



## CASE STUDY

# ASSET IMPROVEMENT MAPPING IDENTIFIES €5,5 MIO SAVINGS FOR PHARMACEUTICAL PLANT

MaxGrip was asked to assess and scope the asset performance improvement potential for a global healthcare company. The American multinational has a solid foundation with a lifetime of over 150 years, an annual revenue of over US\$ 25 billion and operations in over 120 countries. Our consultants partnered with the pharmaceutical company to focus first on its Dutch production location.

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### CHALLENGE: REALIZE THE POTENTIAL

The asset management organization at the Dutch site understood and recognized its potential for maintenance and asset performance improvements. Site management explained that the availability of assets fluctuated, that there was a potential for improvement regarding risk versus maintenance cost and that the planning of maintenance could enhance its effectiveness by applying a regular schedule. Moreover, the healthcare company had a global maintenance excellence program in place. The site had aligned their people, processes and systems to meet the program's requirement. However, the organization faced the challenge of taking the next step: how to put the program into practice and realize the projected results.

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### APPROACH: ASSET IMPROVEMENT MAPPING

MaxGrip consultants performed an Asset Improvement Mapping (AIM) to assess the current state of the pharmaceutical site's asset management. The AIM is a detailed review of fourteen APM competences within the connected dimensions of maintenance execution, asset reliability and management. MaxGrip consultants did a plant walkdown, collected important data and information including data sets from the APM and EAM systems, the maintenance budget of the last five years and Overall Equipment Effectiveness (OEE) data. All data was validated through remote interviews with over twenty key stakeholders from different departments and at various organizational levels. With all the gathered data, information and insights our consultants then performed the improvement mapping based on our proven methodology.

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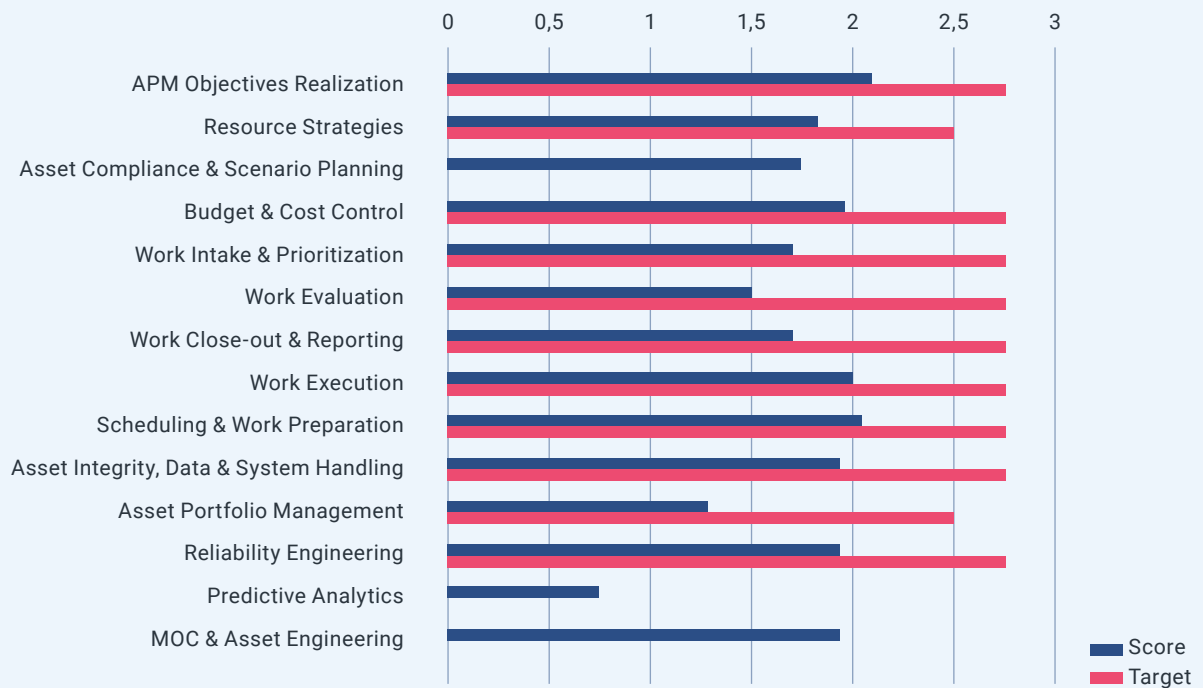
## RECOMMENDATIONS

What stood out overall was that the plant was already doing a good job.

Some highlights:

- High-level APM targets at organizational and site level are set
- The compliance rate is good
- Significant amount of maintenance work is potentially plannable (>80%)
- Regular and effective communications between Maintenance and Production
- Good focus on Root Cause Analysis
- Structured failure analysis is used

The AIM results in a tailor-made business case with mapped improvement potential and realistic roadmap. The site's scores for the fourteen APM competences are seen in the figure below. Overall, you can clearly discern that the production location scores well and has the potential to improve further:



MaxGrip shared a list of recommendations, including:

- Define the long-term asset plan
- Split Reliability Engineering (RE) and Maintenance Engineering (ME) roles and align to personal capabilities
- Improve planning/scheduling process and communication (gate keeping)
- Execute PM work according to plan by splitting preventive/planned maintenance (PM) and breakdown workforces
- Define company criticality criteria, perform a criticality ranking review and update
- Align PM program with output of criticality rankings

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## THE RESULTS

### **BUSINESS CASE WITH 25% REDUCTION OF DOWNTIME**

If all recommendations are deployed then the potential improvements and savings for the Dutch production locations are upwards of € 5,5 million with a Return on Investment of around nine months.

- **The plant will do the right maintenance on the right equipment with better insights in asset criticality and failure modes while improving risk management. This will result in shift towards more preventive maintenance. The ratio of PM/CM will increase from 44/56% to a 60/40% ratio.**
- **Unplanned downtime (due to technical issues) will decrease with 20-30% resulting in extra production volume.**
- **Workforce efficiency: Technicians will work ~10% more efficient on plannable work because of improved planning & scheduling**

The production location is satisfied with the results and excited about realizing the asset performance improvement potential. MaxGrip has started the next stage at this site, the Asset Improvement Deployment. This will transform the recommendations and roadmap into reality. Additionally, the project is extended to include six more sites around the world where MaxGrip is doing an Asset Improvement Mapping.



MaxGrip is a global Asset Performance Management consultancy that enables asset-intensive organizations to improve their bottom line by optimizing asset performance and accelerating digital transformation. Our experts work with leaders in a broad range of industries, including Oil & Gas, FMCG, Power Generation & Distribution, Water and Wastewater, Infrastructure and Metals and Mining.