

Next Generation Customer Service

Future of Field Service

December 2021

There's no question that digitisation digs up new solutions and possibilities for business every day, and field service is no exception. Companies in all sectors are benefitting from technology's capacity to streamline and automate processes that have been mired in old methods and cultures. The digital transformation is flinging open doors, but rushing in does present risks. It's critical to carefully organise and manage digitisation as it extends to field service management. This is true whether you're a manufacturer responsible for equipment at a client's site, a healthcare provider meeting patient needs, or any organisation – big or small – with people in the field. Your strategy should be holistic, data driven and people centric. Field service is changing, without a doubt; the only question is how to make digitisation work for you: nurturing customer satisfaction, growing revenue and reducing costs.

Introduction

You might characterise a fundamental problem with the field service of yesteryear as 'Uberisation': consumers have grown accustomed to digital solutions and now expect fast, streamlined, communicative, trackable service for every aspect of life and work. As groups of consumers themselves, business-to-business clients have developed the same expectations from their suppliers.

Service providers are scrambling to adapt their business models to rise to such lofty digitisation challenges. Some will aim the right technology in the wrong direction. Some will fail to use technology altogether, missing a golden opportunity. And some will simply over-promise – a sales guarantee of service within two hours means nothing if you can't fulfil it; there may not be enough field engineers, or they may lack the right experience/expertise.

Even with some successful application of digital technologies, there's still a problem, which begins with the problem: whatever thing is going wrong that initiated field service help. When an engineer/mechanic arrives at a door, they may fail to effectively fix that problem because of a simple lack of knowledge. They might not be aware of exactly what and whom they're dealing with, or what's been done to help in the past. Even the fact that they were called to that doorstep might be seen as an inefficiency: a problem led the customer to make a call, but could technology have pre-empted that cry for help, easing the burden on both customer and company by anticipating problems and raising digital alerts?

As we race toward a digitised future, these kinds of missteps are inherent, because they stem from a lack of focus on people, and from the isolation of business processes. Digital technologies need to be applied in a cohesive, holistic way to see optimum results; compartmentalised unit siloes won't work in this transformation.

With digitisation, we can see all departments and processes as the cogs of a well-oiled machine that produces extremely valuable data: sales data is integrated with service data, which is integrated with marketing data, and so on. The huge, combined data set enables you to use algorithms that predict how many engineers, for example, you'll need to serve a particular area during a particular timeframe, and how much it will cost. This leads you to formulate a fair and competitive sales price. With the 'machine' running at full tilt, digital transformation benefits will unfold, far and wide. But the first step is to see the business as an ecosystem, and consider how technology can affect every aspect of it.

The next step is to acknowledge the humans behind the machine. As the nature of field service work changes, so do the people receiving (and delivering) it. Far beyond the COVID-19 pandemic, we will be meeting the demands of remote delivery and interaction, and that carries the very real possibility of losing customer engagement. But it's not inevitable – paradoxically, digitisation will empower your company to offer a more personal side.

"The key is to reinstate the value of the personal experience, combining the intuitive capabilities of your technology with the natural talents of the people operating it."



A firmer human touch in field service

The human touchpoints of a customer experience disproportionately affect brand perception and loyalty. In short, they can make or break a customer relationship. As field visits are becoming the main human touchpoint, there is a clear opportunity to build strong customer relationships and grow customer lifetime value.

"Field technicians take the business to the customer, along with something AI can't provide: emotional connection."

Today's customers can buy their machines, devices or other assets online. They can operate, and even troubleshoot, those assets on their own. If they run into a snag, they seek and find answers online. If they run into a bigger snag, your customer support agents guide them through fixes, in a chat app or by video call. So, from the customer perspective, your field service agent may be the sole face of your company – called in by extreme necessity, when customers/clients can't help themselves. Whereas once your customers interacted with a range of your staff, now these agents are your key 'brand ambassadors', offering empathy and satisfying, personal interaction.

