

Enhancing operational efficiency with digital maintenance

The healthcare sector is currently experiencing unparalleled pressure on its services – costs are rising as are the demands for enhanced performance. Deploying digital maintenance can help deliver on these needs and also bring down costs, explains John Dorward, Senior Design Partner - Healthcare at Trend.

The volume of building data available to estate managers continues to grow, resulting from ever-smarter building management systems. Sifting through that information and extracting its value can help the built environment work better. This is especially important in the healthcare sector, where system failures and unscheduled downtime can have significant ramifications.

Fortunately, extracting that value – quickly and efficiently – can be painless if you have the right tools. A modern data analytics solution can optimise maintenance procedures by continuously monitoring asset performance patterns to identify potential faults before malfunctions occur.

The old way of thinking

Standardising maintenance services can prove to be problematic as defining, measuring and comparing outcomes can be challenging. This is often embodied by conventional service contracts that are base service hours delivered on site. A switch to digital maintenance, using tools specifically built to support productivity, sustainability and transformation, can overcome these shortcomings by delivering four key benefits.

First, digital maintenance provides proactive fault detection using real-time analytics and a lifecycle management approach to building maintenance. This drives better outcomes by helping improve performance while reducing costs. Data from [The New Building Institute](#) indicates this can reduce energy use by 30–60% compared to reactive maintenance. Prioritising maintenance based on what needs to be fixed rather than by following a pre-defined schedule **has the potential to achieve double digit savings in operational efficiency**, according to Trend's experience with its clients.

Real-time building insights

Second, the insights generated by a fully implemented digital maintenance solution can help drive decision making based on real-time building insights, rather than around rigid, routine service patterns. This can significantly reduce the administrative load.

Rising energy bills and the global drive to reduce carbon emissions has pushed energy savings to become an agenda-critical priority. Here is where digital maintenance offers a third benefit. By improving efficiency and identifying issues, it can help deliver energy savings that provide a valuable bottom line bonus for healthcare managers. Based on several energy optimisation pilot projects, Trend has found that typical customers can realise double-digit energy savings. Results vary by installation, but this remains indicative of a significant potential saving.

Finally, by being able to monitor the parameters that define occupant comfort, it is possible to help maintain optimal environmental conditions. This not only helps improve the occupant experience and productivity, it can also significantly reduce the number of reactive service calls.

If that's not impressive enough, Trend's experience with its clients shows that digital maintenance identifies issues 100 days earlier, on average, than conventional maintenance-based approaches.



Bringing it all together

Another advantage to digital maintenance is the use of secure cloud-based dashboards, which enable an enhanced level of control and wide-ranging access for all stakeholders. The dashboards can control and monitor a range of values and operations including energy consumption, occupant comfort levels and maintenance issues, all benchmarked against agreed KPIs.

Specifics, such as the occupancy level within a certain zone, can be monitored in real time, along with air quality, all measured against historic performance so that building managers can track trends, identify areas of poor performance and deliver the best possible working environment. For zones with historically poor performance, it is also possible to investigate the causes and focus on the maintenance activities that will deliver the maximum impact.

A further important insight, especially given the focus on the carbon footprint of buildings, is the ability to distinguish areas that are having the largest impact on energy consumption and to then tally this data against service cases affecting energy performance.

The need for a proven solution

Clearly, for any digital maintenance system to deliver the best possible results it needs to provide stakeholders with the ability to access the best possible service activity data. Laying out the facts in a transparent way allows users to prioritise their activities to match their KPIs.

To provide this level of operability, building managers and commercial real estate owners need to choose a partner that has the range, reach, engineering excellence and proven reputation for delivering best-in-class implementation with a clear upgrade path. With healthcare providers under increasing pressure to perform, but with their budgets under scrutiny, digital maintenance can deliver key cost-saving insights while also improving overall building performance.

About Trend Control Systems:

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