ABB ABILITY™ GENIX INDUSTRIAL ANALYTICS AND AI SUITE

Opportunity Loss Manager Business Value Application

Effectively analyze, manage and prevent opportunity loss across process and batch

Addressing business challenges

For the modern business enterprise, enhancing productivity is one of the biggest challenges and key focus areas to remain competitive in a global market. Industries today are also looking at identifying opportunity loss areas and prioritizing their addressal based on business impact.

There is a strong need to reinforce a culture of continuous improvement in efficiency and reliability by removal of bottlenecks in the process.

Customer challenges

Manufacturing plants face multiple glitches due to complex and disconnected processes, resulting in off-specs products, units slowdown and even shutdown. The primary challenge in productivity enhancement is ensuring **Overall Equipment Effectiveness (OEE)** - a measure of how effective a production process is. Also important is **loss prevention**, by identifying and understanding the various losses that occur in the manufacturing or process plant and implementing preventive actions to minimize such losses.

The contributing factors for OEE measure are performance, availability and quality - once losses are identified, it is important to systematically track parameters on a day-to-day basis and analyze them to identify improvement opportunities. Both these challenges faced by customers demand higher resources and consistency in monitoring and tracking.

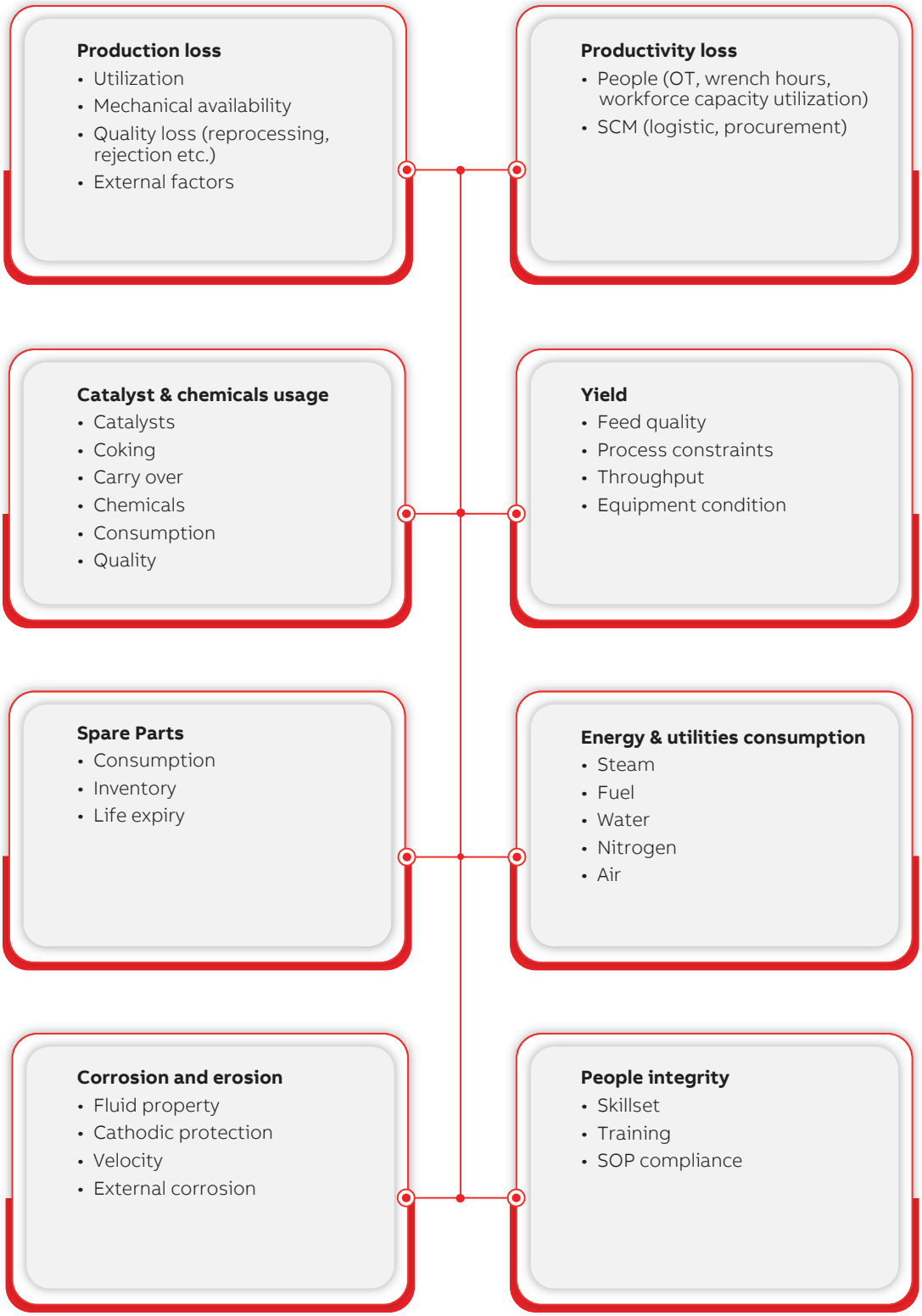
Opportunity Loss Manager app

The Opportunity Loss Manager (OLM) analytical app automatically tracks (based on user configuration) and generates events which are analyzed for their complete lifecycle. This reduces manual processes for loss tracking, in addition to ensuring consistency at the enterprise level. The objective of this analytical app is to capture all lost opportunities, identify root causes, monitor and track actions to their logical completion. The identification helps businesses prioritize areas for improvement. OLM focuses on prevention of hidden losses across diverse areas.

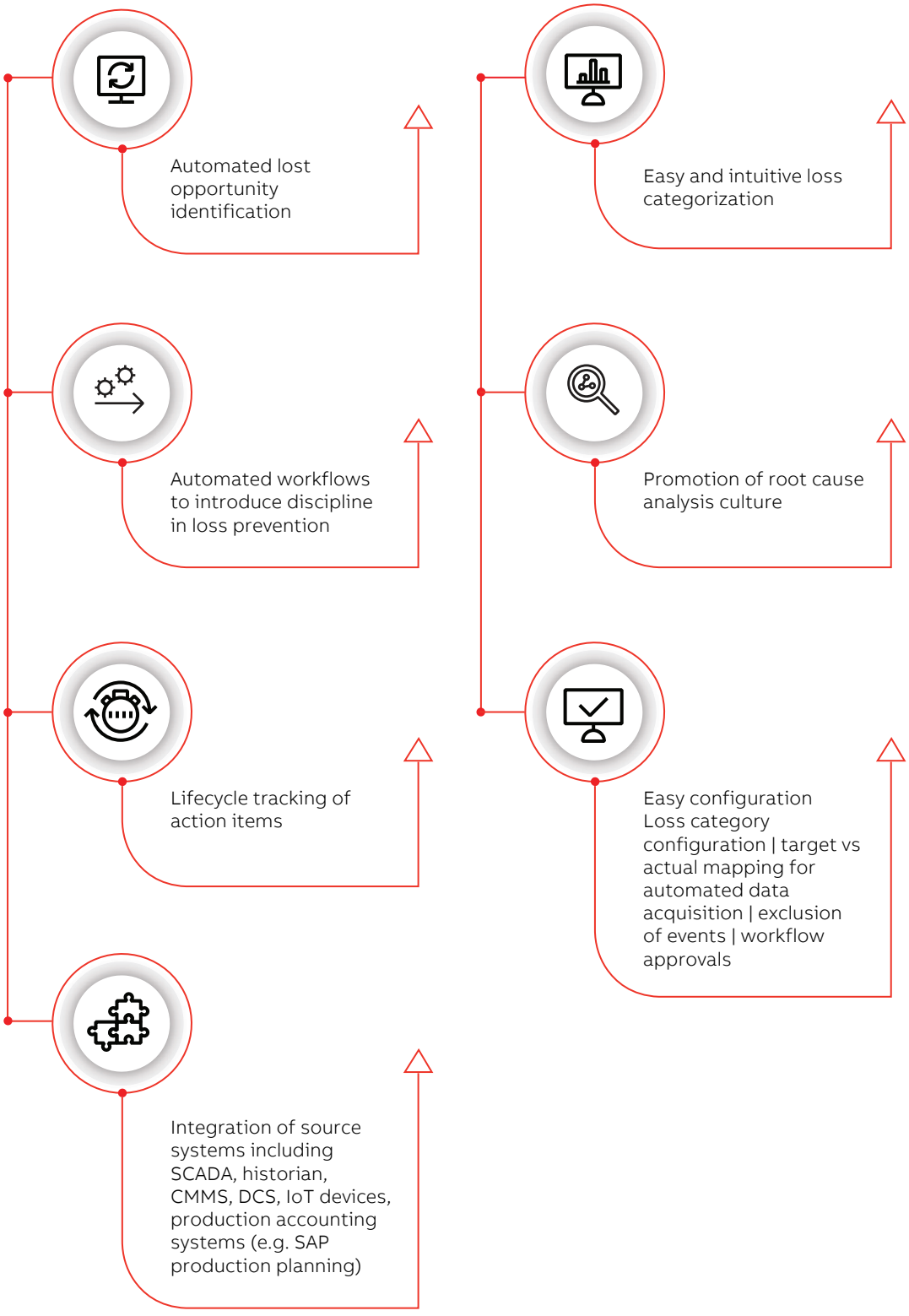
The OLM app is designed to cater to the needs of all types of industries including oil & gas, refinery, petrochemicals, metals, process; and has the capability to extend across all types of products, raw materials and energy sources. It can provide descriptive and diagnostic analytics (by shift, daily, weekly fortnightly, monthly etc.) along with actionable insights.

