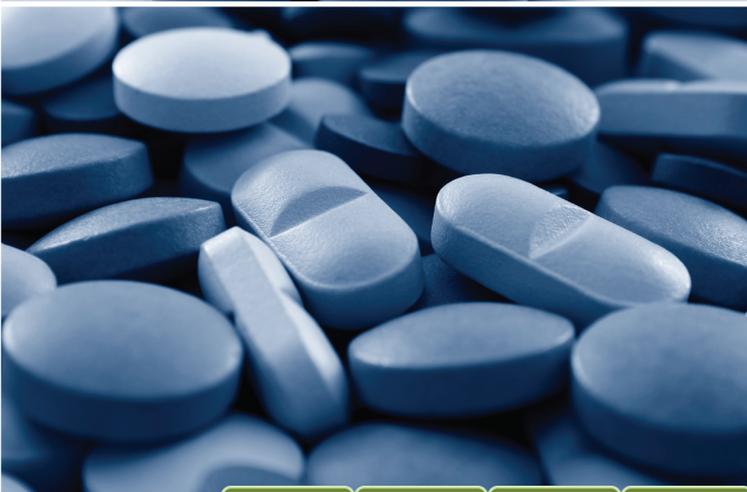


# Actionable Intelligence for the Workplace

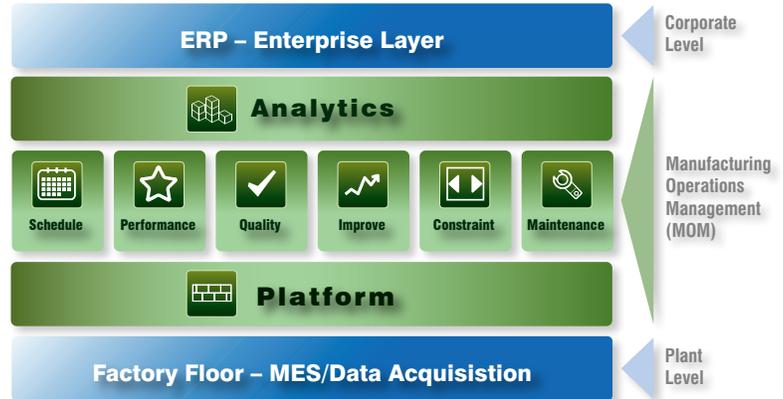


# Manufacturing Operations Management – beyond data acquisition

Accelerated Continuous improvement & efficient manufacturing execution is 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 Operations Management offers 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.

CDC Factory, the leading manufacturing operations management 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 CDC 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 discreet-intensive manufacturers to maximize margins, cut costs and take on market share.

“ The move to real-time intelligence and structured review processes has created a model for continuous improvement that has become embedded into the day-to-day workings of our plant floor. I believe this is the quickest route to capitalizing on our latent human capital potential. ”

George Jurkovich  
VP Operations  
Bay Valley Foods

## INDUSTRY FOCUS

Our intense knowledge and commitment to the industries we serve means CDC Factory eliminates the risks and overhead that are common with generic systems. Our solutions are designed to embrace factory floor processes in a single out-of-the-box suite that is focused on unlocking the human capital on the factory floor. As a purpose-built, pre-packaged application designed for specific industries it requires no customization, ensuring a higher probability of success, shorter time to benefits, and the flexibility needed to support growth and change. CDC Factory is the perfect fit for:



“We selected CDC 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

### Food & Beverage

How should food and beverage producers react to the price savvy consumer who continues to make cost-conscious buying decisions? Being in control of the cost of production and operating under the lowest-cost conditions provides the ability to make agile decisions about the right product mix, new product innovation and the most effective continuous improvement programs.

### Automotive

Automotive manufacturers and suppliers are being asked to make substantial contributions to production efficiency. Rapid changes have created compressed ramp-up schedules and less time for testing. CDC Factory delivers the intelligence and action cycles to reduce waste from poor quality or labor inefficiency.



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

**Jeff Herrell**  
NA Occupant Safety Systems  
Lead Black Belt  
TRW



“We have seen a 10% improvement in efficiency since CDC Factory was installed... there is the added benefit that CDC 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

### 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 critical. CPG manufacturers are deploying CDC Factory to achieve real-time operational transparency and optimize the available people and plant resources.

### 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 non-compliance.



“CDC Software 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

# Actionable Intelligence with Manufacturing Operations Management

CDC Factory is a packaged manufacturing operations management system that is designed to transform manufacturing performance by empowering people to make real-time actionable decisions. It 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. CDC 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 & throughput Analysis
- Continuous Improvement Campaign Management
- Automated Quality Assurance Process
- Compliance Management
- Executive Scorecards & Strategic Analytics
- Workplace Engagement
- Maintenance Response Management
- Workplace Production Scheduling



## Analytics



**Schedule**



**Performance**



**Quality**



**Improve**



**Constraint**



**Maintenance**



## Platform

“ CDC Factory offers us a strategic opportunity to improve the management of the value stream—from schedule adherence to streamlining production runs and enabling responsive maintenance teams. It's allowing us to unlock our untapped capacity opportunities and to drive down our cost per case.”

