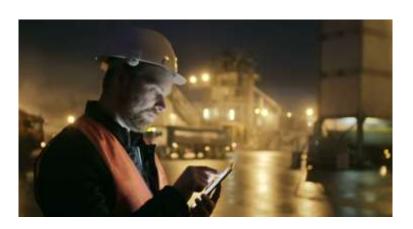


UNLEASH INSIGHTS FROM ASSET & PROCESS DATA FOR IMPROVED ASSET PERFORMANCE

White Paper



Abstract

Are your critical assets performing their best? Is unplanned downtime draining the bottom line? Has the organization been chasing asset and process efficiency improvements? Or burning profits with unnecessary maintenance? Stop reacting. Start predicting. Re-examine traditional approaches to asset performance management (APM).

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Unleash Insights from Production Assets and Process Data for Improved Asset Performance



Smarter APM – While most plants operate efficiently, there are opportunities for improvement, especially when production is asset-intensive or "sold out", and where production is capacity-constrained or margin improvements aren't optional.

Traditional APM

Are your critical assets performing their best? Is unplanned downtime draining the bottom line? Has the organization been chasing asset and process efficiency improvements? Or burning profits with unnecessary maintenance? Stop reacting. Start predicting. Re-examine traditional approaches to asset performance management (APM).

We all recognize that asset availability and performance is essential for better productivity, balanced against controlling maintenance costs and planned downtime. And there is the real challenge – what is the 'right balance? Understanding your strategy is the first step. Having an Asset Performance Management (APM) strategy is the right direction when compared to more reactive approaches of "run to fail".

Traditional APM has focused on asset risk, reliability and maintenance cost reductions - largely based on conventional methods of asset monitoring. Implementation can be considered complex and expensive and, as a result, are typically deployed only on capital intensive assets. Keeping a traditional APM system up to date and secure requires a significant investment in both IT and operational expertise,

and often involves multiple vendors. While these systems generate valuable data, they are often 'disconnected' and don't help plant managers make confident decisions about how to operate.

Smarter APM

While most plants operate efficiently, there are opportunities for improvement, especially when production is assetintensive or "sold out", and where production is capacity-constrained or margin improvements aren't optional. Consider these questions:

- How easy is it to understand the economic impact of sub-optimal equipment performance?
- Is it better to reduce throughput in order to extend the life of critical equipment? Or should the equipment be stressed to maximize current production demands?
- Is there excessive inspection on certain pieces of equipment that can be reduced to save maintenance budget?

 Can the potential maintenance cost savings be offset by the expected (statistical) losses of possible unplanned downtime?

Enabling cyber secure connectivity to a wider set of assets + continuously monitoring both asset health and process performance + combining predictive analytics with industry expertise – these comprise smarter APM and assure confident decision making. A digitally transformed and connected APM strategy improves production certainty and outcomes by eliminating silos and effectively closes the loop between operations and maintenance.

Increasing uptime requires asset data, process data and operational settings to be brought together in a connected, secure environment where asset experts and process experts can use analytics to find better ways to eliminate unplanned downtime and optimize equipment maintenance.



Process and equipment are inseparable.

Reliability of an asset is dependent on understanding how a process is being operated.

Process Knowledge and Equipment Expertise

Process and equipment are inseparable.
Equipment failures can't be completely analyzed, predicted or reduced by just looking at asset measurement data. Reliability of an asset is dependent on understanding how a process is being operated and if that asset is being optimally maintained. After all, operation and

maintenance-induced equipment failures account for the majority of unplanned downtime.

The best performance and equipment effectiveness comes from combining both process knowledge with equipment expertise in a collaborative and connected software ecosystem.

Essentials of a Connected Asset Performance Strategy

There are several essentials to keep in mind when planning a connected asset performance initiative:

- APM is rapidly undergoing a digital transformation: Traditional APM capabilities need large capital investment projects, many handcrafted interfaces, duplicated data sets, and are often accompanied by complex system administration, upgrades, and lots of end-user training. This combination can be deterring and strain plant resources.
- Leverage the simplicity and speed of connected software and a vendor with deep industry expertise to accelerate APM deployment: Deployment time is measured in days or weeks instead of months or years. Consider an approach that blends secure connectivity, advanced analytics and automated software configuration for a solution that is as easy to live with as it is to sign up for and get running.
- Cyber security is not optional: Cyber security threats are pervasive and evergrowing. There can be no exceptions every asset's performance, operation or automation initiative must involve comprehensive and vigilant security methods.
- People are your most important investment: The best APM software in the world can only guide you in what to



The following comprise smarter APM and assure confident decision making:

- Enabling cyber secure connectivity to a wider set of assets
- Continuously monitoring both asset health and process performance
- Combining predictive analytics with industry expertise

do. Improvements don't happen without supervisors, engineers and operators trained to maintain and operate the equipment. Our next generation of process industry professionals will manage plants very differently, leveraging connected software in new ways that improve operations beyond what could be accomplished until now.

In Summary

Avoid critical asset failure, unplanned shutdowns, and improve bottom line results by implementing a connected asset performance management strategy. Plant personnel can now more effectively collaborate to monitor and proactively manage production. Deploying a smart and connected APM initiative, simplifies implementation, eliminates silos and effectively closes the loop for optimizing operations and maintenance.



Honeywell Connected Plant leverages the simplicity and speed of connected software and our deep industry expertise to accelerate APM deployment.

About Honeywell Connected Plant

At Honeywell, we are helping our industrial customers maximize the efficiency of their operations.

Honeywell Connected Plant is turning people, asset and process data into actionable insight to help industrial customers increase throughput, reliability, competency and safety. We are doing this through our unmatched domain expertise and advanced analytics capabilities, under the protection of our sophisticated industrial cyber security solutions.

For asset performance management, we believe that the best performance and equipment effectiveness comes from combining process knowledge with the industry's premier equipment experts in a collaborative and connected software ecosystem. Honeywell Connected Plant is helping customers realize this transformation with its deep domain knowledge, and a partner ecosystem of industry expertise and customer collaboration.

Honeywell Connected Plant leverages the simplicity and speed of connected software and our deep industry expertise to accelerate APM deployment.

We have invested significantly in cyber security solutions that conform to—or exceed—the latest industry standards. Our approach blends secure connectivity, advanced analytics, and automated software configuration for a solution that is as easy to live with as it is to sign up for and get running.

Honeywell Connected Plant. Connectivity. Analytics. Knowledge. Results. That's the power of connected.

For More Information

Learn more about how Honeywell can improve the performance of your operations, visit www.honeywellprocess.com/iiot or contact your Honeywell Account Manager, Distributor or System Integrator.

Honeywell Process Solutions

1250 West Sam Houston Parkway South Houston, TX 77042

Honeywell House, Skimped Hill Lane Bracknell, Berkshire, England RG12 1EB UK

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