The solution covers the needs of the shop-floor for line managers to support executive management with data integration, intuitive UI, analytics, user security and team collaboration. Additionally, it provides analytics for diverse functional locations using equipment hierarchy, e.g. by plant, by unit, by equipment etc.

Highlights


Production loss
• Utilization
• Mechanical availability
• Quality loss (reprocessing, rejection etc.)
• External factors
Productivity loss
• People (OT, wrench hours, workforce capacity utilization)
• SCM (logistic, procurement)
Catalyst & chemicals usage
• Catalysts
• Coking
• Carry over
• Chemicals
• Consumption
• Quality
Yield
• Feed quality
• Process constraints
• Throughput
• Equipment condition
Spare Parts
• Consumption
• Inventory
• Life expiry
Energy & utilities consumption
• Steam
• Fuel
• Water
• Nitrogen
• Air
Corrosion and erosion
• Fluid property
• Cathodic protection
• Velocity
• External corrosion
People integrity
• Skillset
• Training
• SOP compliance

OLM features



Analytical insights

OLM summary: summary of opportunity losses, mapped by categories / sub-categories, plant / area / unit, time period

OLM analytics: cover loss trends, high impact loss categories and equipment involved

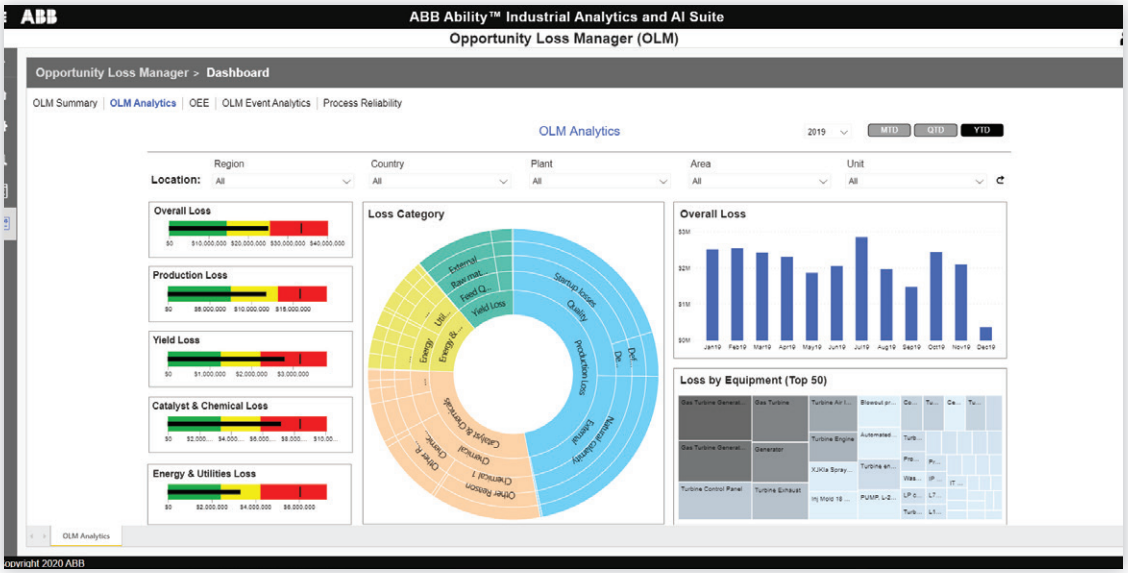
OEE: trend and performance metrics for quality, availability and utilization