In the ideal world, you have carefully selected these agents. They are assigned to particular jobs, at strategic times. They bring the exact experience needed – not too much, and not too little – and the right tools and spare parts. They take remote direction well. They're 'people' people, able to empathise, collaborate and communicate well in person. They can spot additional sales opportunities, by identifying assets already in place and whether they belong to a competitor. And, crucially, they know everything about the site and client they're visiting: who they're dealing with, which time of day is preferred for physical visits, what service has already taken place, what kind of contract is in place...the list goes on.

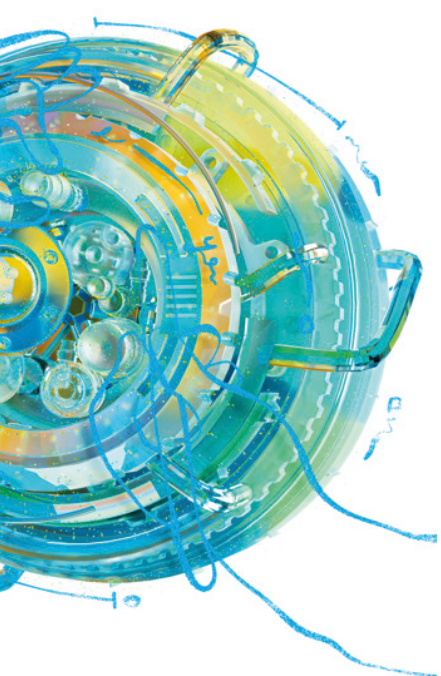
"Examining your field force to place service agents in suitable roles will be a great step toward a human-centric digital transformation."

But even with the perfect agents in place, how can they possibly know everything about the client and site they're serving? The answer is data – on a scale you may not have considered.

Let the data be your guide

Next generation field service is not just training emotionally intelligent, personable engineers. It's empowering them with knowledge. Each interaction is a chance to put that knowledge to use: telling the customer, 'We know you, and we have your best interests at heart.'

Only with an extensive data set is this kind of understanding possible. It will encourage a trusted agent-client relationship, and open up the potential to 'sell up' or suggest improvements. The needed data is attainable through four sources:



The customer

To get details of how, where, when and why the consumer uses the product, look to the interaction that takes place via multiple channels: self-service portals and apps/chatbots, knowledge bases, community hubs, contact centres and field service channels.



The customer management

With interoperable data in an integrated field service ecosystem, customer management can process customer requests and enquiries, is able to feed back changes in customer preferences to field service customer agents and supports the field agent with customer insights and product information.



The asset

Think usage insights gained from artificial intelligence (AI), sensor data and Internet of Things feedback for a continuous data flow that allows proactive issue identification and resolution.



The operations management

As more digital tools are adopted in field service, organisations will be able to use the insights gained to redesign their work, workforce and workplace. The field service worker will increasingly perform more customer service work, which will change the workforce – and skills – needed to be successful in this role, and require new workplaces to bring organisations closer to their customers.

This data should be compiled in an insight hub, which the field customer service agent can mine for customer and asset insights. Their general intelligence will be enhanced by learning about the exact situation they will confront.

- Is there a problem because the wrong product is being used? Or is the customer just unfamiliar with the product?
- What other assets does the customer have?
- What's the status of those assets?
- Is the client eligible for free service, or parts or both?

The more answers an insight hub can provide, the better the decisions the agent will make, with results instantly available to the entire field force.

A day of a field service customer service agent

A machine's **IoT sensor** at one of your customer's sites has sent a prompt. It seems that the machine has broken down. Your customer calls in panic, since keeping this asset up and running is crucial for the business continuity. If this asset remains broken for more than a day, it will cost the customer millions of dollars.

Once the work order gets assigned, the **customer receives information about the location of the technicians through a mobile application.**

Beforehand, technicians would perform on-site diagnostics. Nowadays, however, the technician determines the problem by leveraging IoT sensors embedded within the asset. These tell the technicians what aspect has broken down, which in turn enables them to determine **how it should be fixed and which parts and tools are necessary to do so.**

Within five hours, you have been able to schedule maintenance, gather the necessary tools and parts, repair the asset and **provide the customer with excellent service.**



Within your platform a **360-degree image of the customer and asset** is provided, which allows you to determine which available and necessary certified experts are needed and to schedule them to go to your customer within minutes.

