Prodapt Chase Extraordinary

Creating a smart field workforce with an AI-powered video guide

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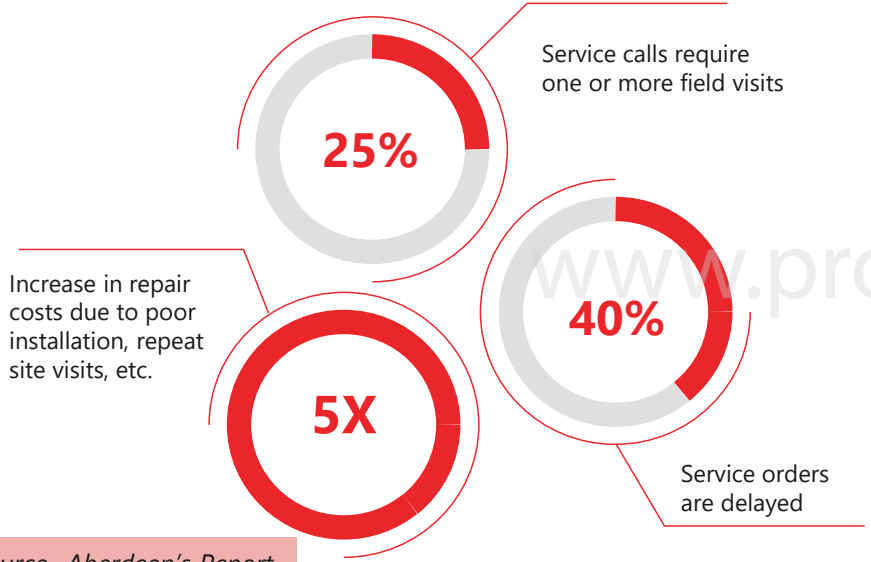
Field service providers are constantly striving to improve efficiency, reduce the number of site visits and improve customer experience

Field service inefficiencies lead to increased costs



Source- Aberdeen's Report

Field service organizations in the connectedness industry can improve efficiency by leveraging the ***power of video*** for capturing rich information, intelligence, and insights.

Video capture – Move away from error-prone, time-consuming and manual capturing of data to avoid re-visits. Video technology can capture the nuances of the site easily and accurately.

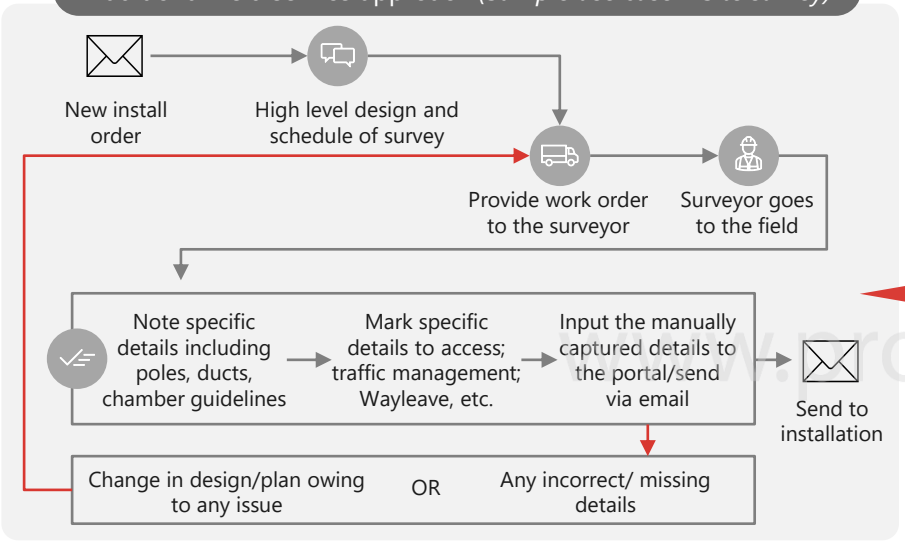
Remote audits – Avoid sending an auditor physically after every install. Video intelligence can enable remote audits and save time, effort, and cost.

AI-based video guide – Simplify field engineers' work and implement 'right-first-time' culture. Video intelligence can enable capturing 100% required data sparing multiple site visits for field engineers.

The insight elaborates on how to leverage *Video AI* to decrease installation quality issues by 60%, reduce repeat site visits, and shorten order-to-delivery time.

