



How can AI assist correct decision making in the process of asset maintenance?

A closer look at the benefits of utilizing AI

by Peter Thede
For VENZO_core



Setting the scene...

In an increasingly interconnected world, the Internet of Things (IoT) enables us to interact with business assets – and these assets to interact with one another. By collecting and analyzing the data from them, while also adding a layer of AI, a new world of opportunities opens regarding maintenance and specifically the prediction of maintenance.

Traditionally the process of planning and executing maintenance of assets has been very manual and human-orientated.

However, now AI into the equation, we can already see a movement from the traditional manual, and often subjective, decisions made by humans into more qualified and computer-supported decision-making with use of big data Analytics. For years we have been collecting the ‘running hours’ of our machinery and technical equipment, but the decision of “When?” and “How?” to make the maintenance is still very often based on subjective decision made by qualified personnel.

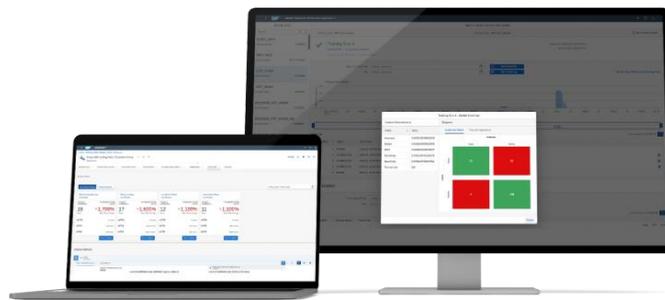
WHAT IS IoT?

The Internet of Things includes any “thing” – that can be connected to an Internet network, e.g. a printer. IoT has come to mean connected things that are equipped with sensors, software, and other technologies that allow them to transmit and receive data. (SAP.com)

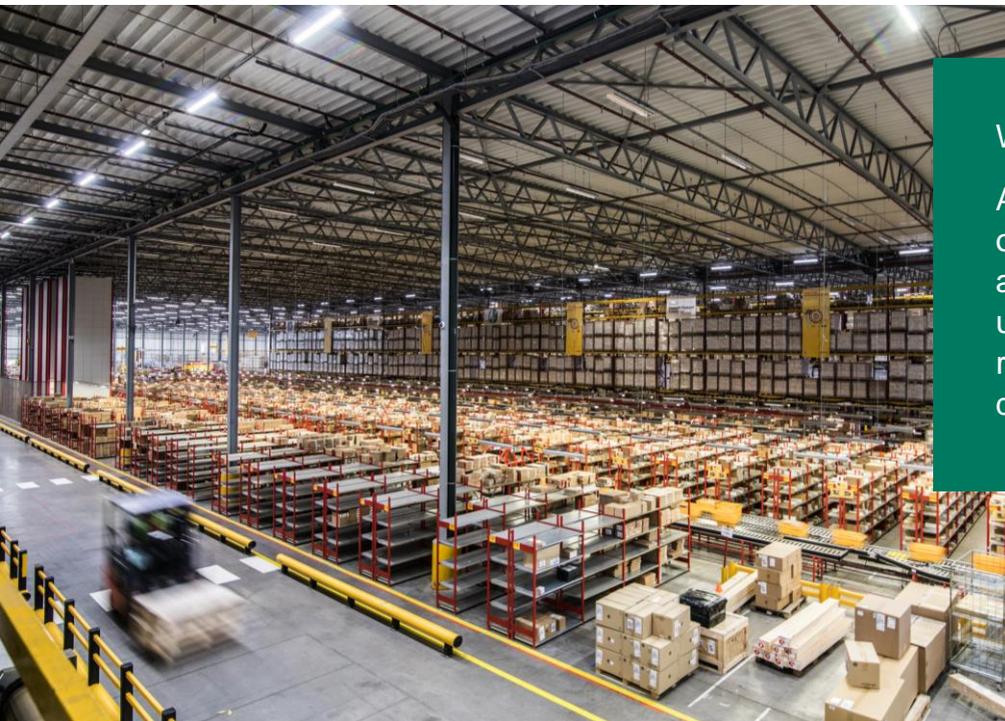


Next level decision support

With today's technological advancements we can shift from simply using 'running hours' as our only tool for decision support into performing predictive maintenance and service checks on time by using AI. The strength from AI is additionally be benefits of error finding and Root Cause Analysis that will be dramatically improved since the decision workflow can be filled automatically from the IoT (Internet of Things) Sensors. This data can immediately be used in a real time environment with dynamic decisions as a result.