**Stuart James**  
Head of Business Systems  
Natures Way Food

# CDC Factory Competencies

## Application Modules



**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.



**CONSTRAINT Constraints Management** Constraint models the whole production flow identifying unused potential capacity by highlighting Head Room, Bottlenecks and buffer zones. Real-time, traffic lit displays, mimic the live production flows and offers drill down points to explore performance variations. The process balance aids the identification of process design adjustments to optimize the throughput of any production process.



**SCHEDULE Production Scheduling in real-time** Enable work floor production schedules to be automatically updated to match the pace of production. Flex plans and synchronize inventory requirements with available production capacity and ongoing constraints.



**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.



**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.



**MAINTENANCE Agile Maintenance Response** Improve maintenance response times and asset utilization with a real-time maintenance control function that is fully integrated with the shop floor management system. Streamline work permit systems and integrate real-time work order generation with common Enterprise Asset Management (EAM) systems.



**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.



**PLATFORM Flexible Infrastructure** Platform is the backbone to the whole suite. A central system for single- or multi-server environments that includes data collection, processing/communications, administrator interfaces for configuration and technical management. The automated data engine provides the flexibility to capture all signals needed to address the full scope of manufacturing opportunities.

# Implementation Success

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 they 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 CDC 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 CDC 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.

Our global perspective means our multi-national implementations that span continents follow a systematic, proven model to ensure consistency of delivery and results.

## Customer Spotlight



### Bay Valley foods

5% Efficiency uplift in under a year



### Pinnacle Foods

\$2M OEE improvement in under a year



### TRW

Real-time shop floor visibility in all areas of the plant.



### Nicepak

10% Efficiency increase in under 6 months



### HJ Heinz Sauces

5% capacity increase in under a year



“ Right from the start, CDC Factory offered a different perspective and approach from its competitors...they included a Change Program that detailed how the team should be structured how it should operate and what problem-solving techniques we should use. None of the other competitors had anything of the sort. ”

Steve Leins  
VP Manufacturing  
Windsor Foods

## CDC Factory Customers include:

### Food & Beverage:

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

### Automotive

- Chrysler
- Ford
- Honda
- Tower Automotive
- Toyota
- TRW

### CPG:

- Boots Contract Manufacturing
- Cibavision
- Gillette
- Nicepak
- Ricoh

### Pharmaceutical:

- Amerisource Bergen
- Anderson Packaging
- Genentech
- GSK
- Smiths Medical Devices
- TEVA

CDC Factory is used worldwide by over 450 factories that span a broad spectrum of industry verticals including Food & Beverage, Automotive, CPG 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 CDC 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.

To learn more about how CDC Factory can help you identify and tap hidden operational efficiencies in your plants, visit [www.cdcfactory.com](http://www.cdcfactory.com). Alternatively contact +1 678 -287-8411 or email at [cdcfactory@cdcsoftware.com](mailto:cdcfactory@cdcsoftware.com).

“ The Factory Profit Audit was an excellent activity it helped us benchmark our current performance and understand the potential returns that could be achieved from the project. The speed at which the team understood the requirements of our business and applied the CDC Factory solution was impressive and the simulated date in the life of the software really brought your solution to life. ”

**Mark Grasse**  
Director of Manufacturing Operations,  
Masters Gallery Foods inc.

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## Want to learn more?

For more information and links to informative resources go to [www.cdcfactory.com](http://www.cdcfactory.com) where you will find product information, case studies, video testimonials and engaging white papers.

### CDC Software

THE CUSTOMER-DRIVEN COMPANY™

#### North America:

Phone: +1 678-287-8411

Fax: +1 404-506-9015

Email: [cdcfactory@cdcsoftware.com](mailto:cdcfactory@cdcsoftware.com)

#### UK:

Phone: +44 1 604 6300 50

Fax: +44 1604 630 532

Email: [cdcfactory@cdcsoftware.com](mailto:cdcfactory@cdcsoftware.com)

#### Spain:

Phone: +34 934 802 850

Fax: +34 934 802 855

Email: [cdcfactory@cdcsoftware.com](mailto:cdcfactory@cdcsoftware.com)

#### France:

Phone: + 331 44 34 46 00

Fax: + 331 44 34 46 01

Email: [cdcfactoryfrance@cdcsoftware.com](mailto:cdcfactoryfrance@cdcsoftware.com)

#### India:

Phone: +91 80 41125858

Fax: +91 80 41125959

Email: [cdcfactory@cdcsoftware.com](mailto:cdcfactory@cdcsoftware.com)