## Revolutionising maintenance with Mobile CMMS

Donal Bourke, Sales Director at maintenance and asset management software specialist PEMAC, explains how mobile Computerised Maintenance Management Systems (CMMS) are becoming a critical part of modern manufacturing.

he intersection of technology and traditional manufacturing practices through the integration of mobile Computerised Maintenance Management Systems (CMMS) applications heralds a new era of operational efficiency and productivity. This leap forward is not just a matter of adopting new tools; it represents a fundamental shift in how maintenance operations are conducted, offering a beacon for industries striving towards digital transformation.

Historically, maintenance operations have been bogged down by manual processes and paper-based systems that are prone to errors, inefficiencies, and delays. The shift to digital, initiated by the advent of CMMS, laid the groundwork for a more streamlined approach, automating workflows and centralising data. The subsequent evolution into CMMS mobile applications enabled maintenance teams to access critical information and perform tasks in real-time, directly from the plant floor or field.

The ripple effects of implementing CMMS mobile applications are profound. At the heart of its benefits is the empowerment of maintenance teams with instant access to data, such as work orders, asset information, and inventory levels, enabling informed decision-making and rapid response to issues. This real-time capability significantly reduces downtime and improves the reliability and longevity of critical assets.

Moreover, mobile CMMS applications facilitate a proactive maintenance strategy, shifting away from the reactive 'fix it when it breaks' approach to preventive and even predictive maintenance. Through features such as predictive maintenance alerts and scheduled inspections, maintenance teams can anticipate issues before they escalate, minimising unplanned downtime and extending the life of equipment. This strategic shift not only saves costs but also improves overall plant efficiency and productivity.

The adoption of mobile CMMS also plays a pivotal role in compliance and safety management. With stringent regulatory requirements across industries, having accessible, accurate, and up-to-date maintenance records and safety information is crucial. Mobile CMMS applications ensure that all maintenance activities, safety tasks and documentation are logged and can be easily retrieved for audits.

Implementing mobile CMMS, however, is not without its challenges. It necessitates a cultural shift within organisations, from top management down to the maintenance teams. Training and change management are essential to ensure that all stakeholders understand the benefits and are proficient in using the new mobile tools. Additionally, integration with existing enterprise systems should be considered to ensure seamless data flow and maximise the utility of real-time information and performance insights.

As we look towards the future, emerging technologies such as the Industrial Internet of Things, Artificial Intelligence, and Machine Learning promise to further enhance the capabilities of mobile CMMS, making predictive maintenance even more accurate and efficient. This ongoing evolution underscores the importance of flexibility and adaptability in maintenance strategies, ensuring that organisations can leverage new technologies as they emerge.

Recently, CMMS vendors have begun to develop advancements in mobile CMMS applications' offline functionality, allowing operations in low- or no-bandwidth areas. Verdantix, Buyer's Guide: Computerised



Maintenance Management Systems (2023), August 2023, research highlights this as a crucial differentiator, predicting it will become standard in five years. PEMAC's mobile application exemplifies this by allowing maintenance teams to download work for offline completion, synchronising and updating once a connection is re-established. This development highlights the innovative approaches being adopted to optimise maintenance operations and improve overall operational resilience and efficiency.

In essence, mobile CMMS applications are transforming manufacturing maintenance, driving efficiencies, enhancing strategic maintenance planning, and ensuring compliance and safety. This transformation is a testament to the power of digitalisation in the manufacturing sector, offering a glimpse into a future where technology and traditional manufacturing practices converge to create more resilient, efficient, and competitive businesses. As technology continues to advance, the role of mobile CMMS in manufacturing maintenance will only grow, solidifying its place as a critical component of modern manufacturing operations.

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