Build an AI-powered video intelligence framework to transform field operations, creating smart field workforce

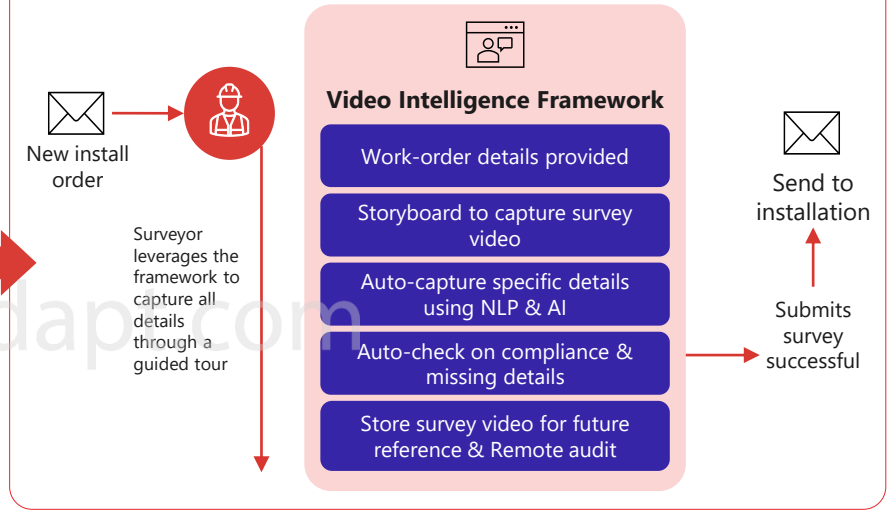
Traditional field service approach *(Sample use case – Site survey)*



Surveyor captures all the required survey details manually on a paper and later re-enters them in a portal. For any incorrect or missing detail, the surveyor again goes back to conduct the survey. This approach has various limitations:

- Time-consuming
- Manual
- Error-prone
- Repetitive

Proposed AI-powered video intelligence framework



Surveyor captures a video and voices it over through a guided storyboard. The framework auto-captures the details using NLP and AI and sends alerts for missing details. Survey is submitted with 100% details and can be a point of reference for specific details or future changes. Advantages are:

- Improved FTFR
- Reduced MTTR
- Improved NPS
- OpEx savings
- Improved technician efficiency

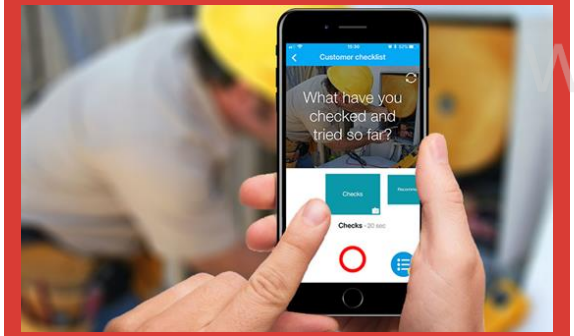
The image above illustrates the use of AI-powered video intelligence framework in 'site survey'. The framework also supports other field service use cases such as installations, repairs, etc.

Key components of the AI-powered video intelligence framework which streamline the field services

Reduce OpEx through 'right-first-time' fieldwork, and enhance customer experience through reduced 'time-to-resolve'

AI-assisted Video Guide

Enables the field engineer to capture a guided video based on a predefined storyboard



Recommendation Engine

Provides AI-powered recommendations and real-time visibility of all the jobs to the supervisors, auditors and field engineers

Smart Dashboards

Provides end-to-end visibility on jobs driving smarter actions for Service delivery managers and Auditors

AI-powered Intelligence Framework can transform field operations through storyboards, guided actions, and intelligent dashboards leading to 3x acceleration in installation time and improved customer experience.

AI-assisted Video Guide – Effortlessly **capture field data** with a prescriptive storyboard

Enables field engineers to capture guided videos with predefined storyboards, and reduce repeat visits

Perform these crucial steps to create an accurate storyboard for video guide

Analyze AS-IS

Use process consulting to understand the AS-IS process in detail. Understand the role of field engineers, the data collected, and the resolution provided.

Use process re-engineering to define the 'To-Be' process.

Create storyboards

Based on the use-cases identified to capture inputs, create and design storyboards & segments.

Video Capturing

Simple, prescriptive short video capturing

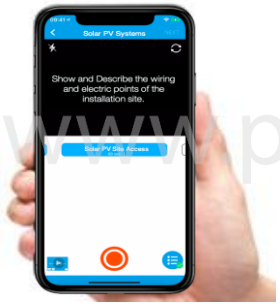
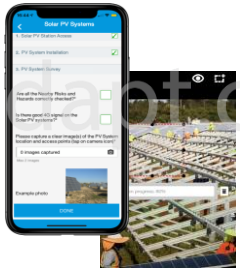


Image Capturing

Prescriptive image capturing with benchmark images and annotation capability



Dynamic Workflows

Dynamic workflows with auto-populated fields and nested checklists capability

Automated capturing

Capture OCR/Barcode/ Meter readings automatically with intelligent range checks

Dynamic workflows built with low-code platforms and built-in computer vision technology identify objects in the video and auto-capture them with relevance.

