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**Adexa's Worldwide Locations**

**North America**

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Toronto, ON

**Europe**

Germany  
United Kingdom

**Asia**

Japan  
South Korea  
Singapore  
Taiwan



**Real Solutions. Measurable Results.**



# Adexa eGPS:

The manufacturing challenges of the 21st Century are daunting. As you create new products, enter new markets, face new competitors, and strive to increase customer service and satisfaction, the complexity — and strategic importance — of managing your supply chain continue to grow. You need timely and accurate information, operational visibility across suppliers, predictable flows of material and working capital — and streamlined efficiency at every stage of procurement and production.

## That's what Adexa provides

Our acclaimed Enterprise Global Planning System™ (eGPS™) suite of solutions for manufacturers provides supply chain planning, enterprise business planning, enterprise performance management, and intelligent collaboration that helps you maximize asset utilization within and beyond the walls of your company. Adexa® provides a local and global view of supply and demand requirements and constraints and the insight you need to optimize them. The result: greater speed and profitability across multi-tiered supply chains.

To draw a comparison, automotive GPS units let you choose a destination and subsequently guide you with real-time directions or warns you if you deviate off

course. Similarly, Adexa eGPS provides you a global, unified, synchronized view of supply, demand, capacity, and performance metrics. With that knowledge, Adexa eGPS can automatically analyze how you compare against your competition or against best-in-class vendors, using Web-based publicly available financial and operational data, and make recommendations on where to improve your organization to achieve strategic advantage.

Effectively, Adexa eGPS helps you define your destination and ensure that all operational and supply chain planning decisions help you attain that corporate goal. To ensure you will arrive at your corporate destination, Adexa eGPS provides hundreds of out-of-the-box key performance indicators (KPIs) to measure your progress. These KPIs can warn you if you deviate off course by notifying stakeholders of any significant event — regardless if it is based on historical metrics such as customer service or forward looking metrics such as forecasted demand.

With Adexa eGPS, you always know where you stand and what you need to do to move forward with speed, confidence, and success. That means you can expand market share, increase return on capital, strengthen supplier and customer relationships, and create a truly agile enterprise.

# Enterprise Global Planning System

## With Adexa you'll know:

- A/R escalation time
- Burdened direct labor
- Burdened payroll expense, administrative/HR, facilities, finance, IT, management, marketing, MRO purchasing, R&D, and sales
- Closing percent by channel
- Closing percent, cycle time, promotion success, and order size by channel
- Cost of goods sold (COGS)
- Customer turnover
- Cycle time by channel
- Days in inventory (DII)
- Days purchases outstanding (DPO)
- Days sales outstanding
- Direct material cost
- Expensed material and services
- Finished goods lead time
- Fixed asset utilization
- Forecast and lead time and accuracy of raw materials, finished goods, MRO, service, and WIP
- Fulfillment and invoicing accuracy
- Inbound transportation
- Inventory write-offs
- Invoicing accuracy
- Lead time for finished goods
- Manufacturing equipment utilization
- Order fill rate
- Order size by channel
- Order to invoice lead time
- Outbound transportation
- Overtime premium
- Plant utilization
- PP&E repair and maintenance
- Project startup expenses
- Promotion success by channel
- Revenue growth
- Sales returns and allowances
- Selling, general, and administrative
- Service burdened labor
- Transportation equipment utilization
- Utilization of manufacturing equipment, plants, transportation equipment, and warehouses
- Warehousing utilization
- Warranty and repair costs
- Indirect burdened labor/expense on material handling, manufacturing, planning, production, quality, purchasing, and service

# IDENTIFY Your Objectives

When you have multiple plants and warehouses, it's difficult to synchronize corporate and manufacturing plans — especially in dynamic, high-growth markets. Move forward with confidence by carefully assessing competitive and market environments and building long-term scenario-based plans that optimize the operational and financial performance of your entire supply chain.

Adexa can give you the high-level, long-horizon plan that identifies financial opportunities and links them directly and tactically to key value-driving business strategies. It starts with a thorough assessment of your industry and competitors — including the key ratios that directly affect return on invested capital. Then, we help you tie those opportunities to plan and optimize at a high level over the long-term.

Only Adexa integrates the necessary competitive analyses, peer comparisons, and industry averages that give corporate planning the proper context. We help you see the entire set of business opportunities and tie financial analytics to the business issues, activities, and processes that drive them. The result: a well-aligned organization that's positioned for long-term success.

- React faster to market changes
- Measure and compare your supply chain performance against the competition
- Adjust your strategic plan frequently
- Analyze the ramifications of M&A opportunities
- Avoid excess warehouse capacity and unused equipment
- Perform long-range planning and “what-if” analysis to determine the impact of simultaneous business decision combinations
- Confidently optimize your supply chain network



# DEMAND

## Accountability

In today's volatile economy, successful manufacturing companies are identifying and tracking important KPIs — the metrics that help measure, predict, and drive company performance. That's especially true in volatile markets like electronics and aerospace where short product life cycles are the rule.

