

Industry

Adexa eGPS

for Aerospace

**Expanding markets.** Shrinking margins. Increasingly complex partnerships. The global supply chains that deliver on aerospace and defense programs are under pressure to

improve Return on



## Increase visibility for effective partnerships. Improve aftermarket performance for long-term profitability

OEMs and prime contractors face ever-shrinking margins and intensifying competition while political and economic instability contribute to growing uncertainty of future demand. Component vendors find themselves with greater responsibility for managing program logistics, costs and the flow of information within complex multi-tier relationships. Adexa Enterprise Global Planning System (eGPS) shows you the way.

## Maximize the value of every project with more precise quoting and costing

Aerospace and defense projects represent the most complex long-term development programs of modern industry. Typically, contracts are awarded and commitments are entrenched before the full extent of the material and logistic requirements are clearly identified.

These gaps in the quoting process allow unforeseen costs to creep in and further erode chronically thin profit margins. eGPS broadens and deepens the end-to- end visibility of costs, constraints, capacities and processes across all tiers and companies in the supply chain, so your bids can be based on more detailed, more timely data. eGPS lets you close the gap between trading partners' systems and practices so you can evaluate design and sourcing alternatives faster. With the extraordinary solving power of eGPS, you can predict the impact of changing requirements and market conditions in real time, then share the results up and down the supply chain automatically.

By delivering information directly to multiple tiers of suppliers and production systems, partners can quote with greater speed and precision, reducing the need to factor an extra margin of safety into costs. eGPS enables comprehensive strategic planning that lets you bridge the progressive phases of the project, from design to production to field support, so you can optimize costs and profitability across its complete lifecycle.

# Synchronize production planning with the digital twin of your supply chain

Establishing partnerships with key component vendors is one thing; getting them to work together is another. The success of a major project hinges on effective coordination of diverse skills, tools and materials distributed over complex tiers of subcontractors and component manufacturers.

Within eGPS, you can capture a detailed inventory of human resources, machine capabilities and work-zone capacities to create detailed sequencing plans designed to optimize planning interactively throughout the supply chain.



## Maximize project value

Improve the accuracy for program quotes, reduce WIP and cycle times, and lifecycle support for tighter control of margins and profits.



#### Synchronize planning

Establish a common language for capturing data and feeding decisions back to enterprise and shop floor systems across multiple tiers and vendors.



#### Reduce lifecycle costs

Extend visibility into design and demand planning to cut costs from development, manufacturing, logistics and MRO stocks.



### **Enable collaboration**

Deliver better information faster so trading partners can respond to changes and operate proactively to help you reach your goals.



#### Strengthen customer relations

Increase responsiveness to customer requests and enable closer integration of after-sale support with customer



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eGPS has its roots in collaborative systems, so it's inherently suited to integrate with the enterprise systems used by partners and customers worldwide.

Information from all sources is captured in a single shared data model, providing a common language and planning platform for different management and shop floor systems — without replacing the applications you know.

As information gets updated and new decisions are made, eGPS can communicate directly with existing MRP, ERP, MES, configurator, logistics and accounting systems anywhere in the project team, at all levels of the supply chain. So everyone's moving in the same direction, at the same speed.

#### Capture your fair share of the aftermarket revenues stream

While most of the risk and development cost for major projects are incurred in the initial run, the bulk of revenues and profit margins go to the aftermarket. Yet, typically, OEMs retain only 15% of aftermarket sales. With eGPS, project primes can streamline their aftermarket supply chains to lower costs and improve service to the customer while continuing to earn premium profit margins.

Detailed data on factors such as availability targets, parts and labor costs, MTBF (mean time between failure) are factored into long-term demand forecasts without sacrificing responsiveness to manage short-term fluctuations. Real-time analysis allows you to evaluate the impact of design and engineering trade-offs on logistic costs before the development proposal is written.

The same flexibility allows smarter roll-out planning for product improvement programs with minimal waste or disruption in established practices. With end-to- end visibility of the full range of demand signals, supply sources, dependencies and decision constraints, you're now in position to leverage pre- positioned global assets into strengthened customer relationships and stabilized long-term revenues.

### eGPS for Aerospace: Get there faster!

With Adexa eGPS, you and your supply chain partners can have a clear picture of where you're going and your position right now as you move forward on your business objectives.

#### eGPS points the way to accurate planning and execution

eGPS enables a global view of supply and demand requirements, measured against both physical and business constraints, to support smarter decision-making across the enterprise and throughout the supply chain. eGPS allows

you to optimize production and delivery plans for speed and profitability, and communicate the plan to all parties involved in the process, from raw materials to the final customer.

When exceptions emerge or new constraints appear, eGPS automatically updates the plan and alerts stakeholders to the new directions they need to take.

#### Faster to respond

The proven collaboration digital twin underlying eGPS enables quick configuration to fit your business systems so you can see your actual data and processes in action before you buy.

#### Faster to implement

All applications in the eGPS suite are pre-integrated and native to the Adexa environment. Both S&OP and S&OE reside in ONE system, truly merging planning and execution. There's no time wasted patching interfaces between critical systems.

#### Faster to solve

The powerful AI/ML and optimization engine at the heart of eGPS forms a digital twin and solves highly complex problems and what-if scenarios in seconds where other solutions require hours or days to process. Fast solving also allows more accurate modeling at the lowest possible level of detail.

### **Faster innovation**

Adexa delivers advanced functionality first because, while other solution providers are working on fixes to bundle disparate modules together from varied developers, our unified data model lets us focus development on adding real enhancements to eGPS solutions. Furthermore, Adexa Genies® enable automation of many of your business processes and constantly improve and optimize your policies such as safety stock levels.

#### **Faster ROI**

By implementing your solution with pre-integrated modules use of attribute-based planning technology, you adapt quickly to the processes you already know and use, eGPS starts delivering benefits sooner and earning dividends on your investment faster.

"Using Adexa
Genies®, eGPS
enables building a
digital twin of your
supply chain and
your factories,
and continues to
self-correct the model
and self-improve the
policies such
as safety stocks."

