AMA
Asset Management Advocates

SAP APM
Asset Performance Management

At an Oil Well Drilling Contractor

Case Study

SAP APM

At an Oil Well Drilling Contractor

Objective

APM initiatives strive to make faster, more accurate maintenance decisions. By utilizing multiple data sources (streaming data from IoT sensors and S/4 including financial information), SAP APM can improve efficiency by integrating technical information, asset history, maintenance strategies, and financial data. For AMA's oil well drilling contractor, we focused on these priorities:

- To provide increased visibility to current maintenance practices
- To alert the business when maintenance is not being done to the scope or on time
- To account for operating context data when making maintenance decisions
- To begin the transition to condition-based maintenance

Approach

- Analyze information in S/4 and other available data sources
- Outline what raw data and what calculations are required for analysis
- Calculate and store necessary values in the equipment record
- Set up APM tenants
- Build local indicators to accept data and sync equipment to SAP IoT
- Use the rules engine to calculate thresholds based on existing data and goals
- Develop rules to evaluate thresholds and live data, which alert when out of spec
- Create reports in SAP DataSphere to combine operational context data with financial data

Solution

Generate alerts within SAP APM signaling equipment that exceeds thresholds. The thresholds are:

1. Preventive work order exceeds or falls below forecasted cost by 15%
2. Preventive work order completed early or late from planned date by 15%
3. Corrective notification with "priority one" created
4. General work order with >$5000 planned cost created
5. Corrective work order with >$5000 planned cost created

End Result

- Enhanced visibility and insight into how maintenance is performed
- SAP APM became a data governance mechanism as it highlighted master data errors with the forecasted preventive maintenance costs
- Preventive and corrective maintenance are being performed and their impacts to the equipment
- Deeper insights into how operating context data affects equipment
- By breaking the asset's data down into smaller more granular chunks, it became possible to monitor the asset on a "cost-per-day" basis and be alerted when it began trending outside of allowable thresholds

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