You want to dissect financial metrics like COGS, days in inventory, DSOs, and revenue growth on a product, customer, or geographic basis. Your operational KPIs can be numerous and changing. Depending on your business model, you might need to track dozens of KPIs to gain insight into your future performance. Most importantly, those KPIs are your distant-early-warning of problems, shortages, and other disruptions that can dramatically affect your results.

With Adexa, you can monitor any KPI, any trading partner, or any manufacturing operation, and immediately notify any stakeholder of events that require their involvement. Adexa's event management capabilities occur in real-time and notifications are delivered based on a user's preferred method of delivery. Even more compelling, Adexa can recommend viable corrective actions when notification occurs. Adexa eGPS focuses on what's relevant or what needs your immediate attention,

allowing you to identify unexpected positive variances and trends, new opportunities for expansion and growth, and new avenues for cutting costs and improving efficiency.

- Identify, measure, and monitor your company's financial and operational KPIs
- Evaluate supplier performances
- Track costs and efficiencies
- Monitor delivery performance
- Detect KPIs that dip below or rise above target levels
- Accelerate decision cycles
- Focus and improve on KPIs
- Identify unexpected events and trends in time to take corrective action
- Reduce costs by spotting cost-cutting opportunities



# 30% Inventory Reduction

Like virtually every manufacturer, you want to reduce lead times — without increasing obsolete inventory. You want to prevent outages and shortages — without large inventories of components and supplies. You want to align sales and production plans — without over-investing in capacity.

Achieving optimal inventory buffers across the supply chain, reducing customer lead times, increasing order fill rates, and avoiding capacity and materials shortages — those are major challenges. But that's where Adexa can help.

We'll help you create a one-to-three month plan that optimizes and balances supply and demand across the supply chain. Set inventory levels based on your service-level commitments and use them to establish optimal inventory buffers. Use your time-varying business rules — such as sourcing across multiple plants and multiple suppliers with qualifications and postponement strategies — as well as identify imbalances, capacity bottlenecks, and material shortages.

Only Adexa integrates forecasting, demand planning, inventory optimization, material and capacity planning, and supply planning into a unified, end-to-end

collaborative environment. That means you can take advantage of capacity-constrained optimization, inventory optimization, collaborative demand and supply planning, and underlying business-process workflows.

- Reduce your lead times
- Deploy inventory across the enterprise
- Break free from material or resource capacity constraints
- Improve service levels
- Reduce inventory management costs and obsolete inventory
- Integrate production and sales planning
- Reduce expediting costs
- Identify and reduce excess inventory
- Manage by/co products
- Optimize safety-stock and raw-material levels
- Accommodate demand spikes
- Improve asset utilization
- Gain greater purchasing leverage



# 100% Visibility

Synchronizing volatile supply and demand factors throughout the extended supply chain is never easy. Sudden changes in customer demand and supply disruptions can leave once-solid MRP plans in tatters. You need to minimize overtime, optimize plant utilization, avoid parts shortages, and streamline production lines — while also responding to changing demand patterns on a daily or weekly basis.

Adexa supports constraint-based planning with a comprehensive, inter-enterprise-wide model to synchronize supply with demand across the entire resources of your multi-site, multi-tier supply chain. Your calibrated plan encompasses procurement, shipments, manufacturing, and customer delivery. And it uses forecasts and customer orders at the “product family” level or at the end-item level to improve constraint-based production planning, rough-cut capacity planning, and master scheduling.

Adexa gives you maximum responsiveness in volatile planning environments. Now, you can reduce inventories by optimizing all supply chain activities and increase your responsiveness through shorter planning cycles. Your capacity and inventory are used to their fullest extent so you can fill all orders when they are truly needed.

- Create accurate constraint-based plans quickly
- Reduce excess inventory, excessive overtime, and excessive open work orders
- Shorten lead times
- Maximize fixed-asset usage and throughput
- Gain new visibility into production capacity
- Easily handle changes in customer demands
- Allocate equitable inventory across customers
- Choose the right alternate sources of supply



FACTORY PLANNING AND SCHEDULING

# INCREASE Throughput

How will you properly allocate your limited equipment resource capacity? How should you prioritize work orders and sequence the schedule for optimal throughput across the factory? And when changes arise — such as rush orders, unplanned maintenance, or other disruptions — how should you recalibrate and re-synchronize the production flows?

Adexa offers the industry's best solution for creating constraint-based planning that optimizes your plant-level production plans and continuously synchronizes them with changing supply and demand factors. With Adexa, you can create a constraint-based detailed plan of operations that is fully aligned with customer demand, current plant conditions, and strategic business objectives.

