

The Future of Field Service in the era of AI

Deloitte Digital | The Netherlands



Current technological developments like AI have a profound impact on key themes within Field Service



PERSONALIZED & PROACTIVE

- **Turn your field agents into *Field Experience Agents*:** Focus on delivering outstanding customer experiences and growing customer lifetime value
- **Base field experiences on the customer needs and preferences:** Make information on customer persona, available service offerings and on-going campaigns accessible on the field agent's mobile device

DISTRIBUTED COMPLEXITY

- **Acknowledge service segmentation will continue to proliferate:** It's not just about what is simple vs. complex, but also about high-value vs. low value, high-risk vs. low risk, and emotionally involved vs. automatic
- **Handle and define complexity:** This will be a critical strategic element for determining relevant opportunities and challenges for your Field Service transformation

INTEGRATED ECOSYSTEMS

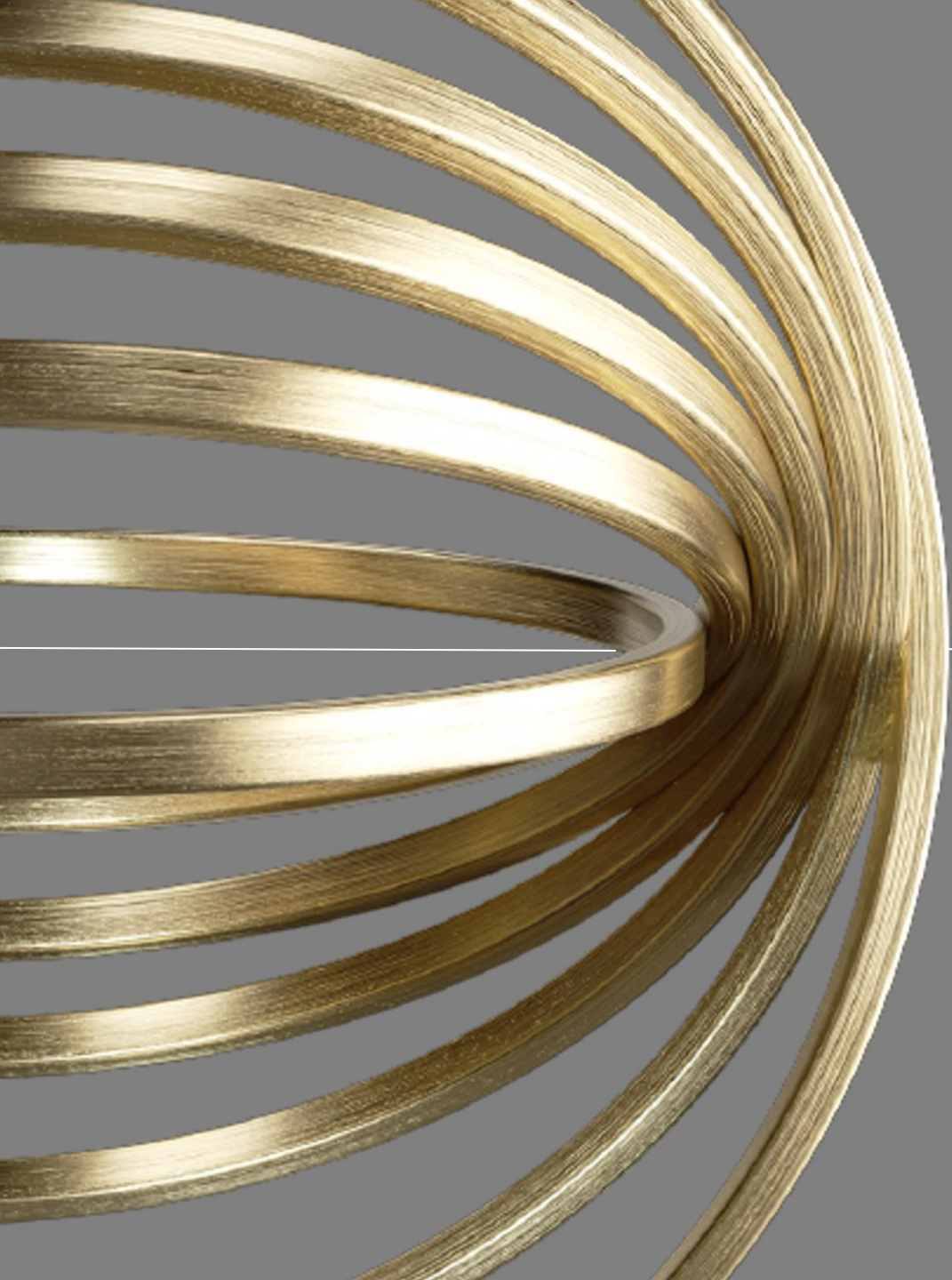
- **Create insight hubs and support your field agents:** Both asset and customer data collected remotely and supported by advanced analytics and Artificial Intelligence allows for better decision-making, instantly available for the entire field force