Once the technicians arrive at the customer site. They already know the problem but are also assisted **by an augmented reality tool and remote support** from the Operations Management. Both channels guide the technicians through the necessary steps to fix the problem at hand. Even better, the tools enables them to spot one additional problem which they **proactively fix.**

Riding the wave of digital disruption

Let's examine five key themes that have pushed people and data to the forefront of digitisation strategies. They are disruptive characteristics of the digital transformation, profoundly changing the way service is delivered. Consider each of them carefully, because they represent the growth potential driven by technological change.

Personalised and proactive

This is the shift toward a human-centric approach: field forces transforming into field customer service agents who are focused on delivering outstanding customer experiences. Earlier we discussed how client needs and preferences can enhance field service; the next-generation field customer service agent is taking field visits to the next level, by using their mobile device to draw upon customer personas, available service offerings and on-going campaign details.

The real win here is growing customer lifetime value. Imagine how relationships could improve if your field service agents could be more than just firefighters: technology enables them to smell smoke, alert the customer and offer services that smother a spark before it catches. The client's entire perception of your company can change after this kind of positive experience with a forward-thinking field agent.

1

Distributed complexity

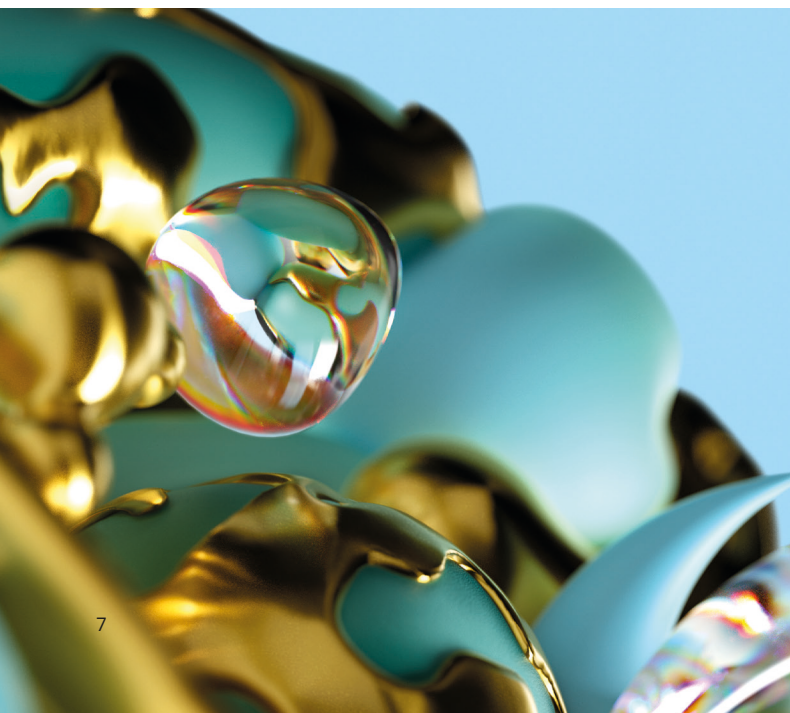
This theme is based partly on the continued proliferation of service segmentation. It will extend beyond what is simple versus complex, to: high value vs low value, high risk vs low risk and emotionally involved vs automatic. And it will be rooted firmly in the new reality of assets and customers not being conveniently found in a single location (e.g. generators in a power station, banking customers in a bank). The prohibitive costs of offering field service to all customers could present a point of differentiation: field service could be an upgrade sold to those who aren't satisfied with purely 'online' service channels.

In addition, complexity is brought by increasing competition between providers: assets may be part of the same ecosystem but owned and maintained by different entities. In some cases, that responsibility is even being pushed toward the end user, away from an asset's centralised producer.

