The value of AI and Business Intelligence in the FM Industry

Using AI-based predictive maintenance to reduce human intervention

Throughout the Facilities Management industry, organisations are facing higher customer expectations and growing competition. To combat this, many businesses are now increasingly focused on making smart data-driven decisions, to provide an operational advantage over their rivals.

The Covid-19 pandemic means that many companies are navigating challenges such as social distancing, remote teams and potentially furloughed staff. This makes data a critical resource to allow sites to keep running – and asset management systems that make use of smart and sustainable technology play an important part in day-to-day operations.

As Computer Aided Facilities Management (CAFM) systems evolve to keep up with the requirements of the "new world" of work, it is becoming easier to:

- Accurately capture data
- Analyse and interpret data
- Use data to provide insight for optimum decision making

Traditional dashboards and Key Performance Indicators (KPIs) can help with this; however, the content typically falls behind, meaning that they look backwards rather than forwards.

As a result, the Facilities Management sector is looking at how to use data to make automated decisions with Artificial Intelligence (AI). However, AI has often been received poorly in the past, because the effort and investment needed to deliver the desired outcomes has been viewed as unacceptably high.

Decrease human intervention through AI-based monitoring

By combining remote monitoring with AI, Facilities Management organisations can better identify the most critical alerts amongst the hundreds generated every day from important assets.

This enables companies in the industry to move from inefficient preventive maintenance towards predictive maintenance. The most common way of achieving this comes through the integration of:

- Supervisory Control & Data Acquisition (SCADA) systems
- Building Management Systems (BMS)
- Recent developments in Internet of Things (IoT) devices

Remote monitoring systems can pass information to the asset management software, meaning that AI can be used to identify the optimum time to act.

Through effective use of automated scheduling software, company work orders can be automatically created, scheduled and dispatched to the most suitable operative or subcontractor. This means that issues with assets can be dealt with before they cause the equipment to break or significantly under-perform – resulting in:

- Less reactive work
- Increased asset uptime
- Significantly reduced costs
- Improved customer satisfaction

This data also allows AI to offer improved insight into the root causes of asset failure. This can be helpful for Capital Asset Investment Planning and Estate Management, allowing Facilities Management companies to better forecast cost, depreciation and exit plans.

Improve first-time fix rates throughout the organisation

Facilities Management companies can improve their first-time fix rate when engineers attending asset faults are prepared with the necessary prerequisites prior to the visit. This improvement is achieved when the history, documentation and photographs of work on assets is available to the engineer, so they can plan for what tools or parts are required.

When this happens, it helps Facilities Management organisations to:

- Increase first-time fix rate
- Meet their Service-Level Agreements
- Avoid unnecessary penalties

The optimum Enterprise Asset Management (EAM) systems can allow businesses to target this information, using mobile apps, to make it readily available to maintenance teams in the field.

With these kinds of solutions, companies can leverage Artificial and Business Intelligence tools to direct the most important data and insights directly to the people who can make best use of it.

This enables Facilities Management companies to capitalise on smart data – and tackle the coming months with confidence.

About Peacock Engineering

Peacock Engineering Ltd was established to deliver a diverse range of Asset and Service Management solutions to asset intensive industries.

Our consulting team is made up of long standing IBM Maximo professionals, each with an average of 12 years' experience in the product and who, together, have amassed over 400 man-years of Maximo systems implementation experience.

From this knowledge and practical application, a proven and trusted process-driven methodology has emerged. With the methodology in place, the ongoing challenge is to improve delivery efficiency and provide affordable solutions, using a mix of services and systems provisioning models, to meet a broad range of industry verticals.