Intelligent Asset Strategies

How a Major Oil & Gas Company

AVOIDED $20 MILLION IN COSTS

{ In Unplanned Maintenance and Downtime }

Challenges:

$4 Million
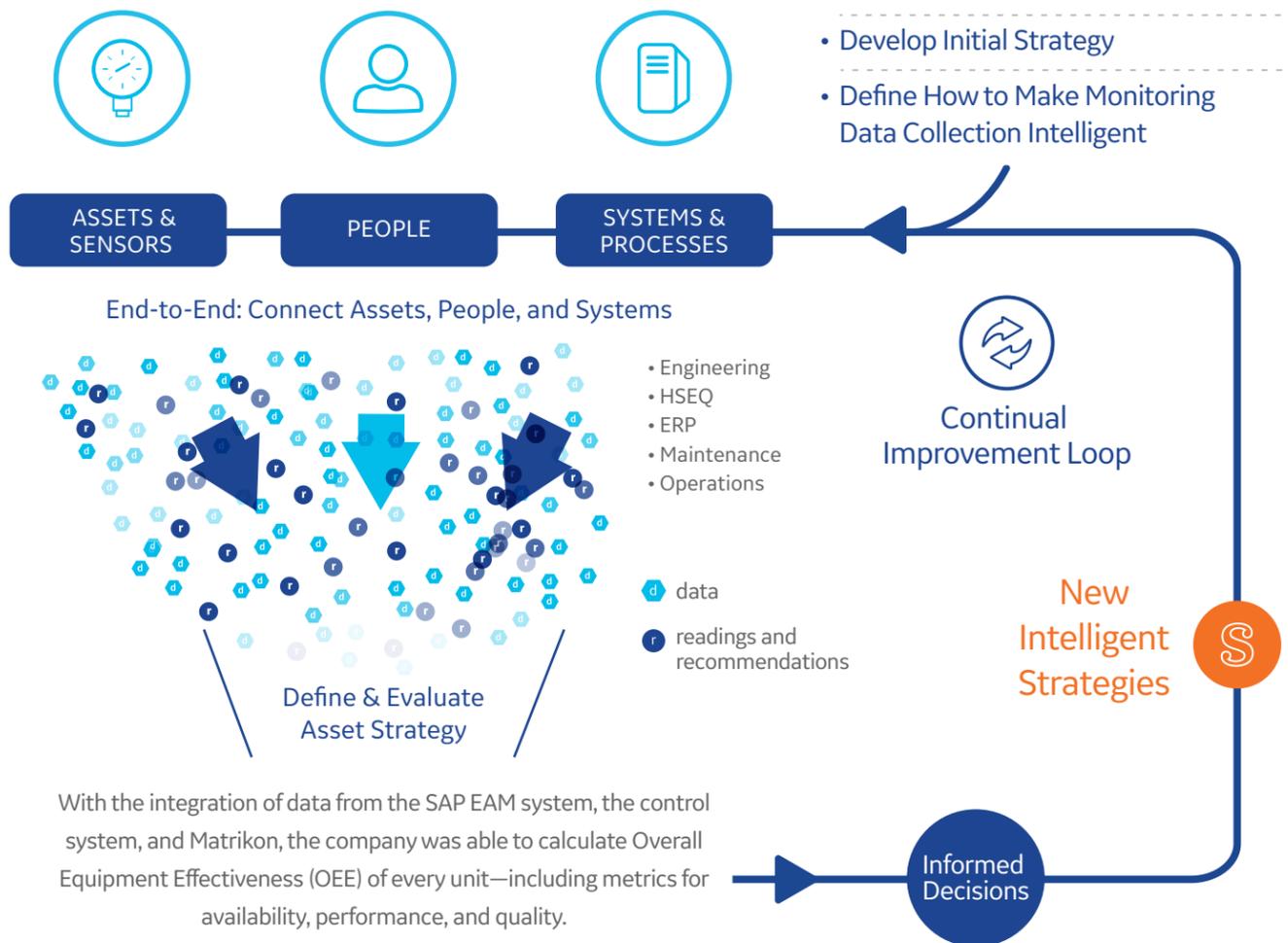The loss each day from production stoppage

If any asset fails (even a small component, such as a flow transmitter), all production stops. And that becomes very costly, very quickly.

- Needed to identify the most critical assets

- Inability to discover which assets were the bad actors

- Needed to change from a spreadsheet mentality to one of knowledge capture and sharing

- With a shortage of skilled labor and a very mobile workforce, it was important to put operating data in a location and in a format usable by all

Solution:

Context & Priorities

- Essential to lengthen trending analysis and integrate that data across functions

- Essential to consolidate reporting

- Use the bad actor information along with downtime data from PLA to determine criticality ratings for their assets

ASSETS & SENSORS	PEOPLE	SYSTEMS & PROCESSES

- Define What is Critical
- Develop Initial Strategy
- Define How to Make Monitoring Data Collection Intelligent

End-to-End: Connect Assets, People, and Systems

- Engineering
- HSEQ
- ERP
- Maintenance
- Operations

d data

r readings and recommendations

Define & Evaluate Asset Strategy

Continual Improvement Loop

New Intelligent Strategies

With the integration of data from the SAP EAM system, the control system, and Matrikon, the company was able to calculate Overall Equipment Effectiveness (OEE) of every unit—including metrics for availability, performance, and quality.

Informed Decisions

GE Digital

Results:

After implementing APM:

- Avoided more than $20 million in unplanned maintenance costs and downtime

- Identified 55 bad actors in a single plant

- Cut downtime reporting from 1.5 hours to less than five minutes

- Added breakdown indicators and cleaned all data from the EAM

- Provided 16 days early warning of critical pump failure

- Overcame internal cultural barriers by making production loss personal at all levels in the organization

The Benefits of APM:

2-6%	5-10%	10-40%	3-40%	5-25%	5-25%
Increased Availability	Inventory Cost Reduction	Reduction in Reactive Maintenance	EH&S Incident Reduction	Gain in Employee Productivity	Reduction in IT Lower Total Cost of Ownership

GE Digital's APM is the only solution that can combine real-time data with human experience, operating parameters, analytics, and connectivity to create intelligent asset strategies that continuously improve over time.