Think of solar panels in a large building that all feed into a battery in the basement; those panels used to be provided by various companies, which would be responsible for their maintenance. Now they're sold directly to the owner of the building, who will assume the burden of care. And maybe the panels are also part of a grid that is not national but regional or municipal. New markets are being created, with panel providers facing the complexity of a huge new base of customers (end users) over a large physical area, who need to know how to get the most out of their panels. These providers must not just sell their panels to consumers but empower them to perform simple maintenance, if they wish to avoid servicing the panels on a large scale.

The companies most likely to succeed will be adaptable to such changes: they'll upskill a larger team, arm them with up-to-date knowledge to pass on to end users and tap into digital solutions that optimise the monitoring of usage, maintenance, etc.

2



Integrated ecosystems

The secret weapon here is that insight hub. Your field force will have access to both asset and customer data, collected remotely and supported by advanced analytics and AI. By linking together data from many different sources, a clearer picture of the customer and situation is possible, which leads to better decisions that are instantly available to your whole field force. The insight hub also eliminates the inefficiency of paper service forms that must be received at the service agent's site, and returned to that same site, throughout the day, over and over, as agents struggle to keep up with their field visits.

3

Workforce redefined

New skills are needed for next generation field workers, but with technology taking over many fixes, updates and other services, the field agent of tomorrow may need less technical expertise. They'll likely take direction from an agent on the other end of a mobile (and even virtual) device, who will need a high level of technical fluency. Consider, also, that whoever does communicate with the customer is likely to face more complex questions and concerns, as that customer takes on operation and troubleshooting. And with new skills, new tools are needed: to manage intelligence, to perform sentiment analysis, and even to simply organise hour-to-hour service scheduling; these tools will absolutely change how service professionals do their jobs.

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AI omnipresence

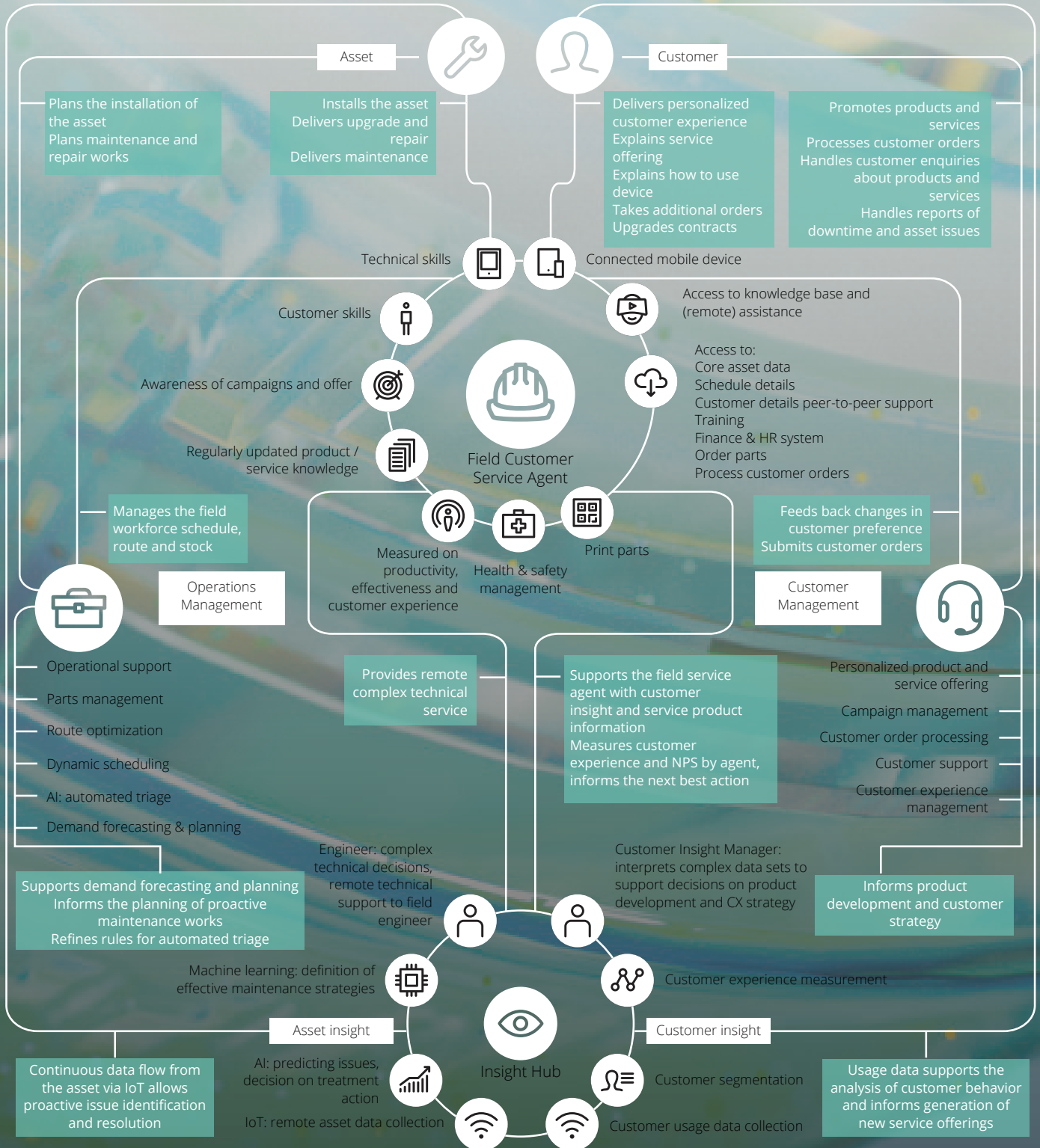
With AI in your pocket, the burden of asset maintenance and repairs will fall less to the field force. Instead, sensor data and automation tools can link to detect and resolve faults remotely. Automated vehicles are a good example here; with certain manufacturers, the customer can log in to a system to fix a problem themselves. For faults that cannot be fixed remotely (think of a damaged or worn-down part), these systems can diagnose the fault, suggest which parts will be needed to resolve it and estimate how long the repair will take, well before a technician is needed.