Recommendations

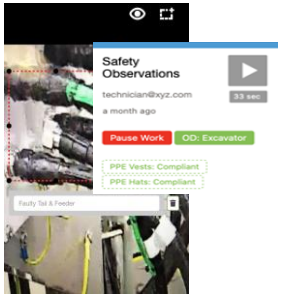
- Leverage video-enabled and structured data capture inputs digitally, to enhance and replace manual/text form fields
- Drive higher compliance and productivity with easy narration and consistent NLP tuning
- Ensure better end-to-end process mgmt., timely interventions, and eliminate missing steps with Planned and guided storyboards

Recommendation Engine – Leverage guided actions powered by Intelligent Platform

Provides AI-powered recommendations and real-time visibility into the jobs to supervisors, auditors and field engineers

Enable field engineers

Field engineers get auto-alerts if they miss capturing any details. In case of any challenges or roadblocks, engineers can access a repository of articles for quick guidance.



AI-powered Auto Alerts

Able to annotate and comment on visuals to ease handovers/ collaborate and track actions using the resulting searchable knowledge base

Searchable index

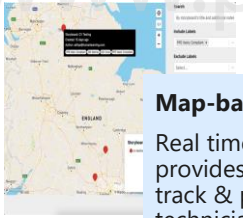
Searchable indexed know-how articles relevant to the job to guide engineers in case of any queries

Enable supervisors

Remote view of the status and activities performed within the jobs is provided to supervisors. This enables job location tracking and remote allocation of jobs.

Real time job monitoring

Work details appear on the supervisor and the field engineer's app



Map-based search from the dashboard

Real time job location (geo-spatial) map provides remote command and control to track & progress jobs, track field technicians' job location and allocate jobs based on their locations

Enable auditors

Auditors have access to videos for performing remote audits. These videos being auto tagged with annotated images, provide details about real issues and solution performed.

Auto-tagging

Auto tagged & annotated images or videos are captured by your workers to help you communicate without being there

Annotation & Intelligent Alerts

The field technician can voiceover and auto-tag while capturing the video. Video-to-text conversion enables text searchability in the video

Recommendations

Provide automated alerts and leading indicators for rapid action by the right person at the right time

Use geolocation map-based interface and intuitive dashboards to track, analyze, and complete the job

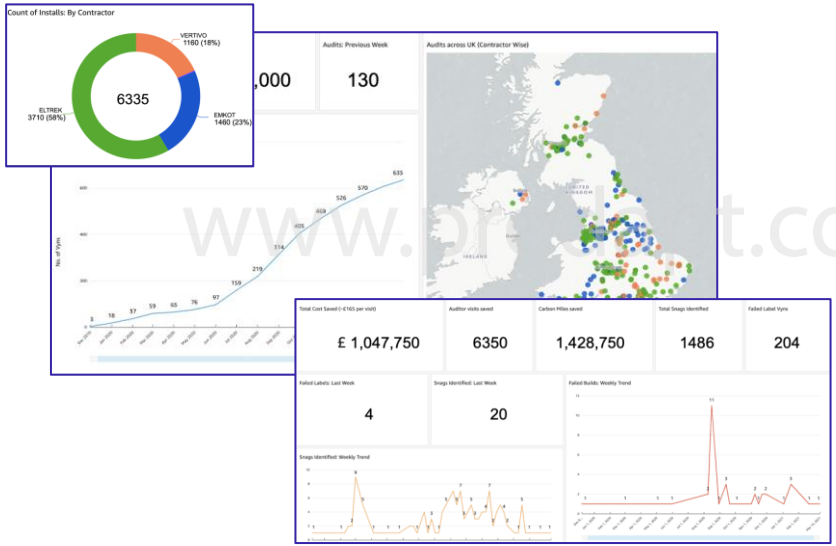
Utilize AI-powered computer vision & natural language processing, video search, and trends from the analysis of qualitative data, for enabling effective remote audits

Smart Dashboards – Leverage **Intelligent Reports and Dashboards** to drive smart decision making

Provides end-to-end visibility of jobs, driving smarter actions for management and business as a whole

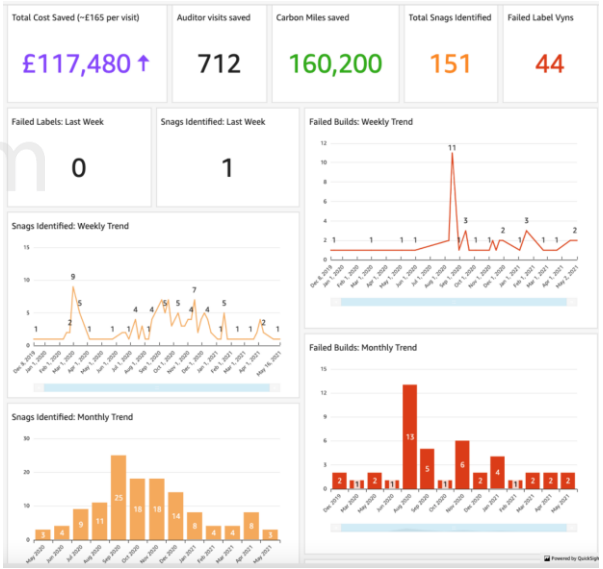
Smart Dashboards can spot trends, predict actions and offer recommendations. Executive decisions like provisioning equipment, sending the right teams and obtaining the right permissions can be completed faster, with greater accuracy.

