

Major Electric Distribution Utility Increases Overall Technician Efficiency by 3.3% with Field Support Agent

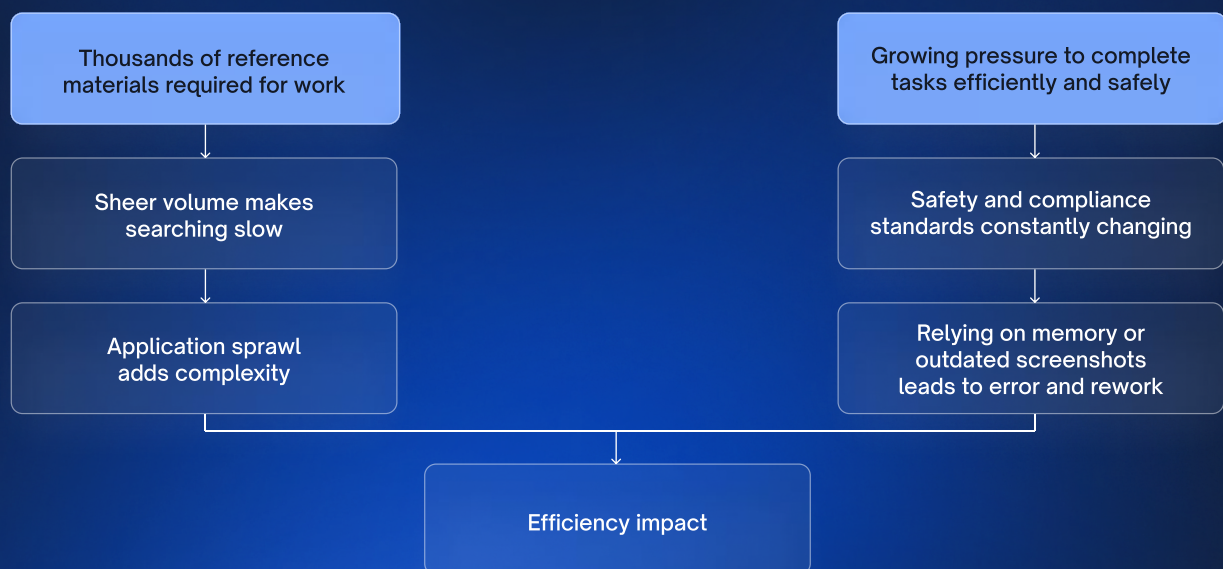
This efficiency led to over \$2.4M in annual savings

Background:

A leading utility company faced significant inefficiencies in its field operations due to the vast amount of technical documentation required for daily work. The organization maintained thousands of industry manuals, technical standards, bulletins, work practices, and electrical diagrams. Field crews often struggled to locate relevant information, leading to workarounds such as:

- ✓ Screenshotting commonly used data for easier access.
- ✓ Printing out frequently referenced documents.
- ✓ Designating specific team members as information gatekeepers.
- ✓ Relying on gut instinct, increasing the risk of safety incidents and rework.

With over 1,000 technicians in the field, even minor inefficiencies in accessing technical information led to significant productivity losses, non-compliant work, and increased labor costs.



Challenge:

The utility company needed a solution to:

- ✓ Improve access to critical information for field technicians.
- ✓ Reduce time spent searching for technical standards and bulletins.
- ✓ Minimize errors and rework due to outdated or inaccessible information.
- ✓ Enhance compliance with updated work standards.

Solution: Datch's Field Support Agent

The company deployed an Datch's Field Support Agent (FSA), which:

- ✓ Contextualizes and retrieves knowledge from work history, manuals, and technical drawings.
- ✓ Understands relationships within the data to provide precise and relevant troubleshooting assistance.
- ✓ Is optimized for mobile devices to enable seamless field usage.



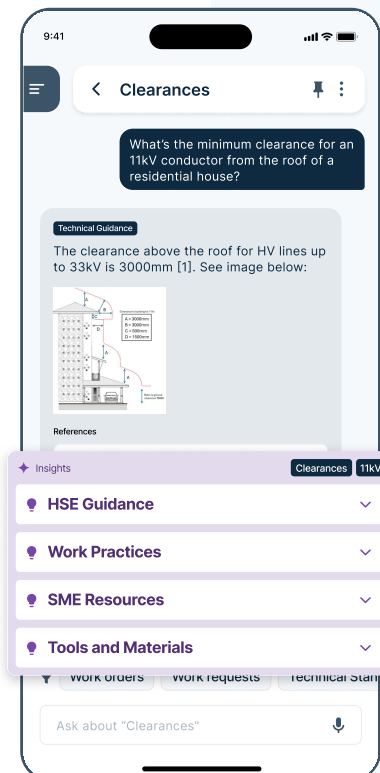
Field Support Agent

Streamline Field Work

Empower technicians with on-demand, context-aware guidance to increase efficiency, maintain quality, improve safety and ensure compliance.

