Working Backwards Deliverables

Press Release

The Museum of London introduces predictive maintenance to better preserve art

With the introduction of the "PredictiveBMS" system, failures in the Museum of London's air handling units can now be predicted, helping the museum to preserve its artworks.

London, 07/2022

So far, the Museum of London (MoL) has not been able to predict failures and defects in its Air Handling Units (AHUs). The AHUs ensure that the environmental conditions in the museum remain within the set parameters that provide an optimal indoor climate for the artworks and protect them from, for example, temperature fluctuations and humidity-related damage. However, AHU failures occur several times per week and can cause damage to the museum's artworks if they fail for an extended period of time. To improve workflow and detect damage in advance, the new application "PredictiveBMS" was developed for the AHU maintenance at MoL.

Building on the continuously collected data from various sensors in the AHUs, the Museum of London has taken the opportunity to further develop the smart buildings applications. predictiveBMS is based on machine learning and artificial intelligence and provides the engineers of the MoL with an opportunity to be proactive, as it is now possible to predict failures and outages of the AHUs. The PredictiveBMS system provides engineers with a web dashboard that displays all potential failures and sends alerts for faults that might occur. The solution aims to display all failures that can be predicted in advance and thus avoided through predictive maintenance to reduce AHU downtime.

According to the director of engineering and facility management, "The entire team is excited about the newly implemented solution as it helps to reduce the number of disruptions that occur, improves daily workflows and is a building block of our smart building."

The application provides engineers with a convenient solution to be quickly informed about possible AHU failures in real time. In the dashboard that comes with PredictiveBMS, engineers are able to review notifications in live time as well as past notifications of AHU failures in detail. For on the go, PredictiveBMS offers an app that can be used from anywhere and informs about potential outages through push notifications.

Peter, an engineer at the Museum of London, pointed out, "Before using PredictiveBMS, maintaining the museum's AHUs was very stressful because failures could occur without warning and had to be fixed immediately. Now it's much easier because we can predict when a unit is about to fail and take early action."

PredictiveBMS provides a total analysis-response system that ensures the right environmental conditions at the Museum of London by minimizing unplanned downtime. Learn more about the application at https://www.museumoflondon.org.uk/museum-london.