ASSET MANAGEMENT IN ASSET-INTENSIVE INDUSTRIES:

EQUIPMENT PERFORMANCE AS A MEASURE OF BUSINESS PERFORMANCE

As economic roadblocks to Enterprise Asset Management (EAM) investments are rapidly disappearing, it's time to get started down the path to true, 21st century upgrades and efficiencies.

Managing assets in asset-heavy industries is extremely important given that the turnover is largely dependent on the performance of critical assets. For example, if a 2,000-barrel-per-day pump goes down with oil at \$100 a barrel, a company can be losing \$200,000 a day because of a single piece of faulty equipment.



Assets occupy more than half of the balance sheets in many industries across the globe

infor

Industrial manufacturing

Oil and gas



3rd party logistics Construction

Food & Beverage

Utilities

While the natural tendency

to focus on immediate savings can lead organizations to concentrate on the perceived costs of design and construction, it is imperative for asset-heavy industries to equally focus on "below the line" costs. In order to maximize the financial value of assets, it is critical to have complete visibility on their cost-impact, i.e. balancing capital versus operational expenditures.

PERFORMANCE CAPEX Site costs

COSTS OF ASSET MANAGEMENT:

CALCULATING THE IMPACT ON BUSINESS

Construction Design costs costs **Finance Maintenance** costs lììi costs **Operational costs Depreciation** costs **Management costs OPEX MEASURING ASSET PERFORMANCE:**

industries as evidenced by the following: One-third of enterprises The average cost say that one hour of of just one hour of downtime costs their

business operations and planned ROI realization.

Asset downtimes can be catastrophic in these

The cost of ineffective asset management in asset-heavy industries severely impacts both



Time for digital,

Asset-heavy industries are revving up digitization of their extensive physical assets after recovering from the 2009 economic downturn. Most asset-heavy industries still utilize rigid, hierarchical, and siloed tools for asset management. This this has an adverse effect on the RONA as

RETURN ON NET ASSETS (RONA) IS DECLINING IN ASSET-INTENSIVE INDUSTRIES

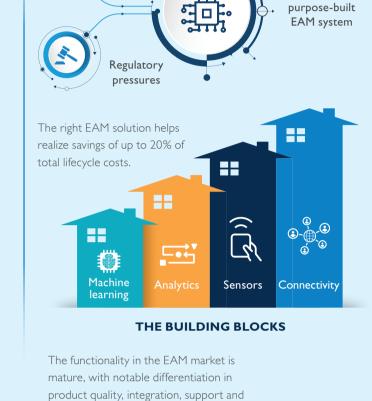
decisions are made by different teams handling different aspects of asset management. In asset-heavy industries, RONA is adversely affected by the

Siloed functions Lack of insight



generated from operating and maintaining assets for future planning and

design phases. **SMART FACTORIES: EFFICIENT ASSET MANAGEMENT FOR**



Aging buildings

specific processes. On-time

Inventory

Maintenance

Compliance

90%

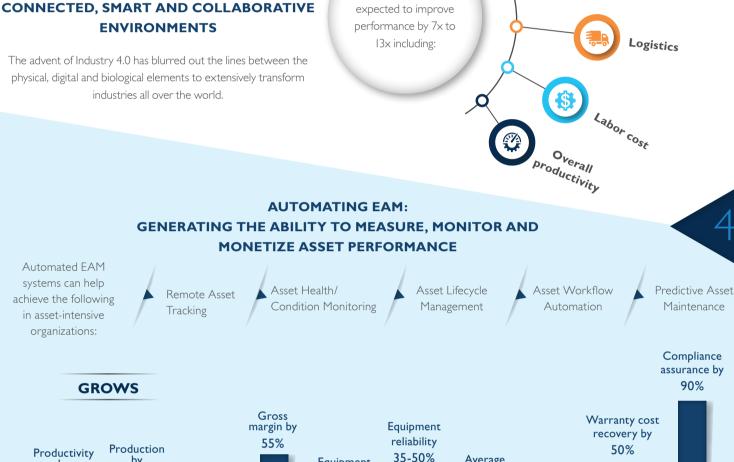
Maintenance

costs by

25%

delivery Quality

how well solutions perform industry-



Smart factories are

35-50% Average by Equipment by OEE by operating 27% uptime by 24% 21% margin by 20% Fleet 18% availability by 10% Capital investment by New equipment Scheduled 3 -5% Inventory repairs by costs by carrying 12% 10% costs by Asset Inventory lifecycle 20% levels by cost by **Purchasing** Downtime Breakdowns Paperwork by up to process 30% 28% costs by 50% by Accident 50% 60% frequency by 70% **75% REDUCES** It is expected that India will become the 5th-largest manufacturing

Automation

in Domestic

Get rid of

maintenance

backlogs

Managing and

Operating Assets

Manufacturing Innovation

Shift from reactive

to proactive

maintenance

Depreciation costs

Al and Technology

Driven

ENTERPRISE ASSET

SOLUTIONS

MANAGEMENT IN INDIA: WHY

SMART VISIONS NEED SMART

IoT and Smart Digitizing and **Manufacturing Optimizing Supply** Maintenance to Keep **Chain Processes**

Keep up with

changing

technology

Realize

real ROI

Purchasing behaviour against assets

country in the world by the end of 2020. Further, the "Make in India"

heavy industries in the future.

initiative by the government to facilitate investment and build best-in-class manufacturing infrastructure is expected to drive the growth of asset-

The following key trends are expected to be seen in the manufacturing



Improve health

and safety

practices

Managing asset lifecycle Track changes involving assets maintenance Trade-off between CAPEX & OPEX Remote asset tracking Inventory level changes for keeping/replacing an asset

Asset events-monitoring &

Asset health/condition monitoring

Work on asset maintenance

SELECTING THE RIGHT EAM SYSTEM FOR ACHIEVING BUSINESS GOALS While the underlying need for an effective EAM system is clear, it is essential that asset-intensive organizations understand and evaluate the options for managing their assets in a comprehensive manner.

Go mobile

Cost of repairs Impact and value of assets on ROI requests Capturing consumption and Overly aged asset Asset transfer/change of ownership requirements **Asset Activity** Asset breakdown Capture labour efforts Procurement of spares and services Asset shutdown Capture work order details Reallocation of cost of assets Corporate finance Site managers Contract managers **Stakeholders** Department finance Internal and external auditors IT managers Involved Planning and budgeting departments Facilities managers Department managers Informed decisions on asset Increase productivity Automated reports on asset activities acquisition and disposal **Organizational** Benefits of utilizing Lower/defer tax on assets Lower asset downtime Enables for smooth facilitation of audits **EAM** systems Higher efficiency and lower OPEX Increased visibility on asset value chain Monitor asset related KPIs effectively



organizational objectives

What is the business

trying to achieve requirements that are (compliance, safety, revenue)? aligned with business goals

objectives

Align asset management Develop high-level

Develop asset management plan

Develop maintenance and activity plans

Monitor performance

Improve

decision making

capabilities

and agile improvements