AI OMNIPRESENCE

- **Reduce reliance on the field for asset maintenance and repairs:** Use sensor data, artificial intelligence and automation tools to detect and resolve faults remotely

WORKFORCE REDEFINED

- **New skills:** A hospitality mindset and tech fluency will be required, impacting screening, training, and internal mobility
- **New tools:** Intelligent knowledge management and sentiment analysis will change how field agents do their jobs
- **New access:** The rise of third-party vendors for field agents asks to remove barriers and enhance information sharing



THE FIELD VISIT

Building stronger relationships with your customer

The future of Field Service is all about **elevating the human experience**. A series of disruptive forces is distributing complexity of Field Service and is profoundly changing the way this service is delivered.

It is an opportunity for businesses to build **strong customer relationships** by leveraging the power of **data & AI**, the unique position of the **Field Experience Agent** and the latest **innovative technologies**.

A day in the future life of a Field Experience Agent

The customer receives repair guidance (e.g., video, knowledge articles, step-by-step guides) provided via a **self-service system**. The customer attempts to resolve the issue but it seems that the issues requires expert assistance. The customer is easily able to contact your Customer Service department through a **GenAI powered chatbot** or directly through a preferred channel (e.g., phone, mail). With help of a **360-degree image** of the customer and asset it is easy to determine which available and necessary certified agents are needed and to schedule them to visit your customer within minutes.

Once the agent arrives at the customer site, he/she possesses relevant knowledge to solve the issue and is aware of customer sentiment. The agent is enabled to request remote support through an **Augmented Reality tool** or through the Operations Management department. Both channels guide the agent through the necessary steps to fix the problem at hand. Even better, the tools enable him/her to spot one additional problem which he/she proactively fixes.

Issue Detection

Self-Service Resolution

Expert Support

Close Case

A machine's **IoT (Internet of Things) sensor** at one of your customer's sites has sent a prompt. It seems that the machine has an issue. Keeping this asset up and running is crucial for the business continuity. If this asset remains broken it will cause major revenue loss for the customer.

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

Beforehand, agents would perform on-site diagnostics. Nowadays, **AI** can identify the problem by leveraging the data generated by **IoT sensors** embedded within the asset. Telling the agent what aspect has broken down, generating **intelligent insights** on the issue determining how it should be fixed and which parts and tools are necessary to do so.

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

We have identified three key actions that allow organizations to accelerate their transition to the Future of Field Service



Respond to the shift towards self-service

Use of in-app tutorials, GenAI powered chatbots, and DIY solutions, act as a new approach for troubleshooting in the form of self-service functionality. Reducing costs and increasing efficiency which enables the agent to spend his/her time more effectively during a field visit



Implement procedures to improve first time fix rates

Agents should be equipped with the information needed to resolve customer issues during the initial visit. Implementing pre-route tasks contributes to enhance first time fix rates



Eliminate barriers for 3rd party providers

Third-party providers should have access to the same information as in-house agents so that all agents are fully equipped to both anticipate customer needs and resolve customer issues

Respond to the shift towards self-service



Self-service is **the ultimate form of customer empowerment**. It enables customers to independently access information they need and solve their own problems, enhancing their **satisfaction** and boosting **loyalty**.