Driven by accurate and reliable plant scheduling, you can improve your on-time delivery performance and customer satisfaction by minimizing cycle times. What's more, you can lower inventory by optimizing work-in-process and improve equipment utilization through smart job sequencing.

- Improve manufacturing machinery utilization
- Synchronize WIP with demand to lower inventories
- Reduce overtime
- Re-route products for cost or availability optimization
- Optimize manufacturing utilization at the line/work center
- Minimize the impact of repair or maintenance work on production lines
- Automate detailed shop floor sequencing and dynamically resequence based on new information.
- Reduce change-over times
- Support proper manufacturing sequences for each product
- Identify and eliminate idle labor at some workstations and bottlenecks at other workstations
- Minimize the high cost of downtime from unplanned machine stoppages, unplanned overtime, and maintenance costs



COLLABORATIVE DEMAND PLANNING

# PREDICT the Future

When you have multiple products in multiple locations, you need to know — accurately and quickly — what your customers want. Forecast too low and you'll have shortages and lost sales. But predict a high demand that doesn't materialize and you're stuck with excess inventory, idle lines, and damaging write-offs. With Adexa you have timely, accurate, and aggregated demand data from sales, marketing, and customers to create a rich and comprehensive view of all demand factors and forecasts.

Using a built-in library of statistical forecasting algorithms, Adexa gives you an up-to-date view of demand and allocations and a consensus forecast using data from multiple sources. Adexa also enables you to analyze your forecast, determine which data providers are most accurate, optimistic, or pessimistic, and assign greater weight to those submissions that are most accurate.

Only Adexa brings speed, accuracy, and simplicity to demand planning, enabling you to increase revenue, organizational agility, and customer service.

- Improve reliability in product forecasts and demand plans — even for new products
- Maintain the right inventory levels for seasonal peaks and valleys
- Accurately forecast revenue and corresponding resource requirements
- Simplify promotion planning and cost/benefit analysis
- Analyze profitability by channel, product, and geography
- Maximize spare parts usage and maintenance inventories
- Strengthen new/untested marketing campaigns



COLLABORATIVE SUPPLY PLANNING

# ACCELERATE the Supplier Network

The secret to an efficient and profitable manufacturing operation lies in controlling your downstream supply chain. You need short lead times, competitive price points and aggregate volume discounts, low raw material inventories (without shortages), and predictable, reliable deliveries — across all of your facilities and all of your suppliers. Ultimately, it comes down to fast, accurate visibility into your vendors' capacities for mutual profitability. How can you achieve it?

Adexa offers a comprehensive answer with a real-time, collaborative solution that creates and maintains an up-to-date view of constrained and unconstrained supply plans and provides an aggregated supply plan across various business units to support improved contract-price negotiations.

You give immediate visibility to your vendors, enabling them to see and understand your raw material and component supply requirements based on your current — perhaps unexpected — fluctuations in demand, promotions, product lifecycles, and more. Adexa enables you to reduce raw material and component prices and inventory, increase your organizational agility, improve purchasing lead times, and improve the accuracy of raw material and component forecasting.

- Shorten purchasing lead times
- Aggregate enterprise-wide purchases for improved price-negotiation leverage, competitive price points, and consolidated contracts across your organization
- Identify opportunities for better discounts on high-volume items
- Optimize sourcing of components and raw materials
- Reduce raw material inventories
- Communicate production issues to suppliers in a timely manner
- Reduce the time and expense of communicating with and managing suppliers
- Stay abreast of supplier decisions on product lifecycles
- Consolidate supplier lists
- Get a better handle on raw material inventory and proactively detect/predict supply shortages
- Understand all facets of how much business goes to each vendor



# MINIMIZE Procurement Costs

It's a truism in manufacturing — you're only as good as your suppliers. But how can you communicate with suppliers and monitor their performance? You need visibility into direct material purchases through contract manufacturers — to ensure terms, conditions, specs, and quality are correct and on time.

But to stay on top of your manufacturing operations, you need to know what capacity and inventory levels exist at every step along the way — especially before materials and components reach your receiving dock. Expedited supply lead times, shortage avoidance, and quality control are just a few of the essential requirements for controlling these supply chains.

Adexa streamlines the procurement process among suppliers at every stage, compressing purchasing cycles and giving you full visibility into the order execution process in an outsourced manufacturing environment.

Only Adexa gives you a unified environment where demand signals automatically propagate through multiple supply-chain tiers based on your sourcing rules and bill of materials. That helps you reduce raw material and component inventories (and risk of obsolescence), lower purchasing prices, shorten purchasing lead times, and streamline communications.