4

Your field customer service agent will also certainly need a hospitality mindset, being in a role that should be seen as much more than an on-site service provider. That employee represents the company brand, reassures the customer, has their best interests at heart and conveys this in action and tone. This aspect of the role will affect the screening and training of agent candidates, as well as their internal mobility – yesterday's manual service person may be a better fit for tomorrow's remote servicing point person.



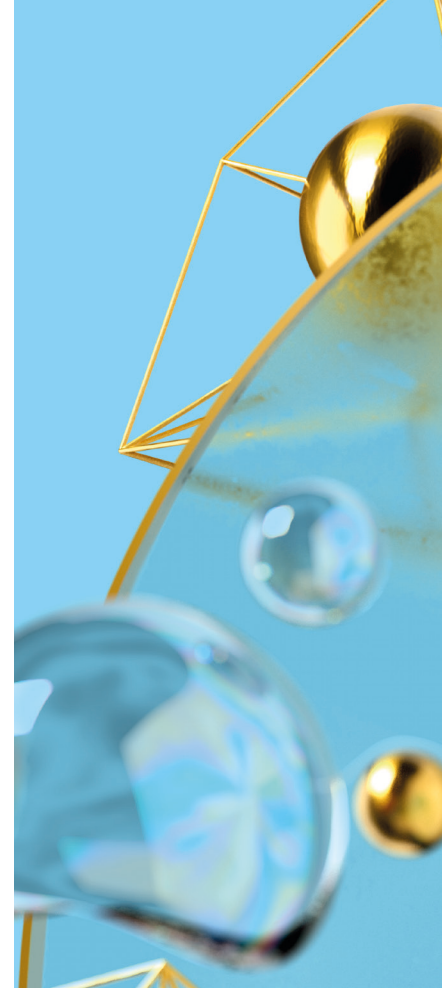
The future field service eco-system: four sources of data