Self-service capabilities improve the overall customer experience

But these capabilities also have the potential to provide other benefits to the organization, such as ...

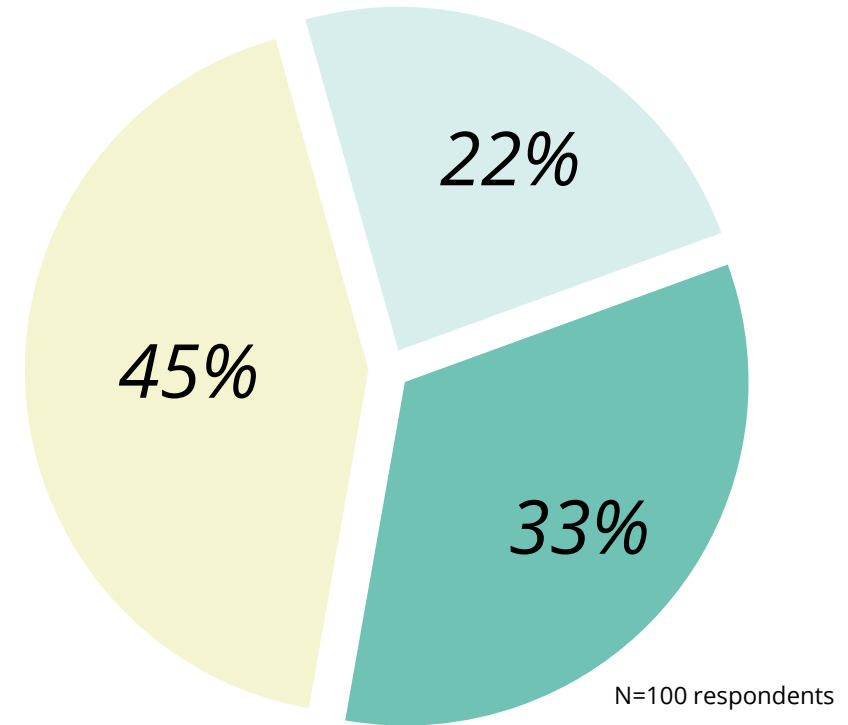
<p>Additional revenue streams</p> <p>Dependent on the industry and the level of complexity associated with repairs and updates, some organizations can sell self-service functionality to their customer. Further, the service can be provided as a value-add to larger, more profitable customers.</p>	<p>Access to more data</p> <p>Meaningful data can be analyzed when customers regularly use self-service features. With this access, data leaders can gain insights into how assets are used, when assets break, the causes of downtime related issues and/or a customer's technical capability. All this data can be used to develop and market add-on services.</p>	<p>Increased employee satisfaction</p> <p>Providing customer with self-service capabilities leads to a decrease in routine, repetitive, low value service requests, allowing field agents to focus on higher value and more rewarding work. More rewarding work is seen as crucial to keep field agents satisfied and engaged. Since finding and retaining qualified talent is identified as the biggest challenge faced by organizations, providing meaningful work becomes increasingly important.</p>

The availability of self-service capabilities varies among Field Service organizations

35% of organizations offer advanced self-service capabilities, 45% allow for limited self-service, and 25% do not provide any self-service functionality.

Larger, publicly-traded companies are the least likely to offer advanced self-service capabilities. Even though, at scale they stand to realize the greatest cost savings by enabling the customer to use the self-service capabilities that they desire.

- No, customers can not interact with my organization's systems for self-service capabilities
- Yes, customer can interact with the organization's systems for self-service capabilities, however, capabilities are limited/manual (e.g. FAQs)
- Yes, customer can interact with the organization's systems for self-service capabilities, and capabilities are advanced (e.g. interactive tutorials, chatbot)



Source: Facing the future of field service: a new customer experience focus in today's service organizations, Deloitte US 2023



When self-service is not an appropriate option, given the complexity of the task, a visit from a Field Experience Agent may be needed

Showing up onsite with a comprehensive understanding of both the customer and the asset (360-degree view) is critical for improving the customer experience, loyalty and increasing first-time fix rates

Review customer's repair history

Agents have an accurate overview of previous repairs, which gives them **context and a sense of customer sentiment**



Check open issues

Agents have an accurate overview of issues that might have not been resolved, which enables them **to tackle these problems as well as the original problem** during their visit



Pre-check installed machines data

Through new technologies (e.g. IoT) agents have an overview of the installed machine statuses allowing them to perform **preventative maintenance** if needed



Increased First-Time Fix Rate

Increased availability of information not only streamlines operations but also improves initial resolution rates. This impacts the customer-agent relationship through efficient problem-solving and increased customer satisfaction.



