FACTORY MANUFACTURING EXECUTION SYSTEM

CLOSING THE INFORMATION GAP
Actionable Intelligence for the Workplace: Factory MES provides Increased Productivity through Real-Time Shop Floor Management
Accelerated continuous improvement and efficient manufacturing execution are the foundation to staying ahead of the competition and expanding margins for any producer in this globally competitive landscape. This means eliminating wasteful activities, maximizing the performance of existing assets, and having the agility to flex the organization in real-time.

Manufacturing Execution Systems offer organizations a route to accelerated performance by unlocking the greatest assets within their factories – their people and plant. Armed with real-time information on production operations and per-unit costs, factory floor teams are able to implement immediate reviews, make real-time adjustments and measure immediate performance improvements. This actionable intelligence is made possible by bridging the disconnect between the factory floor and the wider enterprise. Disparate data silos are consolidated into a single transparent intelligence engine that exposes and attacks waste, sets goals for improvement, and transforms the workplace into a culture of action.

Factory, the leading manufacturing execution system solution, integrates the functionality of shop floor data capture, packaged metrics like overall equipment effectiveness (OEE), constraint analysis, manufacturing analytics and scorecards, continuous improvement capabilities and paperless quality management. By converting the investments already made with MES or shop floor data acquisition into actionable intelligence across the enterprise, Factory provides a seamless flow from day to day factory floor activity through to board-level intelligence.

Manufacturers are sustaining productivity gains by using real-time intelligence to identify priorities for long-term improvement, including product innovation, improved service delivery, pinpointing priorities for capital investment strategies, and eliminating waste across multiple areas and sites, as well as setting new performance targets for their factory teams. Making the shift to a real-time factory is enabling process and discrete-intensive manufacturers to maximize margins, cut costs and take on market share.
We selected Factory because we recognized that our manual, spreadsheet-based processes could no longer support our growth and drive efficiency improvements.

Bill Herbes  
SVP Manufacturing  
B&G Foods

INDUSTRY FOCUS: FOOD & BEVERAGE

Being in control of the cost of production and operating under the lowest-cost conditions enables you to make agile decisions about your product mix, new product innovations, and continuous improvement programs. It’s worth pursuing every bit of efficiency you can gain on the production line.

Factory will unlock the greatest asset in your factories – your people. Armed with real-time intelligence on production operations and per-unit costs, factory floor teams can implement immediate reviews, make real-time adjustments, and measure instant performance improvements.
Factory is designed to transform manufacturing performance by empowering people to make real-time actionable decisions. The software integrates the functionality of shop floor data capture, packaged metrics like OEE, constraint management, analytics and scorecards, continuous improvement capabilities and paperless quality management.

MAXIMIZING EXISTING DATA SILOS

The solution takes advantage of the existing IT infrastructure, linking control and MES systems on the factory floor with the wider enterprise applications such as ERP, MRP and corporate analytic software over intranets, extranets, or the internet without the need for modifications. Factory’s patented technical architecture means lower cost of ownership, superior data integrity and security.

CORE COMPETENCIES

- Real-time performance management
- Plant data management
- Process constraints
- Continuous improvement campaign management
- Automated quality assurance process
- Compliance management
- Executive scorecards & strategic analytics
- Workplace engagement
- Maintenance response management
- Workplace production scheduling
INDUSTRY FOCUS: CONSUMER PACKAGED GOODS

Internal pressures to manage costs and increase productivity continue to build. Meeting external challenges – such as retailer-specific demands, regionalized requirements, and complex compliance regulations – is increasingly critical. CPG manufacturers are deploying Factory to achieve real-time operational transparency and optimize available people and plant resources.

The Factory suite can be implemented in less than six weeks per factory. It identifies true production constraints, trims materials costs, cuts change-over/start-up times, and drives an action-oriented culture throughout the workplace.

“We have seen a 10% improvement in efficiency since Factory was installed... there is the added benefit that Factory is key to promoting a culture change within the business. The shop floor is now able to tell us what the problems are, rather than the ‘top-down’ approach.”

Simon Ford
Industrial Engineering Manager
Nicepak
FACTORY MES COMPETENCIES

PERFORMANCE | Real-time Performance Management. Identify all manufacturing losses, measure OEE, monitor product costing in real-time and control crew performance. Standardize change-over’s and start-ups. Combine the power of automated plant data with the intelligence of the workplace employees. Enforce best practices by the action cycle engine triggering frequent reviews and pre-formatted data to assist the workforce to maintain flawless performance.

