

Enterprise Asset Masset and Maximo from IBM & Performance Technologies

Customer environment

Asset intensive organizations depend on physical assets to produce and deliver goods and services to the marketplace. From fleet vehicles to production facilities, each of these assets must be tracked, managed and serviced to deliver optimal value and support critical business functions. However, managing these physical assets can present unique and substantial challenges—largely due to the critical nature of the assets themselves.

- *How can we schedule equipment for inspection or maintenance with minimal business disruption?*
- *How can we better control vehicle fleet maintenance to manage the service workload and maximize vehicle uptime?*

Management is further complicate by the fact that many of these assets are distributed and/or mobile. For many organizations this means multiple management silos, often with redundant function at a single location or steps repeated at multiple locations—real costs, both in terms of business productivity and actual service costs. The consequences of under-management and reactive management can be even more severe, with unpredictable productivity and safety implications.

Enterprise Asset Management for business:

In a price-sensitive global marketplace, goods and services have become increasingly commoditized. Companies seeking to differentiate offerings, improve market share, and support profitability have identified Enterprise Asset Management (EAM) as a key opportunity for improving operational efficiency. Proactive asset management has the potential to provide relief from competitive pressure by allowing organizations to flexibly choose from a combination of benefits: reduced operating expense, greater productivity, higher service levels, deferred asset expenditures and more.

Enterprise Management in the public sector:

Public sector organizations at the local, state, and federal level are often challenged with managing a large number and variety of assets. These organizations, with responsibilities ranging from national security to environmental protection and education, are not concerned with profitability, but have strong mandates to meet the strictest standards for safety and deliver higher levels service to their constituencies. Holistic management of assets can help

these organizations streamline and improve an asset acquisition and management process that is often segmented and divided bureaucratically.

Overview and value proposition:

IBM® Maximo® Asset Management solution in conjunction with **Performance Technologies'** expertise on the field, can provide your enterprise with a comprehensive answer for physical asset management. This flexible solution provides a unified, service oriented architecture (SOA) platform that delivers asset lifecycle and maintenance management from end-to-end across the enterprise. With customizable options for automation and user assistance, IBM Maximo Asset Management can help you exploit new efficiencies and maximize asset value while cutting management costs.

In practice, IBM Maximo Asset Management facilitates the development of a coordinated program for preventive, predictive, routine, and unplanned maintenance. Advanced scheduling functionality allows deployment of personnel with the appropriate skills at the right time and for the right job. It helps ensure compliance with contracts, service level agreements, internal standards, and government regulations. Additional high-value functions include inventory, procurement, warranty management, vendor management, parts management and supply chain logistics.

IBM Maximo Asset Management Essentials can also deliver basic asset and work management features at a lower cost for smaller organizations or departmental clients with limited number of users

Capabilities:

- Track and manage asset deployment, specifications, conditions, calibration, costing from a single system.
- Ease the integration and administration of intelligent (IT connected) physical assets such as self-reporting pumps and meters
- Manage maintenance with comprehensive maintenance work management for planned and unplanned activities including long- and short-term planning, preventive, reactive and condition-based maintenance, schedule management, resource optimization and key performance indicators.
- Plan inventory to meet maintenance demand accurately, making the right parts available at the right location when needed.

- Manage vendor contracts with comprehensive contract management support for purchase, lease, rental, warranty, rate, master, blanket and user-defined contracts.
- Define service offerings and establish service level agreements (SLAs) to help align service levels with business objectives.
- Automate process workflows to quickly and accurately enforce business-critical policies. It includes automated, preconfigured, and customizable process workflows for asset and work management processes, including industry specific process templates.

Benefits:

IBM Maximo Asset Management can help your company/organization to:

- Improve asset visibility—increase awareness of asset locations, conditions and commitments.
- Reduce planned and unplanned asset downtime.
- Maximize asset productivity.
- Improve service planning and scheduling.
- Reduce risk of business disruption.
- Retain and exploit asset management records for general reporting, cost justification, and regulatory compliance.
- Improve capacity planning and forecasting.
- Defer or avoid capital expenditures through increased efficiency.
- Support safety initiatives.
- Eliminate the license and administrative costs for multiple “point products.”
- Integrate physical asset management into a growing family of whole-business visibility, control and automation options from IBM.
- Metrics/Statistics achieved by Maximo EAM Customers:
 - Labor Utilization UP 10-20%
 - Asset Utilization UP 3-5%
 - Equipment purchases DOWN 3-5%
 - Warranty recoveries UP 10-50%
 - Inventory needs DOWN 20-30%

- Inventory carrying costs
DOWN 5-20%
- Material costs REDUCED 5-10%
- Purchasing labor
REDUCED 10-50%

IBM Maximo options:

IBM Maximo Asset Management product options extend the asset management platform and provide deeper industry and task-specific functionalities. Options include:

- **IBM Maximo Linear Asset Management**

Assists in tracking, managing and optimizing performance levels of linear assets such as roads, railways and pipelines.

- **IBM Maximo Scheduler**

An add-on to Maximo. Enables to visually schedule work and forecasted PM's in a Gantt chart view, taking into consideration work constraints and dependencies applying a critical path method automatically which users can then manage. Availability of labor and crafts are also visible to help with scheduling activities.