Better Customer Experience





A field visit, the one crucial human touchpoint, is key to delivering a seamless customer service experience. If done right it, disproportionately affects the customer experience in a positive manner. However, if done wrong the effect is reversed.



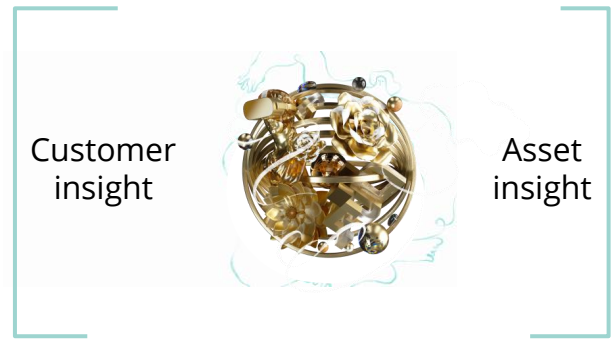
Data & AI driven insights enable Field Experience Agents to increase first-time fix rates and improve the customer experience...

Converged, multichannel interaction in an integrated ecosystem will become the gateway to the Future of Field Service, where Field Service organizations should converge data originating from four sources

DATA BECOMES AVAILABLE THROUGH CONVERGENCE OF SERVICE CHANNELS & INTEGRATED ECOSYSTEMS

-  **Customer**
Details on how, where, when, and why your customer uses the product and multichannel interaction through self-service, contact centers and Field Service channels (plus service segmentation)
-  **Customer Relationship Management**
In an integrated ecosystem, data is interoperable with multichannel interaction through self-service, contact centers and Field Service channels
-  **Asset**
Think of asset intelligence, sensor data and IoT providing data for the organization
-  **Operations Management**
Data that is generated in the daily operations of your Field Service organization. Think of data on spare parts, day-to-day schedules, routes and operational support to agents

ENABLES AN INSIGHT HUB BASED ON DATA AND AI



...in which barriers for third-party vendors should be eliminated to extend their capabilities

While organizations are increasingly relying on third-party providers to perform Field Service tasks, they are not providing these partners with the same information as their in-house Field Experience Agents.

Organizations share limited data with third-party providers



Extend access to external Field Experience Agents for a seamless customer experience