Example Dashboard (SAP.com)



WHAT IS AI?

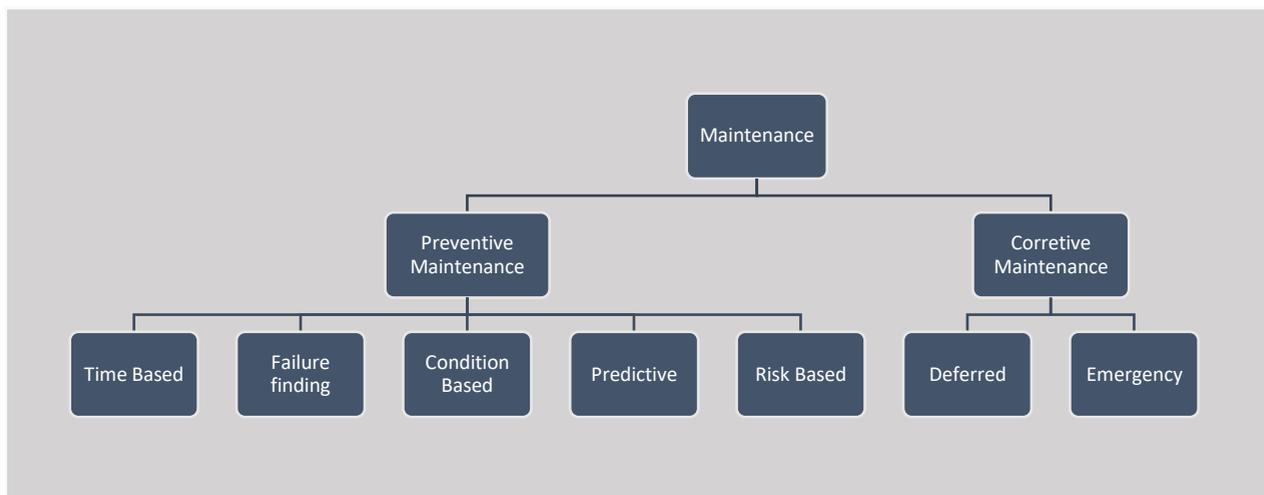
Artificial intelligence (AI) is the ability of a computer or a robot controlled by a computer to perform tasks that are usually reserved for humans as they require human intelligence and discernment. (Britannica.com)

What kind of maintenance approaches exist?

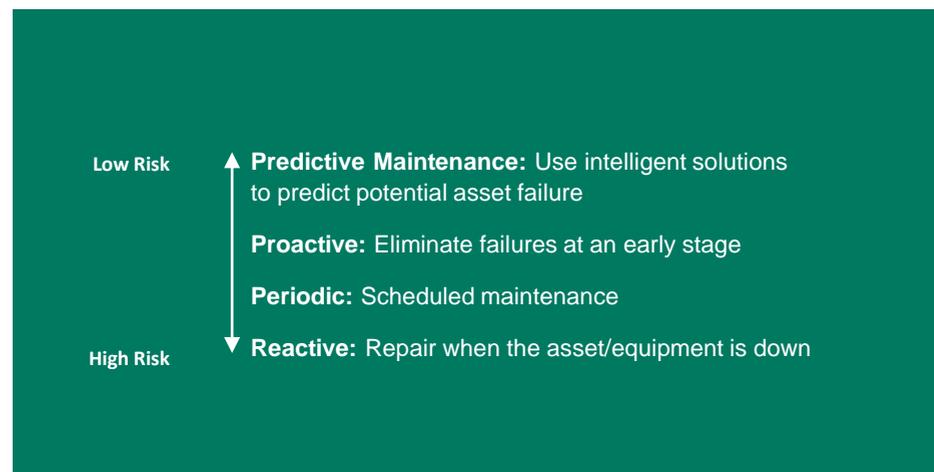
There are 9 Types of Maintenance split between Preventive Maintenance and Corrective Maintenance.

Preventive Maintenance is done before a failure occurs and consists of maintenance types like: Time Based Maintenance, Failure Finding Maintenance, Risk Based Maintenance, Condition Based Maintenance and Predictive Maintenance.

Corrective maintenance is done after a failure has occurred either as Deferred Corrective Maintenance or as Emergency Maintenance.



