

Case Study

Microsoft Teams for Remote Support

Over the past few months, V12 has seen not only a significant increase in customers using the **Teams** application in **Microsoft 365** for collaborative working, but also for a host of other, perhaps less obvious, activities.

Managing Director Charles Rickett comments: "One of our energy clients has been trialling the use of small, ruggedised, head-mounted computers for remote inspections of their oil and gas installations, with considerable success and some surprising benefits."

Even without the health, safety and travel restrictions imposed by Covid, these site inspections are challenging enough; they often require highly skilled technicians to operate in inclement conditions, in far-flung locations and with minimal communications facilities.

OUR CLIENT CAN NOW DEPLOY A
SINGLE ENGINEER, EQUIPPED WITH A
SPECIALIST HEADSET WITH EXTENDED
BATTERY LIFE AND VOICE CONTROL

Until recently, inspectors had to print off a form and walk around a site with a pencil, pad and clipboard – often while tethered to an installation by a safety harness, working in torrential rain or sandstorms. They logged their observations and typed them into Excel when they returned to the office, before emailing the report to their command centre.

Using smart wearable devices, our client can now deploy a single engineer, equipped with a specialist headset with extended battery life and voice control. It's a fully rugged head-mounted unit, which optionally snaps onto safety helmets and can be easily used with safety glasses or corrective eyewear.



It can be used in wet, dusty, hot, dangerous and loud industrial environments, and with a high-resolution micro-display, it fits just below line of sight and views like a 7" tablet. It's a dashboard that's there when you need it and out of your way when you don't. It allows for a completely hands-free voice-controlled experience, with no scrolling, swiping, or tapping – just simple voice commands.

THE HEADSETS HAVE INBUILT STORAGE, SO THE ENGINEER CAN RUN THE INSPECTION WITHOUT BEING CONNECTED TO THE INTERNET

Once on site, an inspector simply dons the headset and states the application they wish to use to open a job reference, and then starts filling out a form using Voice-to-Text. The clever part here is that, in the absence of a mobile signal or Wi-Fi, these headsets have inbuilt storage, so the engineer can run the inspection without being connected to the internet, and when they return to the command centre or a wireless area, the inspection report can be automatically uploaded.

The device can be connected to Wi-Fi, even in an unsafe zone, as the unit is intrinsically safe (EX rated). The units can even be connected to mobile Wi-Fi hotspots mounted on vehicles and a USB dongle can be attached to the headset to give 3G coverage if there is no other signal available.





Since V12's clients work internationally, in certain countries there may be language barriers for first line workers, so it's a real benefit that the device supports French, Spanish, Italian and many other languages allowing an inspector to work in their native tongue.

A TUTOR CAN BE ANYWHERE, TALKING THROUGH DOCUMENTATION AND VIEWING THE SCENARIO IN REAL-TIME

With the ability for two-way audio-visual communication between the site and command centre in a non-intrinsically safe setting, inspectors do not necessarily need to be as skilled since they can have someone more experienced remotely guiding them through the checking processes. This also makes it an excellent training aid – a tutor can be anywhere, talking through documentation and viewing the scenario in real-time, through the headset eyepiece.



A centrally-located tutor can access multiple pupils in different locations. For example, you might be a principal teacher, connected to pupils on different continents, in different countries and at different sites whereas previously, this would have required the physical presence of a skilled engineer at each.

Although wearable technology has been around for a little while, the specialist integration with Microsoft has been accelerated by the adverse consequences of the pandemic, where travel is not possible and specialist staff are in high demand.

Using these headsets in conjunction with Microsoft 365, V12's client has found instant productivity gains by improving the ability to rapidly and accurately process actionable information.

The headsets can connect field workers with experts and provide voice-activated access to uploaded manuals and schematics, all of which have enabled a significant increase in First Time Fix rates.

Charles Rickett concludes:

"We look forward to supporting our client in rolling out the trial across their sites in the coming months. In addition to V12's range of simple, intuitive and cost-effective voice solutions, we can create bespoke communications solutions for every industry, in any environment. Our services have been deployed in the UK and beyond, across a number of sectors including Energy, Technology, Retail and Telecoms.

"If you have an unusual communications conundrum, or are looking at something a little different, we'd love to hear from you."