Forward thinking: field service of the future

Expanding your digitisation strategy to one that is comprehensive, data focused and people centric can mean the difference between staying afloat and sinking in your market. A useful case study is a gas company whose customers pick up the phone when they notice their gas tank is empty. If the tanks were sensor connected, then levels and consumption could be measured and depletion estimated. This not only enables the company to manage refills more efficiently and foresee when they need to start buying more gas, it sets them up for future resilience when fossil fuels are no longer an option: by keeping track of their customers' gas consumption, the company can offer the right alternative at the right rate, even as competitors crop up to join the hydrocarbon/solar energy market.

Looking beyond energy, manufacturing, industrial, technology and telecommunications applications, any sector can benefit from next generation field service. The possibilities are unlimited for any organisation with people in the field, providing service or maintenance. Here are some that may not seem so obvious:



Public space management

Citizens report various problems in their neighbourhoods – broken street poles, loose sidewalk tiles – which prompts the city to send the right people with the right skills and materials to fix and maintain, calculating optimal routes to do so.



Waste collection

As demonstrated by the Dutch city of Utrecht, sensors can determine the contents of waste containers, and prompt their collection only when full, minimising the traffic congestion that waste-collection vehicles normally contribute.



Office management

Sensors around the office register when a device, desk or meeting space has been used, triggering field service agents to perform targeted cleaning; this especially suits today's flexible-workstation and shared-workspace environments.



Logistics

Deliveries can be optimised if suppliers use digital solutions to find out the actual inventory of a pick-up point. Combining those statistics with knowledge of the pick-up point's speed of sales will enable the supplier to forecast when the inventory will run out, and deliver before that point.



Banking

Field customer service agents can save customers the trouble of visiting physical banks, by performing various tasks at their homes (e.g. verifying identity documents, talking through questions, giving advice on financial products).



Retail shopping

Online shopping can be a breeze with 'personal shoppers' who bring clothes or other items to the customer during a designated timeframe, wait while they try things on/out, then return any unwanted items.



Home visits

The sky's the limit here – any entity that sends agents to homes can use technology to automatically sense when a visit is necessary and arrange an appropriate time. But a potentially life-changing example can be found in home care: a caregiver can arrange their schedule to maximise patient convenience and minimise loneliness, and can even receive digital alerts of falls or injuries.

Regardless of your sector, if you're a digital-native company – already familiar and comfortable with many technologies – you're at a huge advantage, being able to integrate tech solutions into all aspects of the business. Many companies require a teething period, to adjust as they focus on fostering new skills and incorporating new tools smartly and comprehensively.

In the end, the reward for your prescience will be a redefined field customer service force that brings new value: fewer but more meaningful personal touchpoints, a boost in personal customer engagement, less need for individual knowledge of the field customer service agent, and enhanced collaboration and communication.

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The key points to take away



Tailor field experiences to customer needs and preferences, by making information on customer personas, available service offerings and campaigns accessible on the field service customer agent's mobile device.



Train and recruit your field customer service agents to be customer centric.



Reduce reliance on the field for asset maintenance and repairs, using sensor data, AI and automation tools to detect and resolve faults remotely.



Trigger the right field service interventions when required, supported by automated faults triage.



Create an insight hub supporting your field service customer agent: asset and customer data collected remotely and supported by advanced analytics and AI allows better decisions at the center and instant availability to the field force.



Turn your field force into customer service agents, focusing on delivering outstanding customer experiences and growing lifetime value.



Create the right experience for the field technician, by turning their van into a mobile office where they can truly feel a part of the company.

Contact us!



Jeroen Panken
Director
+31612581736
jpanken@deloitte.nl



Ashley Ashokkumar
Senior Manager
+31650055201
asashokkumar@deloitte.nl



Vincent Eijkelenkamp
Senior Consultant
+31650055333
veijkelenkamp@deloitte.nl



Charlotte Vollebregt
Business Analyst
+31631135981
cvollebregt@deloitte.nl

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