86%

share repair history

72%

share IoT data

72%

share billing industry

78%

share information on products currently used by the customer

33%

share information that can be used for upsell opportunities



In-house agent



External agent

INSIGHT HUB ACCESSIBILITY



Key data insight for field visit

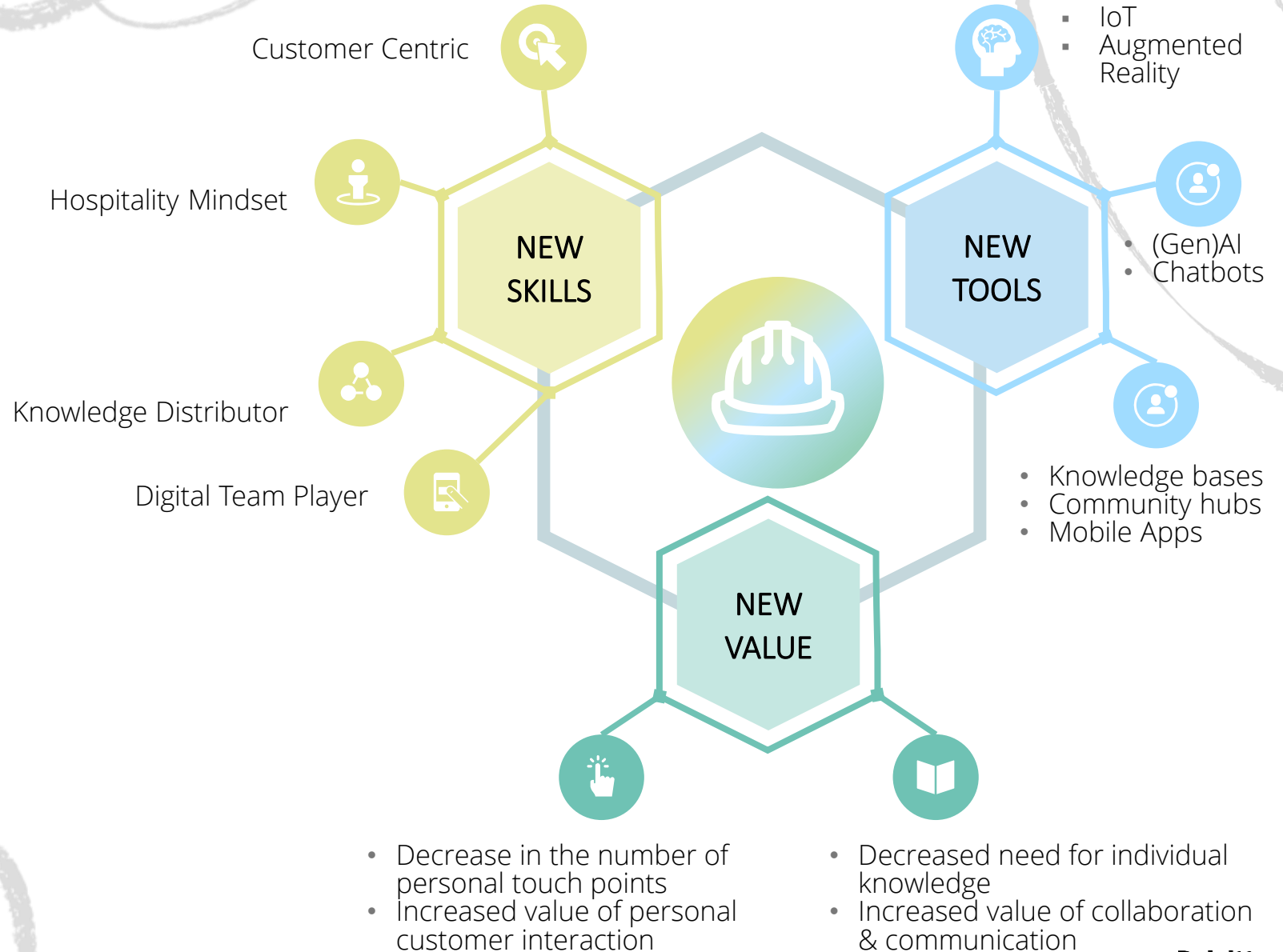
Field Service organizations must determine critical information agents need to have on-hand for addressing customer needs. Access to key data should be extended to external parties to ensure that all agents are adequately prepared to anticipate customer requirements and effectively address customer issues

Source: Facing the future of field service: a new customer experience focus in today's service organizations, Deloitte US 2023

The Field Force redefined:

Technology driven field visit by a customer centric Field Experience Agent

With a new set of **tools and skills**, the agent provides **new value** towards the customer. Transforming agents to **front-line brand ambassadors**, providing a seamless customer experience enabled by innovative technologies.