Field Support Agent integrates seamlessly with your team's existing maintenance data, technical standards, works practices, technical diagrams, hazard bulletins, and more to provide technicians with instant, relevant guidance right where they work. No more searching through printed manuals or various digital folder structures to find the right information. Instead, technicians receive the exact technical standards, schematics, and best practices they need, every time.

By embedding the Field Support Agent into your current field service applications, you minimize training and change management while maximizing efficiency. The result? Safer operations, higher-quality job completion, and a consistently reliable workflow that ensures all maintenance tasks meet your standards.



Contextual Guidance

Offers immediate access to relevant standards, bulletins, hazard alerts, and previous work records based on the task at hand.

Seamless Integration

Embeds within your existing field service applications, minimising retraining efforts

On-Demand Insights

Pulls from your organisation's DMS (i.e. sharepoint) + maintenance data to provide accurate, up-to-spec instructions

Enhanced Safety & Compliance

Ensures technicians follow proper procedures and meet regulatory requirements

Improved Job Quality

Drives consistent, high-quality maintenance work across all field teams, every time



Real-World Impact:

Example Scenario: Updating Installation Standards

Pete and Joe, two field technicians, were replacing a wooden utility poles in a residential neighborhood. Their work-pack included a requirement for a possum guard installation, but they were uncertain about the new standard measurements.

Before FSA Deployment:

- | The business had changed the “standard” on possum guard installation heights
- | They published a technical bulletin stating this update. Notifications of these bulletins were posted in the staff rooms at the depots to increase visibility.
- | Pete, remembering he had seen this notification, knew he should look up the height and spent 15 minutes searching for the relevant standard while out in the field.
- | Unable to locate the document, he called Henry, a subject matter expert, who spent another 5 minutes finding and sending the correct information via WhatsApp.
- | Joe, unaware of the standard update, installed the possum guard incorrectly
- | When his installation is audited / spot-checked he receives a non-conformance notice (demoralizing, re-work required). The re-work was estimated to consume 1hr of worker time including transit.

After FSA Deployment:

- | Pete & Joe, when installing the possum guard simply input “possum guard height” into their Field Support Agent
- | The agent provides them with (1) the answer of “300mm to 1.5m” and (2) a link to the exact section in the technical standard where this answer can be found. After reviewing the standard, Pete and Joe complete the work with the confidence that they are compliant and not going to have re-work.
- | This is because within seconds Field Service Agent:
 1. Understands who was asking the question
 2. Finds all relevant standards and information relating to possum guard installations.
 3. Determines what information takes priority for this context.
 4. Presents all relevant diagrams and schematics for the installation.
 5. Highlights any auxiliary information that might be useful (in this instance there is a maximum height in a diagram, but also a different minimum height in a different section in text).

Bottomline:

Because of Datch’s Field Service Agent, Pete & Joe are able to:

1. Self-serve, gaining high quality experience while preserving their coworkers’ time and focus
2. Mitigate the need for re-work and increase compliance with standard.



Overall Results Summary:

Post implementation of Datch's Field Support Agent, this utility found:

An average of

75%

task efficiency improvement for finding technical information

90%

reduction in rework caused by information gaps.

Increased compliance with evolving industry standards.

ROI Calculation:

Given:

- ✓ This company has approximately 1,000 technicians
- ✓ They estimated average cost of a technician was \$75,000 USD
- ✓ They estimated that 2% of technician time is spent searching for information
- ✓ They estimated that 2% of technician time lost to rework due to poor information

Annual efficiency gains per technician:

$$[(75\% * 2\%) + (90\% * 2\%)] = 3.3\%$$

Annual Cost Savings:

$$(1,000 * \$75,000) * 3.3\% = \$2,475,000$$



Key Benefits:

Direct ROI:



Increased Efficiency:

Technicians spend less time searching for information and more time on productive tasks.



Reduced Rework:

Accurate and standardized guidance minimizes errors and repeat jobs.



Improved Compliance:

Ensures adherence to safety and technical standards, reducing regulatory risks.

Second-Order Benefits:



Higher Job Quality:

Access to best practices improves overall work performance.



Safer Operations:

AI-driven alerts on hazard bulletins and safety protocols enhance field safety.



Faster Adoption:

Seamless integration with existing tools reduces training and change management efforts.



Conclusion:

By leveraging AI-driven knowledge retrieval, this utility company transformed field operations, significantly improving productivity, compliance, and cost savings. The deployment of the Field Support Agent eliminated barriers to accessing critical information, empowering frontline workers to operate more efficiently and safely. The strong ROI and measurable benefits position AI-driven field support as a game-changing solution for utilities and other asset-intensive industries.

How it works

Ingest

Connect disparate data sources such as CMMS and DMS via simple, read-only integrations

Understand

Map entities to an organization-specific knowledge graph

Surface

Use understanding to surface the relevant data points automatically in context

Answer

Ask questions of your data and get real answers via (NLQ), i.e. "How many work orders mention loss of pump pressure?"