Business Risk
based on maintenance
method

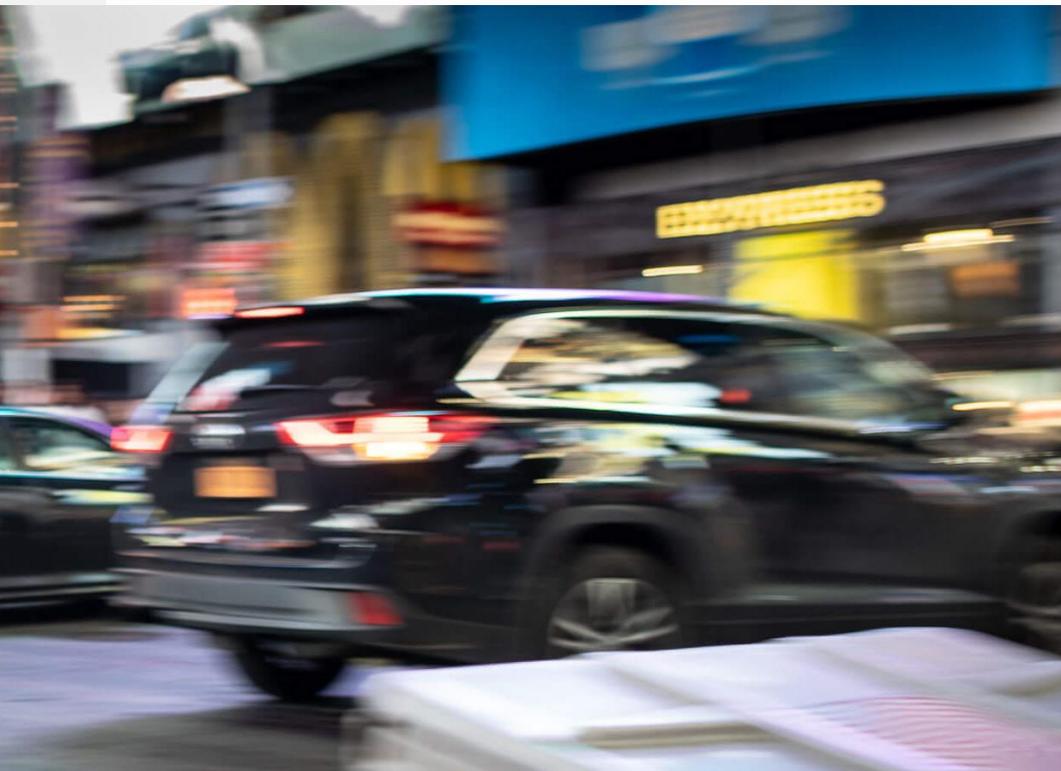


A closer look at the benefits of utilizing AI

With predictive maintenance supported by SAP AI we will also see a greater attention to avoid breakdowns to the production environment by setting the service intervals based on computer-based calculations. The result are directly reflected at the bottom line for any business, since breakdowns tend to be very costly for the business both measured in time and money spent to recover from the disasters.

To enhance services and applications that automate and optimize corporate processes and enrich customer experience across the intelligent SAP suite. Businesses can now take their Asset Process Automation to the Next Level by using SAP AI Business Services. They are provided as re-usable services for SAP Business Technology Platform customers.

(sap.com/btp).



Let's exchange perspectives!

What's in it...

What's in it for organizations? What are the efforts and the cost associated with moving towards AI utilization, more intelligent workflows and predictive maintenance?

Process optimization by AI is expected to lead to higher productivity, demonstrated in better quality to a much lower cost.

Reach out

Let us know if you are interested in an informal exchange of experience with asset maintenance for SAP, or if you want to know more about what you can do to optimize your business and what kind of current offers are available from SAP mixed with the best of AI and predictive maintenance.

[Click here to reach us](#)

"We believe that the implementation of AI into the decision making process helps organizations to be accurate and consistent which becomes increasingly important in today's high-paced markets.

Additionally AI can analyze large datasets within seconds and without errors, freeing up your team to focus on other important tasks"

Golrang Almgren-Jensen,
Managing Director in VENZO_core.



VENZO_Insights by our experts



Peter Thede
Manager
VENZO_core

About Us

VENZO_core is a member of the VENZO family.

In VENZO_core we specialize in optimizing business processes and in SAP S/4HANA.

We blend SAP best practices with human centric values and agile principles. We want to be the ideal partner in our client's business system transformation journeys.

Contact us by mail or reach out on LinkedIn to talk about business transformation journeys related to SAP, ERP and Supply Chain Management.