ANALYTICS | Enterprise-wide Factory Intelligence. Analytics identifies variations in plant, SKU, value stream and shift performance pinpointing priorities for improvement and capital investment. Deploy packaged dashboards and manufacturing metrics to support operational excellence initiatives including OEE, mass balance, throughput averages against SKU, standards variances, quality conformance, and crew performance. Use ‘drill down’ and ‘what if’ capabilities to deliver intelligence on costly manufacturing root causes, production constraints and unprofitable products across the plant network.

IMPROVE | Continuous Improvement Campaign Management. Provide complete transparency of improvement initiatives throughout the factory and wider enterprise. Re-ignite corporate CI initiatives and close the loop between potential and actual improvements using pre-built capabilities. Manage improvement campaigns online fuelled using root cause analysis and known methods including Kaizen Blitz events, and Six Sigma. Engage continuous workforce commitment through direct shop floor interaction and review points. Benchmark and compare improvements across the enterprise.

QUALITY | Quality Assurance. Enable paperless compliance and tracking of all Quality Assurance processes throughout the factory floor. Automate checks related to production quality and reduce give-away through SPC control. Real-time outputs and control links coupled with automated alerts ensures deviations from perfection are dealt with immediately. Manage the full life-cycle of quality sign-off with online certificates, electronic signatures to support any number of check types including HACCP, ‘spot check’ audits and full product audit inspections.

REAL-TIME LOGIC ENGINE | Data Transformation. The Real-Time Logic Engine is a bi-directional, high performance Boolean logic engine designed to function as an OPC bridge and consolidator. RTLE is able to read and write to multiple underlying OPC servers while applying Boolean logic and transforming data in real-time. For more complex processing, a full featured scripting language is available providing you with the ability to create your own functions. A powerful trigger-and-action capability is built into RTLE’s data handling, allowing for sophisticated monitoring, calculations, and automated responses.

ACTIVESSENTIALS | Data Collection. ActivEssentials lies at the heart of the Activplant solution, where it provides a mature and robust platform from which to derive the business intelligence you need to run your manufacturing enterprise. It is flexible enough to handle almost any manufacturing operation. You get contextualized data in a form that is actionable, pertinent to your needs, and accessible to all that need it. ActivEssentials is the right tool to help your organization to get to where it needs to go.

INTEGRATION TOOLKIT | Data Retrieval. This toolkit’s greatest purpose is in being able to retrieve contextualized ActivEssentials data and integrate it with the third-party applications that you use to manage your business. The ITK can produce data sets that comply with standards-based methods, which you can then use for the presentation of ActivEssentials data in MES, ERP, and BI applications. By combining ActivEssentials data with that from other aspects of your business, you gain greater insight into the overall performance of your operations.
FACTORY CLOSING THE INFORMATION GAP

Aptean has designed, built and packaged the right applications and services to ensure that our operations teams will be empowered to make critical operating decisions in real-time, resulting in higher efficiencies.

Tim Brown
Production, Process, and Systems Engineering
Anderson Packaging

“...Aptean has designed, built and packaged the right applications and services to ensure that our operations teams will be empowered to make critical operating decisions in real-time, resulting in higher efficiencies.”

INDUSTRY FOCUS: PHARMACEUTICAL

Pharmaceutical producers are feeling the pressure to increase efficiencies whilst reducing production costs. Successful companies meeting this challenge are armed with accurate real-time intelligence such as OEE and are implementing immediate action cycles in the workplace within weeks without risking noncompliance.

Factory’s shop floor focus enables real-time performance management along with data capture. It combines strong out of the box simplicity with the capability of being configured to pharmaceutical manufacturers’ specific needs of fairly easily.
The technology is combined with a proven change method that focuses on developing a structure of daily performance reviews to drive better performance every run, every shift, every day. The process develops shop floor skills so the teams are able to drive their own improvements and is deployed typically in six to eight weeks per factory. Results are fast and dramatic and highly visible by week 10.

For multi-site rollouts Factory is deployed using a standard Project Execution Template (PET), enabling rapid deployment and standardization across the enterprise, creating a standard platform for managing and measuring daily operations.