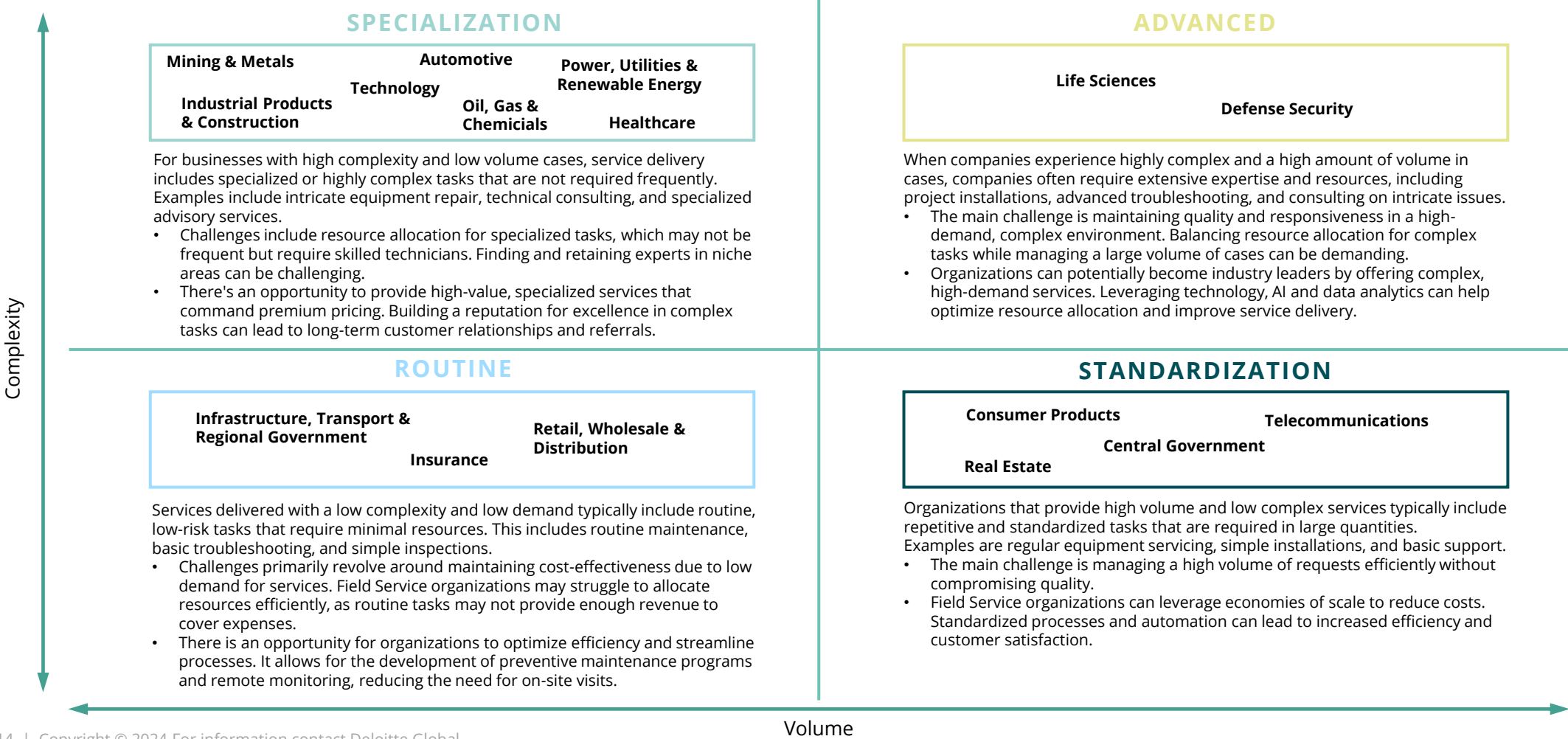




The future Field Service eco-system,
it is all about getting your field visit right

