# Addressing the challenges of UK utilities

## Optimised field service management

## Meeting the challenges

An industry in transition

advanced

People. Partnership. Solutions.

# Does your field service management technology help you meet today's challenges?

The UK utilities sector is undergoing a profound transformation. It's being shaped by the challenges of climate change, population growth, affordability, changing policy and regulatory targets.

To address these needs, innovation is required. Implementing solutions that meet the core demands of the industry are imperative in order to:

∧ Safely manage assets

∧ Maximise production and reliability

∧ Minimise outages

∧ Control operating costs

Alongside this, utilities companies must manage the challenges presented by paper-based processes, an aging infrastructure and workforce turnover. In response, utility companies are deploying innovative field service management technologies as they transition away from legacy systems.

# Dynamic resource scheduling

## Right people, right jobs, right time

For many years field service organisations have relied on rostering to ensure shift patterns are aligned to work demand, but real productivity gains can only come when making the step-change to dynamic scheduling.

Rostering and dynamic scheduling both ensure you have enough people, in the right location, to meet projected demand. And both will allow you to drill down to specific times of the day to devise and allocate shift patterns, to extend hours covered and maximise coverage during peak hours.

However, there are differences between rostering and dynamic scheduling. Rostering ensures that you have enough people to fulfil the demand at any point in time; dynamic scheduling ensures the right people are allocated and are doing the right jobs at the right time.

### Right people, right tasks

Scheduling enables you to take all criteria into account when allocating work, such as location, skill set, qualifications, accreditations, equipment and even language. This enables a fundamental shift from having someone available to do a task, to having the best resource for that specific task. This reduces time while increasing customer satisfaction.

### More tasks per day

The order in which work is scheduled and allocated can also have a significant impact on productivity. Scheduling workers with the shortest route between jobs can minimise travel time and maximise productivity. Avoiding urban areas at rush hour can reduce time spent on the road, while ensuring appointments are kept can avoid the wasted visits when the workers cannot access a property or asset.

### Minimising travel time

For field service organisations, travel time can be the greatest source of productivity leakage. Finding ways to reduce travel time is essential and, for each minute saved, this directly increases the productivity and efficiency of your field workforce. Although there are many tools available to assist with route planning, we strongly recommend that journey planning needs to be comprehensive and fully integrated into the scheduling process.

### Booking appointments based on route

Taking travel time into consideration when booking appointments can help avoid many issues at the outset. By having an intelligent scheduling solution that not only looks for available slots, but can also identify the optimum slot, appointments can be offered to customers that have the least travel time associated with them.ensure your field workforce avoids unproductive time sat in traffic jams or following diversions.

### As-the-crow-flies vs actual distance

Many scheduling solutions use geographic plotting to calculate the proximity of jobs, and some only calculate as-the-crow-flies distances between jobs. That's often significantly different to as-the-vehicle-drives distances. The best scheduling solutions consider the street-level road route between jobs (and therefore the actual travel time) in order to accurately calculate and minimise travel time.

### Leveraging real-time information

Road works, peak hour congestion and road closures can all significantly impact journey time. Having access to this intelligence whilst scheduling work can make a big difference. Avoiding built-up areas at rush hour, planning routes around major road works and rerouting based on known incidents can ensure your field workforce avoids unproductive time sat in traffic jams or following diversions.

Effective dynamic resource scheduling makes sure that the requirements of each job are met in accordance with your organisation's service level agreements.

# Mobile workforce management

## Streamlining workflow

Repetitive, laborious tasks like paperwork, rekeying data and manual workflows are all detrimental to the productivity of your field workforce — and so is not having access to key information.

Effective mobile workforce management applications streamline processes and connect field workers directly to back-office teams. They empower field-based staff to raise work and create follow-on jobs while in the field; these jobs are immediately visible to their back-office colleagues.

Although equipping field workers with mobile devices is commonplace, many applications do not fully integrate with back-end systems; nor do they fully eradicate paperwork or streamline processes. This is often due to the perceived complexity of integrating systems and devices. But, in our experience, integration does not have to be complex nor costly. Plus, the benefits of having a seamless mobile working solution far outweigh the investment required. Here's why.

### A connected workforce
When mobile working is combined with dynamic scheduling, the management of field-based activity is transformed. Managers gain an up-to-the-minute view of activity and progress against schedule.

If work overruns, this can be instantly taken into account by the scheduling application, and the day's schedule can be adjusted in the moment. In addition, field workers can immediately book repeat visits, order parts or schedule a follow-up visit direct from the field, which streamlines processes and connects the entire workforce.

### Faster processes
By enabling workers to electronically capture information in the field, including photos and signatures, they can immediately post that information into back-end systems, automatically triggering the next step in the process. This not only speeds up processes, but reduces mistakes. It also eliminates the need for field workers to return to base to submit paperwork.

### More first-time fixes
Providing field workers with all the essential information they need to complete more tasks first time — including instant online access to customer history and knowledge bases — means you reduce the average time they spend on-site, and significantly increase the number of first-time fixes.

## Billions of planning scenarios
The number of possible combinations of how each job could be allocated if 100 workers carry out five jobs per day.

# Actionable insight

## Using data to maximise productivity

**Analyse data, learn about trends and benchmark performance to gain year-on-year productivity improvements.**

Having access to comprehensive insight is key to driving continuous improvement. We always recommend leveraging the information available from dynamic resource scheduling and mobile working applications to drive productivity. Acting on this insight to make changes, and measuring the impact of these changes, enables you to maximise productivity improvement. You can do that in four ways.

