Case Study

An On Key EAM implementation that unlocked efficiency and optimised operations



Pragma exceeded our expectations, and to our great satisfaction, this project surpassed its goals and represented an economic benefit of an ROI of 9.4 to 1.

Arturo Encinas Valenzuela, Executive Director

25.8%

Maintenance costs

Value add

Equipment availability increased by 26.6%

Maintenance costs were reduced by 25.8%

Overall productivity increased by 15.8%

on investment of 9.4 to 1

Penalties paid due to delays were reduced by 17.2%

The project's economic benefits represented a return

15.8%1

Key challenges

The client's limited asset management maturity resulted in inefficiencies and higher operational costs. Maintenance processes were reactive leading to increased downtime, higher maintenance costs, and lower equipment availability. The lack of a structured AM approach posed significant challenges due to the need to process bulk cargo in a timely and cost-efficient manner.

Penalties and delays due to equipment breakdowns, maintenance being delayed, and unoptimised maintenance strategies were having a negative impact on profitability as well as reputation.

There was no asset criticality plan in place for critical assets, resulting in some critical assets not receiving the necessary attention, and less critical ones being over-maintained.

A lack of effective performance monitoring tools and key performance indicators (KPIs) for tracking and analysing operations made for difficult data-driven and informed decisionmaking.

Our intervention

- Before the project was launched, an AMIP (Asset Management Improvement Planning) assessment gave insight into and understanding of the client's AM maturity. The results were benchmarked against international and local companies, and a clear action plan was developed based on the results.
- The AM objectives, policy and strategy were defined in a series of strategic workshops facilitated by the project's executive team.
- ► The project's first phase was successfully implementing the On Key EAM (enterprise asset management) system. On Key EAM enabled the implementation of the asset management objectives in line with the planned sustainable asset management journey.
- Customised Work Planning and Control processes were developed and implemented to facilitate tactical maintenance management throughout asset lifecycle phases.
- An asset criticality matrix was developed to apply specific maintenance strategies for critical assets.
- An OMM (optimum maintenance mix) process was implemented to analyse the current reactive maintenance state to one of reliability-centred maintenance where maintenance plans could be optimised.
- A series of dashboards and KPIs were developed using On Key Insights, our BI platform, to control and analyse performance levels.

Client background

- Cooper/T. Smith de México has operated and managed the specialised public terminal for handling mineral bulk and general cargo in the Mexican Port of Altamira, Tamaulipas, for over ten years.
- The public terminal has a 600m waterfront and a 22 ha storage area. The terminal has two docks, allowing for the berthing of ships up to 260m long and 32.20m beam. They can receive up to 80,000 deadweight tons (dwt) ships. There is an unloading/loading capacity of between 14,000 to 20,000 tons per day for bulk materials, depending on the type of ship and the density of the material.
- ➤ The terminal and its storage yards are authorised to operate as a controlled area, which gives port customers competitive advantages in foreign trade and provides cargo security due to the controlled access to the entire terminal and closed circuit television.