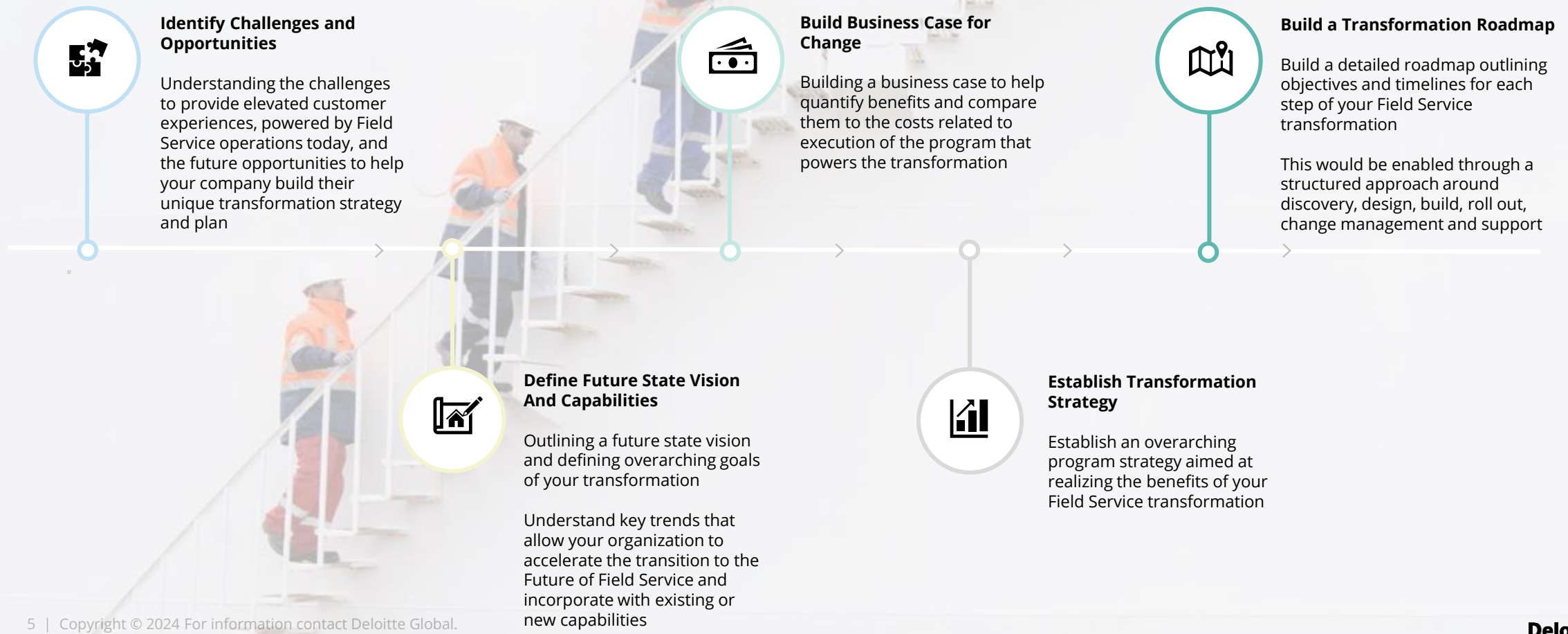
This requires a **customer-centric** Field Experience Agent,
backed up by the power of readily **accessible**
customer and asset insight and **technical expertise**

Getting your field visit right can be complex and is dependent on multiple factors within your industry



How to get started?

Let's look at the next steps for your organization to initiate the Field Service transformation





Deloitte offers services in multiple domains to help accelerate the transition of your organization to the Future of Field Service

FIELD SERVICE STRATEGY

- Consumption Based Models
- Mixed Labors Models (Internal/External)
- Predictive / Preventative Maintenance
- Capacity Planning

BUSINESS PROCESS

- Customer Interaction
- Dispatch Operations
- Field Operations
- Depot/Parts Operations
- Management

DIGITAL TOOLS & ENABLEMENT

- Self-service Portals
- Work Order Management, Routing and Scheduling Solutions
- Mobile Solutions
- (Generative) Artificial Intelligence
- Augmented Reality
- IoT

PERFORMANCE MANAGEMENT

- KPI Development
- BI Tools
- Technician Incentive Plans

Deloitte has over 250 consultants globally focused on helping companies transform their Field Service organizations

Core Field Service Partners



ORACLE



servicenow



SERVICEMAX

We partner with other vendors for other innovate technologies like IoT, AR, and IT

WHAT WE DO

Provide Field Service transformation services to help our clients accomplish their strategy and operational goals

WHO WE SUPPORT

Executives seeking to define new service revenue streams, improve customer/employee experiences, reduce risk and decrease operating costs

WHO WE PARTNER WITH

We bring the power of our domain experience with our alliance partners' technology platforms to deliver solutions that drive business value

Contact us



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