- Control the procurement process in an outsourced manufacturing environment
- Shorten purchasing lead times
- Improve visibility into purchase order status
- Optimize sourcing of components and raw materials
- Reduce raw material inventory levels
- Communicate production issues to suppliers in a timely manner
- Streamline supplier communication and management
- Create real-time visibility into supplier availability and capacity
- Integrate procurement functions with other enterprise systems



ORDER LIFECYCLE MANAGEMENT

# REAL-TIME Order Management

With multiple tiers of suppliers, subcontractors, plants, and inventory locations, alignment and synchronization are non-negotiable requirements. Smooth, fast, and accurate information flows are critical to manage customer orders from start to finish and limit the potential for supply chain disruption.

Adexa solutions foster collaboration among all participants in complex, multi-tier supply chains. That means you can create a unified environment for managing order execution that crosses production lines, departments, plants, and companies. Procurement processes are faster and more efficient. Customers can place orders, make changes, and check statuses from a Web browser. And you can identify imbalances, bottlenecks, and shortages that can affect customer orders.

Adexa helps you accelerate the velocity of your business and the responsiveness of your entire supply chain. Your decisions are faster and more on-target because you've reduced the internal and external barriers to the sharing of information. Order management and processing costs decrease, and you can make firm delivery commitments with confidence.

- Tie individual production runs to individual customer orders
- Use greater information about supplier capabilities and capacity to best meet customer demand
- Enable customers to access order status or delivery information directly
- Improve on-time shipment performance
- Simplify and streamline customer change-orders processing
- Reduce purchase order management costs
- Improve visibility of third party logistics activity for inbound consigned inventory
- Automate purchase order processing



# 100% Fill Rates

The challenge to keep order-fill rates high never ends. Component shortages, lengthy supplier lead times, and inappropriate substitutions can all converge to disrupt your ability to offer and deliver products to your customers. But your “worst-case” fixed lead-time can cost you sales and even customer accounts.

When orders come in, you need to confidently promise availability and meet those aggressive commitments. With Adexa, you can quickly and accurately calculate product availability dates based on the actual status of your supply chain — no more worst-case fixed-lead-times. In conjunction with your Order Entry system, Adexa provides real-time capable to promise (CTP) and available to promise (ATP) information while you place the order — even if only part of the order will be ready — using current materials and capacity information.

Only Adexa analyzes inventories, capacity, and even material supply constraints to provide availability information. That means improved customer response times and accurate (and aggressive) delivery dates — without over-committing your capacity.

- Use substitute components or products to meet customer orders
- Reduce turnaround time for customer inquiries and increase accuracy of ATP information
- Manage availability, stock-outs, partial shipments, and returns
- Stop using fixed quoted lead-times on sales orders
- Reduce or eliminate errors and inaccurate deliveries for configured products
- Reduce time needed to prepare and process sales quotations
- Reduce partial-order shipments
- Reduce customer change orders
- Shorten plan cycle times



PRODUCT LIFECYCLE MANAGEMENT

# FASTEST to Market

Complex products — automobiles, defense systems, computers — often have short lives, requiring streamlined, synchronized processes in design, engineering, sales, marketing, manufacturing, distribution, and customer service — all in significantly compressed timeframes.

Adexa gives you unique power to manage the product lifecycle, accelerate the introduction of new products, and optimize all product lifecycle phases: design, engineering, sales and marketing, manufacturing, distribution, and end-of-life retirement. With Adexa, you can optimize design resources (such as CAD stations) to speed design cycles; create product demand forecasts based on the existing history of similar products; allocate production capacity across new and existing products; and, analyze inventory, capacity, and profit margins to determine the optimal end-of-life timeframes.

- Bring new products to market faster
- Shorten lead times for product design and validation
- Streamline and accelerate new product launches
- Optimally deploy engineering, CAD, and prototyping resources to complete critical projects
- Reduce product development and manufacturing costs
- Reduce levels of obsolete component inventory at multiple locations
- Get product design changes into production quickly
- Ensure alignment of product features and customer needs
- Ensure easier availability and accessibility of new products to clients



# Adexa eGPS

## Practical. Profitable. Proven.

Founded in 1994, Adexa delivers an integrated suite of supply chain and business management solutions for manufacturers that maximize asset usage within and beyond the four walls of an enterprise by providing local and global view of supply and demand requirements, constraints and deployment of capital.

Driven by its comprehensive understanding of the requirements of the customer and the shortcomings of competitive supply chain offerings, Adexa enables and automates intelligent decision making across the enterprise and throughout all levels of multi-tiered supply chains for faster and more profitable operations.

Adexa offers vertical solution templates based on common industry requirements, as well as industry-specific support teams with the expertise to rapidly tailor solutions and meet unique customer-specific requirements.

Adexa eGPS is the next generation solution which delivers a self-repairing supply chain. It is built for customer success — out-of-the-box integration, incredibly rapid implementation, immediate return on investment, and guaranteed satisfaction.

Only Adexa is practical, profitable, proven.