



PRODUCT DATASHEET

AVEVA Asset Performance Management Assessment Service Process and Requirements

Measure Performance vs Business Objectives

The Asset Performance Management Assessment offered by AVEVA enables our customers to gain a clear understanding of the current status of their business and maintenance maturity, including where improvement opportunities will provide the quickest financial return. The APM Assessment involves a comprehensive action plan to execute against a defined strategy. This internal document walks through the objectives of an APM Assessment, the preparation required prior to booking the assessment, execution, people involved, duration, client deliverables, costs to the customer and sample APM Assessment questions and benchmarks.

Objectives

- Provide the client with full insight of the relative strengths and improvement potentials within the field of Asset Management
- Draft a prioritization plan in order to realize the improvements in a timeframe of one to three years
- Create a first rough cut estimate of the investment required to achieve the improvement potentials
- Provide a specific risk profile and overview of topics which need attention during any improvement initiative – typically related to the organization, processes and (IT) systems

Preparation

At minimum, the following information about the customer is required:

- Market sector
- Type of plant/type of production process
- Single / multi-site
- Organization chart
- Current performance levels / main pains (which KPI's are not met and where do they struggle most to get it fixed)
- Information on what they have already done/ tried to get it resolved
- Key metrics which they use for defining plant performance and insight in current situation, history and trends (or have it available when we go on site)
- Problem owner – who is tasked to resolve the problem
- Stakeholder – who is keen to have this resolved
- Key staff involved

Execution

- During the site visit, we request access to the following information and people:
 1. Asset Master Data Management
 2. Maintenance Objectives
 3. Maintenance Strategies
 4. Planning & Preparation
 5. Workflow Management
 6. Inventory & Procurement
 7. Monitoring & KPI's
 8. Cost Management & Value Realization
 9. Structural Failure Analysis
 10. Maintenance Organization
 11. Skill & Knowledge Management
 12. Sourcing Strategy
 13. Continuous Improvement & Audit
 14. IT / IT systems
- Key information to be made available to AVEVA assessment team for analysis (subject to NDA)
- AVEVA assessment team will conduct a plant tour of typically 4-8 hours (safety briefing required, PPE to be provided by the client)
- The typical agenda for the APM Assessment includes kick-off, planning meetings, review meetings, final review meeting, draft report review, final presentation and close



People Involved

We typically engage with and schedule interviews (1.5 – 2 hours per individual) with the following key staff during the time onsite:

- Operations / Plant manager
- Maintenance Manager
- Reliability Engineer / person responsible for Preventive data
- IT Systems manager
- Supply chain / Procurement/technical buyer
- Planner/ Scheduler
- Inventory/Warehouse Manager
- Quality Manager
- Safety Manager
- Sr. Technician Mechanic / Sr. Technician Electric / Sr. Technician Automation
- Project Engineering Manager

- Finance Manager/Plant Controller
- HR Manager

The APM Assessment is typically planned between five to eight weeks prior to the actual visit and at least three weeks lead time for planning prior to the onsite assessment is required

Client Deliverables

- Concise overview (PowerPoint) of the current state; summarized findings, high level industry benchmarks and contour in the spider web
- (Optional) An asset condition hotspot overview; a pictured high level visual impression of notified “Asset Management significant spots” across the plant (PowerPoint).
- High level future state report with recommended actions and associated timing and effort needed (max 18 pages) (PowerPoint)
- Close-out meeting presentation

APM Assessment Key Questions

- Are you able to plan maintenance spend ahead?
 - Minimal 70-80% of your budget should be predictable
- Do you regularly experience deviations on your budget?
 - Spend compliancy should be 85-90%
- Do you know if your attention goes to the most critical assets in your plant? Do you have the right maintenance strategy in place for those assets?
 - On average 20-30% of assets are really critical (is this monitored in your system)?
- Do you have access to the right data to know that you are in control?
 - Proper use of IT systems and data integrity are key for future proof strategy.
- Are you able to prove 100% compliance?
- Do you know the value in \$/€ of your spare parts in stock?
 - In F&B 1.2-2% MRO Stock /replacement value is acceptable. Anything above that you should investigate.
- What is the value of spares in relation to the value of your production assets,
 - Benchmark numbers: Oil & Gas/Chemicals 0.9–1.2, F&B 1.3 -2%, Pharma 1.75-3.5%, Processing and other industries 2-3.5%
- Do you know if you have the right spares in stock for your critical assets?
- Do you register your technical losses (downtime and ontime)?

- Are you able to analyze failures and effects? Do you have the right data to do this?
 - How do you make sure that outcomes and mitigating actions from these analyses are logged into your system? Does this provide the right insights for prevention?
 - At least 85% of all failures/incidents should be categorized, checked and have for example failure codes.
- Have you separated the planned and preventative maintenance work from the unplanned maintenance? 70-80% of maintenance should be planned and of that 40-60% should be preventative at least. Preventative maintenance is always planned, but there is always other maintenance work that needs to be planned as well.
- Is your unplanned technical downtime no more than 3-8% and do you have controls in place to improve your performance?
- Are you in control on the planning of your maintenance work?
 - Minimal of 85% of planned work should be ready on time and 100% of the work effecting compliancy.
- Are you sure you have the right capacity and skills in place in your organization?
- How do you determine if your current workforce capacity is planned properly?
 - Are there clear work packages defined for e.g. 1st line operator maintenance, 2nd and 3rd line maintenance?
- Are you in control of your core work processes? Is it transparent who does what and are results and actions reported?
- Do you have a deliberate strategy for in and outsourcing?
- Are you able to evaluate the performance of your contractors (on delivery time, quality)?

For more information on AVEVA's APM Assessment offering, please visit sw.aveva.com/asset-performance/asset-strategy/apm-assessment