Our complementary consulting services are designed to assist our customers in managing this change and achieve the maximum benefits enabled by Factory. Buy-in, involvement, risk management, and senior level commitment are the essential elements to changing behavior. We bring together a multi-disciplinary team with specific expertise in project management, shop floor buy-in, continuous improvement, MES plant automation, and technical configuration.

“We see Factory MES as a key component to improving our labor utilization, increasing OEE and throughput, and improving quality control and traceability.”

Kevin Capatch
Lean Manufacturing Coordinator
Advanced Scientifics Inc.
INDUSTRY FOCUS: AUTOMOTIVE

Today’s automotive manufacturers and suppliers are being asked to make substantial production efficiency contributions to production. Rapid changes have created compressed ramp-up schedules and reduced available time for testing. Every party in the process is under pressure to respond quickly to evolving consumer tastes and market scrutiny. You need to achieve maximum efficiency and lower production costs by ensuring there is no waste from excess scrap, poor quality, or labor inefficiency.

Today’s top automotive supplier manufacturers rely on Factory MES. Our solutions are designed to help you achieve real-time operational transparency, optimize your assets, and drive a culture of immediate action in the workplace.

“Innovation like this will help us in our efforts to identify waste much more quickly than through traditional methods.”

Jeff Herrell
North American Occupant Safety Systems Lead Black belt
TRW Automotive
FACTORY | CLOSING THE INFORMATION GAP

CUSTOMER SNAPSHOT

FOOD & BEVERAGE
• American Italian Pasta Company
• Allens Inc
• Aurora Organic Dairy
• B&G Foods
• Bay Valley Foods
• Cadbury
• Coca Cola Bottling Co. Consolidated
• Heinz
• Intersnack
• Kens Foods
• Pinnacle Foods
• Premium Waters
• Ralcorp
• Sudzucker
• Windsor Foods

AUTOMOTIVE
• CMWA – Central Motor Wheel of America
• Ford
• Tower Automotive
• Toyota

CONSUMER PACKAGED GOODS (CPG):
• Boots Contract Manufacturing
• Cibavision
• Gillette
• Nicepak

PHARMACEUTICAL:
• Amerisource Bergen
• Anderson Packaging
• Genentech
• GSK
• Smiths Medical Devices
• TEVA

“"The speed at which the team understood the requirements of our business and applied the Factory solution was impressive and the simulated day in the life of the software really brought your solution to life.”

Mark Grasse
Director of Manufacturing Operations
Masters Gallery Foods

Factory is used worldwide by over 350 factories that span a broad spectrum of industry verticals including Food & Beverage, Automotive, Consumer Packaged Goods, and Pharmaceutical Packaging. It has been configured to suit both the needs of both multi and single site operations.

ACTIVATE RAPID COST SAVINGS WITHIN WEEKS
Companies seeking to verify their potential performance gains with Factory can take advantage of the Factory Profit Audit which gets to the heart of where the greatest immediate margin improvements can be realized from your plant(s). The audit establishes an agenda for rapid performance improvement utilizing real-time intelligence and the greatest continuous tool available to you: the hourly paid workforce. It will calculate those areas that can be improved the fastest, at the least cost, and with the greatest impact.
CLOSING THE INFORMATION GAP WITH FACTORY MES

The shop floor is the heartbeat of any manufacturing organization. The ability to see data in real time and enable your operators to act upon it immediately is critical in today’s competitive environment where every opportunity for improvement, no matter how big or small, counts.

Unlike generic MES systems, Factory is a purpose built packaged application, designed for specific industries, which requires no customization and is typically deployed in less than six weeks per factory.

This ensures a higher probability of success, shorter time to benefits and the flexibility needed to support growth and change. Different to other MES systems, our technology is combined with a proven change method that focuses on developing operator skills and a structure of daily performance reviews to drive a better performance every run, every shift, every day.

Learn more about how Factory can help you identify and tap hidden operational efficiencies in your plants. Contact us today to discuss your needs and arrange a demo:

www.aptean.com/factory.

“The morale on the factory floor has skyrocketed since we began using Factory MES. You can now look up at the screen and see exactly where we are in terms of budget efficiency.”

Tokena Chestnut
Operator
Premium Waters

More than 9,000 customers around the world rely on us to give them a competitive edge. By providing innovative, industry-driven enterprise application software, Aptean helps businesses to satisfy their customers, operate most efficiently, and stay at the forefront of their industry.

For more information, visit: www.aptean.com