Gain insights through leading indicators for preventive action and optimal mobilization of workforce



Use the Dashboard to **View how work is progressing** and configure it to **show the relevant KPIs** that you need to succeed

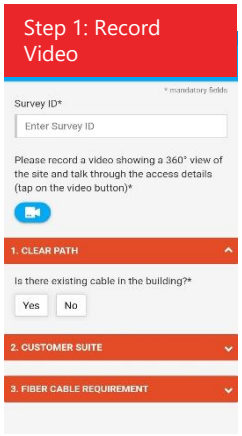
Easily monitor cost savings, site visits/audits, and environmental friendliness stats

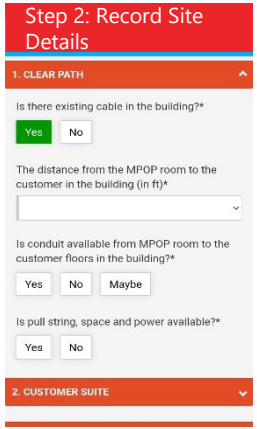


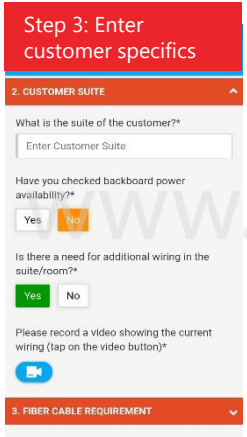
A leading service provider in North America implemented AI-powered video intelligence framework

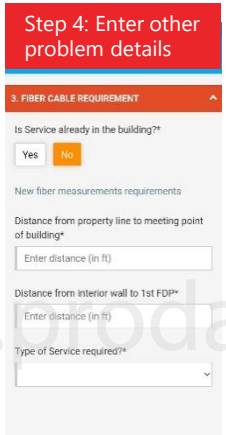
Improved field service efficiency and accelerated fibre products order to delivery time by 41%

Capturing field details using custom-designed storyboard guiding field engineers

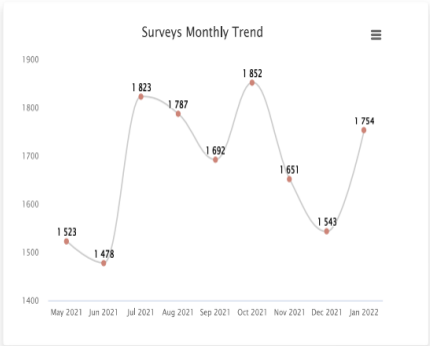


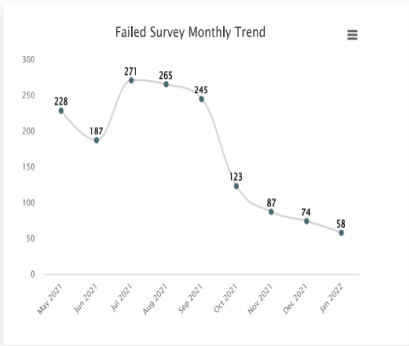


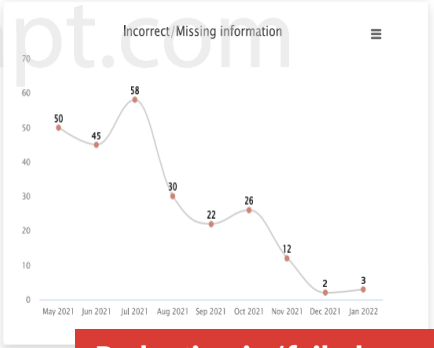




"Illustration: Field service mobile app provides step-by-step guidance to field engineer, to shoot the site video and capture needed data"







Reduction in 'failed survey trend' implies significant improvement in the first-time fix rates and associated cost savings. For e.g., in Jan 2022, out of 1754 surveys performed only 58 failed

Business benefit achieved by a leading service provider in North America by building & implementing an AI-powered video intelligence framework

3X
Acceleration of Install to Commission cycle time

90%
Less failed handovers due to digitization

60%
Reduction in field data quality snags/issues

30%
Cost-savings across the field operations

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