

World Leading Pharma Facility Takes Control of Operations & Transforms Alarm Response using the PlantQuest Platform

A commitment to helping global Life Science facilities run safer, more productive facilities underpins every PlantQuest deployment. Be it saving workers 1,000s of hours per year locating assets & navigating their site, reducing alarm response times, or ensuring workers have the all the information they need to make smart efficient decisions. It was no different when PlantQuest deployed its EHS



module within one of Europe's leading pharmaceutical facilities.

Since its deployment, the facility has reduced their average alarm response time, reduced the amount of downtime related to evacuations, and streamlined routine workflows, delivering an ROI in under one year. All of this was achieved with zero impacts on the overall facility operations.

Key Partnership Wins



Reduced Alarm Response times by on average 50% to 75%.



Installation of no new telecom infrastructure or hardware.



Responders instantly location of all alarms & can navigate to them with confidence.



Client took control of tacit knowledge protecting from contractor & staff turnover.



A reduction in the amount of downtime due to evacuations.



An ROI for the client delivered within one year of deployment.





About the Clients Facility

The brownfield facility was built in 1992 and is one of Europe's most extensive solid-dose pharmaceutical manufacturing facilities. With a workforce of over 800, the facility runs a 24-hour operation and comprises of 1,500 rooms, 12 buildings, and four levels.

The facility has embraced digital transformation, placing digital technologies at the forefront of operations helping their workforce run a safer, more productive operation. The client and its 100,000+ sq. meters facility has led the way in its respective industry through these initiatives.

Since the initial deployment of PlantQuest and its EHS Module in 2021, the partnership between PlantQuest and the client has only grown stronger. Given the increased operational efficiency and facility safety, the facility seeks to utilise the PlantQuest platform across additional workflows. Whilst the PlantQuest technology is set to be deployed within many of the clients facilities across Europe and the USA in 2023, leading into 2024.

The Challenge

Given the size and complexity of Life Science facilities, locating and navigating to alarms in the most efficient manner possible can be a tedious process. Pharma manufacturing units are running at a greater capacity than ever, facing a 24/7 operation throughput. "With a downtime costing a unit up to \$20,000 a minute, a manufacturer cannot afford a disruption in the production processes" (Kruglyak, 2021). Let's break that down. \$20,000 is \$1.2M per hour. Staggering!

Through the experience of the site-based emergency response team (ERT), the client discovered that its workflow surrounding the location of its 5,500 fire related input devices could be streamlined and improved, helping to further reduce emergency response times. In turn, fewer evacuations and less downtime, and a safer working environment for all. Prior to adopting PlantQuest, the facilities response team used to have to sort through 300 fire drawings to locate an alarm, with responders not knowing the safest and quickest route to its location.



The client required PlantQuest to provide a Google Maps-like solution allowing responders to locate and navigate to any of its 5,500 fire detection and 1,500 EHS assets spread across the 1,700 rooms, from any location within the facility. With the client operating 24 hours a day operation, and downtimes potentially costing millions of euros per hour, it was vital that implementing the PlantQuest solution would have no impact on ongoing site activities. Furthermore, given the complexity and structural nature of the client's 32-year-old brownfield facility, Wi-Fi and GPS connectivity availability across the plant was at a premium. Therefore, it was paramount that the tablet function of the solution delivered would operate with full functionality within the areas of no connectivity.

How PlantQuest Helped

PlantQuest surpassed the clients expectations by delivering a Google Maps-like solution deployed on desktop and tablet. Digitising over 300 fire layout drawings, the facilities ERT can now seamlessly locate any alarm across their facility in 50% to 75% less time. Aiding this is PlantQuest's ability to allow responders to locate and navigate to any alarm across the facility, regardless of location and the tablet's network connectivity. Commissioned with as little as two days on-site, zero interruption was made to the daily operations of the facility during implementation and commissioning.

PlantQuest in Action

Operational efficiency has never been more critical for the clients facility, especially given their commitment to manufacturing critical pharmaceuticals, including a Covid-19 pill for the world stage. On top of this, operational efficiency significantly impacts the financial performance of any facility, especially given the costs involved in an evacuation and production downtime.

When the client first implemented PlantQuest, its priority was to aid its ERT in reducing alarm response times. With this being achieved, PlantQuest has transformed the facility alarm response training ensuring first responders can navigate and respond confidently. The facility has seen efficiency gains across many other workflows through the PlantQuest platform. PlantQuest has enabled the EHS team to take control of their sites assets by instantly locating all 1,400 pieces of EHS equipment throughout the facility, rather than relying solely on contractors being able to do so. The site encourages contractors working across a range of workstreams to use the PlantQuest platform when locating assets and rooms, helping to reduce the time spend on site and ensuring they navigate the facility in the most efficient and safest manner possible.



Looking to the Future

Optimisation and efficiency never end; more can always be done. While the facilities' implementation of PlantQuest has improved on this even further, their sights are fixed on the next stage of safety and optimisation. This includes a direct integration of PlantQuest with the facilities' Fire and Lone Worker (Man Down) systems helping to reduce response times even further and increasing the facilities' safety. Furthermore, the facility looks to optimise worker onboarding by removing the need for new hires and contractors to learn the site's geography. By exposing the PlantQuest platform to all workers and installing it on kiosk screens throughout the facility, new and current workers will seamlessly navigate the facility as safely and efficiently as possible. In turn, a more productive working environment.

Outside of the 100,000+ sq. meter Irish facility, the client is integrating the PlantQuest technology into their mobile asset tracking technology stack using the PlantQuest Industry 4.0 Mapping SDK (Software Development Kit). This will aid the organisation in improving its operational efficiency globally in facilities throughout Europe and the USA.

PlantQuest is dedicated to developing and building on our current relationship with all our customers, both locally and globally, in accordance with their long-term strategic digital transformation goals. The primary indicator of our success is ultimately our clients' continued success and advancements. We are grateful and humbled to work with the world's leading life science organisations across a portfolio of facilities and look forward to working together to help them further transform their operational efficiency.

