

Apriso Global EMI Solution

Accelerate Visibility to Manufacturing Intelligence

As the speed of business accelerates, it's critical to see plant floor activity across your enterprise. Yet getting that information in a form you can use to direct faster, more informed decisions is a major challenge. Complex supply chain and plant data from multiple locations is being captured in different ways, and then reported in different formats. Often the information you need is simply unavailable. Complicating matters further, plant managers need information at a different level of granularity than a regional manager or the corner office. Without the right information for the right people in the right context, it's just data.

The DELMIA Apriso Global EMI (Enterprise Manufacturing Intelligence) solution helps you address these challenges by providing a global framework and approach to gather and report on up-to-the-minute data – wherever and whenever it is needed across your enterprise – tailored and presented in the right way for each decision-maker. Use this solution with existing Manufacturing Execution System (MES) applications, or combine it with other Apriso solutions for global Manufacturing Operations Management (MOM). Either way, you will have the visibility to understand what is happening in your plants to make better, faster decisions while driving continuous improvement on a global scale.

A True Global Manufacturing Solution

Based on more than a decade of experience with best-in-class manufacturers, Apriso Global EMI goes far beyond ERP-based and generic BI solutions. It was designed from the top down to work across all manufacturing plants, enabling true enterprise visibility as well as cross-functional and cross-plant execution analysis at every level, from one plant to dozens. Centralized visibility allows decision-makers to quickly identify both poor and outstanding practices, wherever they may be, and to take necessary action.

Quicker Time to Value

Dassault Systemes provides a complete "out-of-the-box" solution designed specifically for manufacturing, so you can go live and get value fast, with minimal IT involvement.

This solution includes:

- Production-ready visibility and integration that can leverage existing plant solutions, so no need to rip and replace
- Thorough selection of 400+ best-in-class KPIs, available out-of-the-box to analyze machine intelligence (OEE, unplanned downtime), production intelligence (order adherence to the plan, yield), labor intelligence (labor efficiency, units per labor hour), equipment maintenance, quality planning and execution, and logistics both inbound and outbound.

Why Apriso?

- Benefit from extensive global manufacturing execution and modeling implementation experience
- Reduce the time and cost of data acquisition and configuration by 60%+ with "out of the box" analytics, KPIs, dashboards and reports
- Improve quality with consistent, coherent analysis of all shop floor processes to improve Root Cause Analysis and other CI programs
- Reduce costs by monitoring and analyzing constraints, bottlenecks and throughput
- Boost decision support with fact-based, contextualized shop floor data that's readily available for the right person at the right time
- Quickly deploy common metrics to standardize enterprise analyses and plant-by-plant performance
- Improve agility and responsiveness with up-to-date intelligence available across all manufacturing sites

World Scrap Map



Beyond ERP-based Solutions

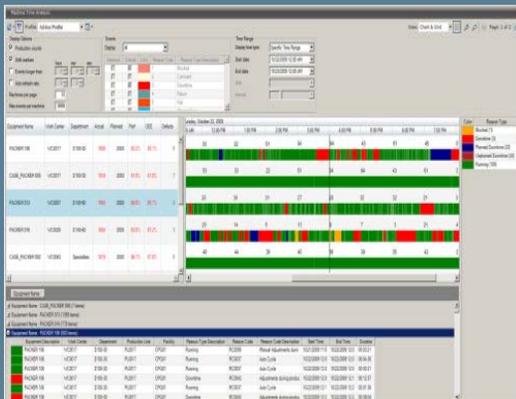
Apriso Global EMI solutions go beyond ERP-based approaches in three critical ways while complementing and extending the power of existing corporate systems.

1. Granular plant detail. ERP was never designed to manage granular details of the plant floor. Apriso's solution allows you to drilldown to individual machine station events broken up by reason code, shift, hour of the day, production order and other key granular information.

2. Designed for manufacturing execution.

Ready-to-use KPIs, cockpits, dashboards and screens provide visibility into production lines, logistics and suppliers, work stations, process improvement, OEE, scrap, downtime, efficiencies, and more.

3. Time to Value. ERPs contain key information in many different modules in thousands of tables. Understanding, collaborating and displaying this information is not trivial. Adding on top the cost of integration means that getting, implementing and managing reporting out of the ERP takes significant resources. With Apriso Global EMI you achieve ROI in months, not years.



Machine Time analysis gives engineers the ability to see the cause and effect of line stoppages and events

Everything You Need In One Solution

Apriso Global EMI is a comprehensive solution that handles the details, so your IT staff doesn't have to. The solution provides all the capabilities for gathering, transforming, cleaning, storing and analyzing your manufacturing data. And, with pre-defined Intelligence Packs, screens, Excel plugin, reports, analysis views/definitions and standard KPIs and metrics defined around manufacturing execution, you can focus immediately on solving problems and driving continuous improvement.

Apriso applications include out-of-the-box analytics made for manufacturing. Analyze any detail – picking times, pack times, setup times, maintenance schedules, quality levels and much more – and compare across different lines, work teams, plants, or any dimension desired.

The Right Information for the Right People

Apriso Global EMI solutions excel at delivering the right information to each user – from the corner office to executives in Operations, Manufacturing, IT, Quality, Supply Chain, and Plant Management. You can easily create role-based specific views of plant information that are targeted at the right level for specific business needs. You can:

- Roll up data across sites with drill down into plant-level detailed data
- Conduct ad-hoc analyses of manufacturing operations
- Define and share analyses for collaborative intelligence through a central repository of analysis definitions
- Gain instant access to current and historical data
- Enjoy full mobility with access anywhere, anytime

Integrates with Your Enterprise Systems

Apriso Global EMI solutions support all continuous improvement models. They can integrate with your corporate BI strategy, leveraging the Microsoft BI Stack including Microsoft Excel and most third-party Business Intelligence applications. This allows you to continue using your favorite corporate reporting front-end if desired, while letting Apriso's solution handle the data transformation, cleaning, and analysis.