OLM event analytics: track OLM events, pending and overdue RCA

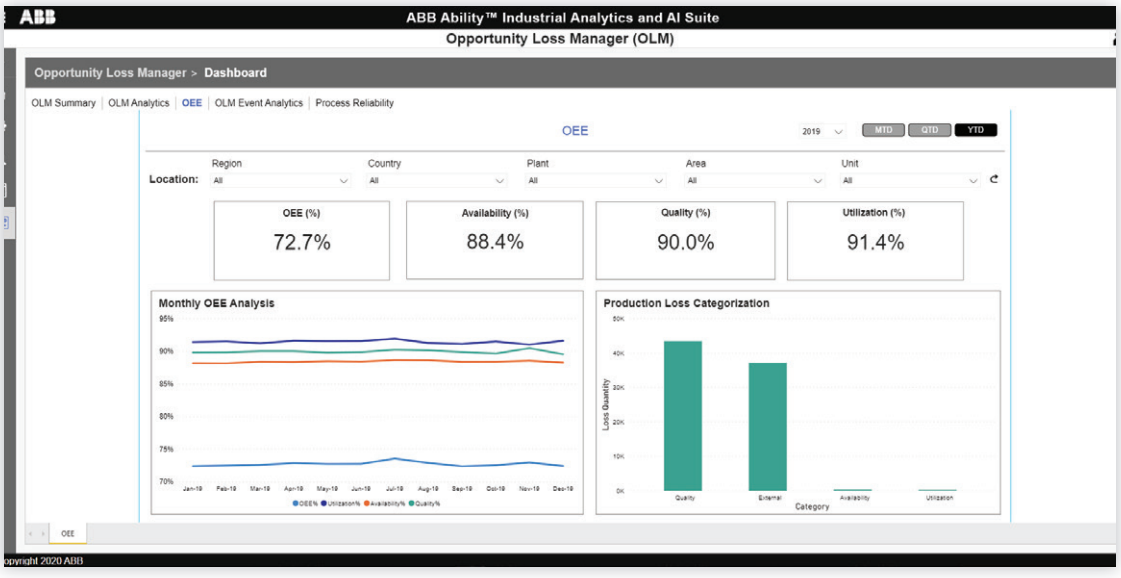
Process reliability: analyzes production data statistically with respect to name plate capacity and derive process reliability of units with losses attributed to efficiency and reliability utilizing Barringer's theories

Showcase

Opportunity Loss Manager analytics



High-level Overall Equipment Effectiveness analysis



Business benefits

Utilizing Opportunity Loss Manager can be beneficial to an organization's operations by helping identify losses, improve productivity across varied assets and equipment. Deployment of the solution can result in savings through 5%-10% loss reduction year on year.

It can help introduce a loss prevention culture across the organization and automate identification of losses through integration and benchmarking / business targets. By attributing losses to critical incidents including asset failures, process upsets, shutdowns and turnarounds with quantified saving potential, the app is able to help build data-driven decision-making and strategy.

The app also allows for continuous tracking of tangible losses thereby promoting a cultural transformation across the enterprise.

ABB GISPL
iadigital.marketing@abb.com
iadigital.sales@abb.com

https://new.abb.com/process-automation/genix

© Copyright 2020 ABB. All rights reserved.
Specifications subject to change without notice.