buyers don't immediately grasp how to operate them. The questions that Sound United needed to answer were simple, but yet, complex. To improve CX and help customers fall in love with their products, the company boiled everything down to three focal points:

1. How can the installation of connected speakers be simplified?
2. How can customers easily select streaming music providers and songs?
3. How can the music listening experience be enhanced and personalized?

To solve this CX dilemma, Sound United turned to technology. Each of these speakers is now equipped with a sensor that sends data back to an IoT-powered data repository.

Because these speakers are connected to the web at all times and have sensors which transmit signals, status updates, and warnings; Sound United is able to learn how each device is used. Their teams then use that collected information to improve customer experience and proactively prevent customer obstacles that may not have even occurred yet.

For example, Sound United identified a defective memory chip in one of their models. They were able to run a test exclusively for the speakers that contained malfunctioning chips. After identifying which speakers had defective chips, they were able to proactively resolve some customer issues by “pushing” firmware updates online. While some speakers did need to be physically replaced, the majority were fixed through the air, instantly!

Just think of how this is interpreted from the customer's viewpoint. “Dear Customer: We noticed something wrong before you noticed something wrong. We just took care of it for you”; or, “We found something wrong with your speaker, here's a new one—on us.” Wow!

Just having data doesn't help you. It's the insights that the data provides that is valuable. As another example, Sound United noticed (with the help of their Oracle sensors) how many speakers were being named “bathroom”. It turned out customers were placing their speakers on a counter top or even above their shower head so they could continue to jam out in their robes pretending to be Freddie Mercury as ‘We Will Rock You’ roared on.

This “bathroom discovery” lead Sound United to design hardware that was more moisture resistant. If more and more people were going to be placing their hardware around water, having waterproof speakers was need if the company wanted to keep and attract customers.

All of these proactive measures have **reduced customer telephone calls by 12 percent**. By creating a better experience, along with additional investment in its online knowledge base, powered by IoT data, Sound United has estimated savings of as much as **\$180,000** per month due to a lower number of customer contacts.

That is no joke.

How DISH Network is Serving Up Field Service Success

Close your eyes and think for a moment. In your mind, which industry takes the most heat for their CX?

While I'm sure this could generate a plethora of answers that we don't have time for, I'm willing to bet that a good portion of you thought something to the effect of 'television providers'.

Fortunately, DISH Network is leading the way to change this answer.

With a mission statement of 'Connecting people and things', DISH makes it clear that they're focused on CX. Today, customers may be used to seamlessly swap between Netflix to the Hopper DVR service with their voice activated remotes; DISH was the originator of this idea—one that has since been copied over and over again.

Can Higher Device Complexity = Decreased User Complexity? Yep.

Device complexity will only continue to increase, meaning the volume and cost of service calls has the potential to increase, as well.

To address this issue, let's return to my friends at DISH Network. The hardware they have in millions of homes across the country presents a sophisticated challenge to the organization as a whole. As David Troll describes, it's no easy feat.

"From standardizing our supply chain, simplifying customer interactions around all of the systems in the home we provide, all of which are connected, and yet, at the same time, increasing the robust technology to deliver better services, more features and capabilities.

"It's interesting, customers want it easier and that makes getting things to them like that harder and harder. They also want it simpler; they want it elegant. Today people just want to plug it in, turn it on, and make it work."

So, the moral of the story is that as device complexity goes up, the customer expects the user complexity to go down. And user complexity must go down because complexity equals friction and friction equals churn.

So the goal is to proactively delight customers and enhance their experience overall in order to reduce customer churn, stabilize revenue, and increase profits. And that is all possible. Devices are getting smaller. They are connecting more easily, and they are able to manage massive amounts of data.

But what about the flip side of that coin? Are employees the impacted by all of these changes occurring on behalf of the customer. They most certainly are—and they're quite happy about it.



As CX Improves, So Does Employee Satisfaction and Retention

Perhaps DISH's greatest CX achievement is that they've addressed the #1 complaint of any television customer: waiting for 'the tv guy' to show up. As Robb Origer, VP of DISH In-Home Services puts it, the company switched from 'here's what works for us' model to something entirely experimental.

"We did a test. We opened up everyone's capacity on every day of the week to find out if we let customers do whatever they like, what is that they really want from us?" Robb shared that DISH learned three key things:

1. People calling that day wanted to see a technician the same day or the following day.
2. With the same level of staffing, vehicles, and equipment, his technicians were able to complete more work.
3. Customers were happier and remained customers longer.

With these remarkable results, Robb knew he needed to rollout changes across the country. In order to do this, he needed the right people. So, he began recruiting field personnel who had a passion for providing a top-notch customer experience. "If I could find folks who were passionate about that", Robb said, "I knew I could teach them the rest."

Before any of DISH's employees are able to go into the field or work with customers at any level, they went through a technician training program. This program placed them in almost every customer-facing piece of the business, allowing them to get to the full experience their customer would. Personally, I love how this creates empathy—not only for the customer, but for every role across the organization.

So how is DISH measuring success? According to Robb, their two main targets were customer satisfaction and completion rate. "We think the rest of the performance metrics will come in line as long as we're focused on what the customer's preference was."

While DISH is building a highly-educated and empathetic staff, their "My Tech" app is making life simpler from the customer's side as well.

For example, when a customer signs up for a service appointment, DISH provides a 75-minute arrival window on the day of service. When the technician is within 60 minutes of reaching their destination, the app notifies the customer. This notification also provides the name, picture, and location of their technician, as well as a map to show how soon they will actually arrive—just like Lyft, Uber, or Grubhub. Brilliant.

DISH Network has created an **Unforgettable CX** with benefits to customers and their employees. While field service is facing a perfect storm, it's clear that there are plenty of opportunities to capitalize on within your own industries.



Why Cloud Technology Makes All the Difference

With help from cloud technology like Oracle CX, you can create optimized interactions that produce ROI and enhance employee experiences just like DISH and Sound United.

Oracle is well positioned to deliver on these capabilities in 2019 and beyond. Field technicians will be able to provide service in real time to that meets and even exceeds customer expectations thanks to further innovations of the IoT's increased connectivity and automation in today's devices,

With the ability to monitor the location of field resources and manage operations centrally with real-time view of field in real-time, organizations can improve their visibility and on-time arrival, increasing company efficiencies.

By equipping field employees with instant peer-to-peer communication technologies through cloud-based mobile apps, field connections will be streamlined to allow for work independence and knowledge sharing.

These streamlined communications will get the right person to the right place at the right time. This type of unification keeps customers, teams and coworkers aware of the status of jobs thanks to predictive notifications across channels.

Whether they're in the field, managing team members, or simply waiting to have their smoker repaired, Oracle Field Service is designed to connect systems and people. Its time-based, self-learning, and predictive technology helps solve complex business problems enabling businesses to transform and streamline their overall capacity, routing and scheduling, dispatching, and so much more. The Oracle Field Service can reduce operating costs and inefficiencies by centralizing your data, communications, and assignments.

With all of this new CX intelligence at your disposal, it's integrate that knowledge into each customer and employee touchpoint. Connect with your team about what they need to be successful and get to work collaborating and creating an experience that will help your brand develop an Unforgettable CX.

It's Time to Deliver Tomorrow's CX **Today.**

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