This solution works seamlessly with ERP, PLM and other systems, complementing and extending their capabilities by delivering granular information that's essential for managing plant-floor execution across an enterprise.

A Solution Tailored for You

The DELMIA Apriso Professional Services team has implemented literally hundreds of global manufacturing solutions for leading companies worldwide. Our experience is your advantage. The first step is to develop detailed specifications based on your requirements. Next steps include providing conceptual designs, process mapping and user interface specifications. With rapid prototyping and blueprinting capabilities, this solution enables visual, iterative configurations coupled with a “validate-as-you-go” agile process, so you get exactly the right solution you need.

Implementation Support from Start to Finish

DELMIA Apriso professional services combined with a global partner network deliver the highest caliber of support, based on extensive industry knowledge and manufacturing operations experience. This combination of skills and service delivery help ensure Apriso solutions are implemented according to the highest possible quality standards. Dassault Systèmes’ staff can complement your own IT team by providing the right level of requirements analysis, systems configuration, quality assurance, training and go-live assistance that you need.

By offering a comprehensive library of implementation accelerators, DELMIA Apriso professional services allow you to get started fast and deploy smoothly. With a process-based solution, interaction is eased to third party applications, subcontractors and vendors so you can better control your own destiny – use the right combination of DELMIA Apriso support, internal knowledge experts and third party partner guidance and capabilities to complete your implementation.

Beyond Visibility: Directing Manufacturing Change

Apriso Global EMI solutions can be used with existing enterprise systems / applications. Go beyond merely adding visibility by directing manufacturing processes with a complete Apriso solution for global MOM to unify and standardize enterprise manufacturing process deployment. This strategy lets decision makers roll out processes to multiple plants with a click of a button using proper workflows and governance, supported by DELMIA Apriso personnel and partners across the globe.

- Use Apriso Manufacturing Process Intelligence to define and configure your analytics solution
- Use Apriso Machine Integrator to capture plant floor information
- Use Apriso Business Integrator for 3rd party applications including ERP
- Use Apriso Process Builder with an embedded BPM engine to configure, update and execute manufacturing processes
- Use Apriso Global Process Manager to share and roll out best practices
- Configure master data and reporting parameters



“The new era of manufacturing will be marked by highly agile, networked enterprises that use information and analytics as skillfully as they employ talent and machinery to deliver products and services to diverse global markets.”

*Manufacturing the Future: The next era of global growth and innovation,
© 2012 McKinsey Global Institute*

“By leveraging Apriso, we were able to take a global perspective on manufacturing operations and continuous improvement to achieve higher quality, greater efficiency and lower costs by delivering better real-time visibility and control over our operations.”

*Dr. Robert D. Borchelt, PhD. Director,
Manufacturing IT Systems & Industrial
Controls, Cummins Inc.*

Putting It All Together

You can't manage what you can't see. But if you're a global manufacturer, clear visibility into the production floor of your enterprise has never been more challenging. You need an EMI solution that works at all levels of your company, from each individual plant floor to every tier of decision-making. DELMIA Apriso Global EMI solutions deliver visibility and control across all manufacturing operations and the supply chain, enabling multiple improvement strategies and process improvements from a single solution.

Turn Visibility into Agility

- See essential information, contextualized for each user's role and needs
- Capture and analyze data you can trust
- Make better decisions, faster
- Implement changes by directing and deploying processes centrally
- Keep pace with product, market and organizational change

Drive Global Continuous Improvement

- Identify best practices and deploy globally
- Improve visibility into, control over and synchronization across operations to manage customer orders and service levels more effectively
- Use cross-silo analysis to pinpoint trends in quality fluctuations resulting from production changes
- Support systematic and ad hoc Quality Control initiatives
- Comply with regulatory requirements

Apriso solutions offer the widest possible footprint for management visibility – across your entire enterprise. Performance is optimized across all aspects of the extended value chain, including your people, materials, machines and processes – and those of your suppliers. By transferring real-time data, signals, alerts, KPIs or business intelligence from any network location to any other location around the world, Apriso solutions empower global manufacturers to respond quickly to strategy shifts, changing market conditions and unexpected events.

About Dassault Systèmes & DELMIA

Dassault Systèmes, the 3DEXPERIENCE Company, serves 170,000 customers across 140 countries, providing virtual universes for sustainable innovation. Dassault Systèmes' DELMIA brand offers products that connect the virtual and real worlds. As part of DELMIA, the Apriso product portfolio helps manufacturers transform their global operations to achieve and sustain operational excellence. Learn more at apriso.com.

Expertise in Manufacturing Visibility

Apriso Global EMI solutions power the operations of industry-leading manufacturers around the world. These solutions can help manufacturers meet increasing operational complexity while maintaining brand integrity.

Global clients using this solution include leading firms in cosmetics, tobacco, automotive, consumer goods, food & beverage and other industries.

“Today, manufacturers need technology solutions that improve the basic economics of their plant floor operations, extend their operations on a global basis and provide visibility across their enterprise to the executive suite.”

Sanjay Ravi,
WW Managing Director for Discrete
Manufacturing Industries,
Microsoft