### 1. Field workers

By benchmarking the productivity of individuals with their peers and identifying trends in performance, you can highlight weaknesses to help ensure that every field worker is delivering to their full potential.

### 2. Task types

When you measure workforce productivity by work type, you understand why some tasks take longer than others. You can identify causes for overruns on certain tasks, which means you can put measures in place to improve efficiency.

### 3. Capacity and demand

By learning about the correlation between workload demand and resource capacity (and how this fluctuates across each day, week, month, season or year) you can improve resource planning and optimisation.

### 4. Geographic coverage

When you can map the geographic distribution of work onto field workforce location, you can explore scenarios for reallocating field-based staff to reduce cross-territory travel.

# Field service management solutions

## Driving field workforce productivity

Utilities companies are boosting the productivity of their field-based workforces by leveraging the power of integrated dynamic scheduling and mobile working solutions.

The Advanced field service management solutions increase the productivity of field and plant resources. They provide real-time visibility of field-based workers and reduce fuel costs through route optimisation and dynamic scheduling. They improve contractor management, speed up first-time job success, empower the workforce and increase customer service.

### Work Hub

Work Hub is an agile, intelligent work management application which increases field-based workforce productivity and ensures more effective service delivery to your customer's environment.

### Dynamic Resource Scheduler (DRS)

DRS seamlessly blends appointed, planned and responsive work across the field-based workforce. It helps field service organisations increase productivity by an average of 20 per cent, while ensuring that all customer commitments are met, travel time is kept to a minimum and more tasks are completed in a single day.

### Job Manager

This mobile workforce application connects centralised teams with their field-based workforce in real-time, enabling organisations to increase productivity, improve customer service and reduce costs.

### InfoSuite

InfoSuite is business information software that provides a holistic view of operations, visibility of key performance indicators and the ability to quickly drill down into the underlying detail.

**1.** Planning and Forecasting

**2.** Customer Service and Appointments

**3.** Scheduling and Dispatch

**4.** Mobile Workforce

**5.** Performance Management

Work Management

# Case study Clearwater increases productivity and earnings

After implementing our flexible, mobile working application, Job Manager, Clearwater saw a 10-15 per cent increase in productivity and higher earnings per field worker, along with real-time visibility of how its field service is performing.

Clearwater Group Plc provides products and services relating to water hygiene and treatment; engineering, pump services, consultancy and air hygiene. In an average month, it was carrying out around 11,000 jobs, leading to 30,000 written reports created in the field, using around 50,000 pieces of paper.

But there was a delay passing paperwork between the office and field workers; this paperwork needed to be re-keyed into an office system. And some paperwork could inevitably be misplaced. Clearwater needed to streamline its working processes to increase the efficiency of its existing workforce, while improving the audit trail and speed of reporting for its end-to-end process.

### Flexible software for field-based workers

With Job Manager, field-based engineers now sign onto the mobile application from a tablet each morning to download their allocated work for that day. This gives them comprehensive details about where they need to go, what they need to do, and what information they need to capture during their visit to the site.

One of the crucial reasons why Job Manager was chosen was because of its flexibility. As IT Manager, Geoff Griffith, explains, "Job Manager's scheduler can allow staff to run over. Also, the mobile application can have as many data capture forms on the device as we configure. In the instance of the 15-minute job, only one or two forms might be needed, but for a job that gets extended, the engineer has an additional five or 10 electronic forms that give him all the necessary background and the capability to undertake the new work. There is now no need for them to return to an office or depot because they were ill-prepared. This means our field staff spend less time travelling back and forth and more time on site completing additional jobs."

### Increased productivity and earnings

Geoff adds, "Ultimately, the introduction of Job Manager has led to a 10-15 per cent increase in our productivity and greater earnings per field worker. We also now have visibility of how our field service is performing in real-time, whereas previously we wouldn't know if there were any problems until after the event had occurred."

## Clearwater

A WCS Group Company

# About Advanced

## Driving productivity, insight and innovation

We enable our customers to achieve increased efficiencies, savings and growth opportunities through focused, right-first-time software solutions that evolve with the changing needs of their business and the markets they operate in.

As the third largest British software and services company in the UK, we help organisations create the right digital foundations that drive productivity, insight and innovation – all while remaining safe, secure and comp liant.

Our solutions for both commercial and public sector organisations simplify business challenges and deliver immediate value, positively impacting millions of people's lives.

### Journey to the cloud
We have a strong track record in helping our customers' journey to the Cloud. We manage private, public and hybrid Cloud environments as well as deliver sector specific Cloud-based solutions and services. We are certified partners with Amazon Web Services (AWS) and Microsoft, and have achieved the highest levels of accreditations. Our Cloud solutions are used by organisations of all shapes and sizes including Highways England, Performing Rights Society (PRS) and Aspire Furniture.

### Field service management
Our field service management software solutions help our customers streamline their service to increase job capacity, reduce overheads and improve customer satisfaction.

More than 40,000 field workers rely on our software to undertake their work every day, and over £20m has been spent in research and development of our product. Our applications can be fully integrated with their existing infrastructure, or rolled-out as independent solutions, with the option of being hosted in the Cloud.

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