- **IBM Maximo for Service Providers**

An Add-on to Maximo. Offers a comprehensive solution for managing assets as a business. Provides extensive capabilities in billing, customer agreement, and service management for all asset classes

<http://www-03.ibm.com/software/products/en/maxiforservprov/>

IBM Maximo Industry Solutions:

- **IBM Maximo for Utilities**

Provides industry specific capabilities to support compatible unit estimating (CUE), crew management, tracking of labor skills and certifications, integration with fixed asset accounting, mobile workforce management, design tools and spatial (GIS) enablement.

<http://www-03.ibm.com/software/products/en/ibmmaximoforutilities/>

- **IBM Maximo for Life Sciences**

Provides industry specific capabilities to support life sciences and pharmaceutical manufacturing business requirements, such as regulatory compliance with FDA (21 CFR part 11 for support of electronic signatures and electronic audits), Calibration of instruments, tools & measurement equipment and standards, support for asset-related CAPA processes and support in Validation projects by providing Compliance Assistance documentation.

<http://www-03.ibm.com/software/products/en/maximoforlifesciences>

- **IBM Maximo for Nuclear Power**

Addresses the specialized needs of the nuclear power industry, such as surveillance testing, corrective action, calibration, and procurement engineering.

<http://www-03.ibm.com/software/products/en/maximofornuclearpower>

- **IBM Maximo for Transportation**

Provides industry specific capabilities to support transportation business requirements, such as Campaigns, Industry Codes, Fuel and Meter Integration, Labor Certifications, Maintenance Alerts, Meter History and Warranty Recovery

<http://www-03.ibm.com/software/products/en/maximofortransportation/>

- **IBM Maximo for Oil and Gas**

Addresses the specialized needs of the oil & gas industry, such as failure codes, asset specifications, location details, prioritization matrix, regulatory compliance, and condition for work.

<http://www-03.ibm.com/software/products/en/maximo-for-oil-and-gas>

- **IBM Maximo Health Safety & Environment Manager**

Extensions to Maximo Asset Management provides strategic applications for audit management, risk assessment, safety reporting, management of change, condition reporting, corrective actions and training.

<http://www-03.ibm.com/software/products/en/maximohsemanager>

Customer pain points

- Difficulty tracking asset location and availability
- Companies need to lower cost of operating and maintaining assets
- Difficulty scheduling appropriate skilled technicians for service and repair orders
- Continued concerns over production reliability, cost, quality, labor efficiency and operational integrity
- Increasing environmental, safety regulations, health regulations and reporting requirements
- Difficulty deploying or administering intelligent physical assets (difficulty integrating physical assets with IT)
- Many companies are experiencing aging assets and workforce(s) that will have to be replaced

Target customers:

IBM Maximo Asset Management is ideal for asset intensive businesses and public agencies. This is a cross industry solution that offers exceptional value for key targets including:

- Railroads - managing track, signals, structures
- Utilities – managing pipes & wires
- Telecommunications – managing cable
- Oil & Gas – managing pipeline, meters
- State DOTs - managing roadways
- Government (city, state, federal) – managing public infrastructure, roadways, etc.
- General business customers (Demand is high for asset management help, but IBM Maximo Essentials may be a better fit for businesses with less complex assets)

Customer projects that Maximo qualifies for:

- Improving Asset Availability/Reliability
- Network/Resource Optimization
- Replacing legacy work and asset management systems
- Integrated supply chain with work and asset management
- Service Desk/Corrective Action

Typical sponsors:

CXO/Management <i>(CIO, Finance/accounting, CFO, risk officers)</i>	
Role	Responsible executive or manager - approver
Responsibility	Responsible for business success of the enterprise
Reasons to buy IBM Maximo Asset Management	<ul style="list-style-type: none"> • Deeper ability to manage all the critical assets in the enterprise including linear assets • Enhanced control of access to important information for improved regulatory and compliance and risk management.

Line of Business/Operations <i>(Facilities managers, maintenance managers)</i>	
Role	Influencer – primary user
Responsibility	Ensure that asset performance supports the needs of the business
Reasons to buy IBM Maximo Asset Management	<ul style="list-style-type: none"> • New capabilities for managing unique attributes of linear assets • Improved user interface for more efficient and accurate information capture and accessibility

IT Administrators <i>(Program mgrs, system administrators, information specialists)</i>	
Role	Primary user - influencer
Responsibility	Responsible for implementation and administration of EAM solutions
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Winning against competitors:

Competitive, standalone EAM products are typically niche solutions focusing on limited types of assets (e.g. fleet) and industries (e.g. utilities). The standalone products have different user interfaces, platform requirements and administrative overheads that affect user and IT efficiencies. Furthermore, these products operate in silos - inhibiting visibility and automation across assets types and the enterprise in general. IBM Maximo solutions, on the other hand, support more asset types and offer more in-depth industry support on a common service oriented platform, enabling information and process visibility, control and automation across assets in the enterprise.

SAP, Oracle, IFS and Lawson use their ERP solution footprint and other tactics in competing with Maximo solutions. Infor is increasingly leveraging their ERP footprint in their accounts as the means to differentiate their EAM solution. That is, the ERP vendors don't just compete on the merits of their asset management component alone. When competing with ERP vendors, always position the inherent problems with monolithic ERP systems - release locks, slow deployment and upgrade cycles - affecting business agility. In addition, ERP systems usually offer a generic EAM component as the means for supporting the ERPs management and financial reporting functions. Unlike Maximo's rich asset management functionalities and industry offerings, ERP systems support selective industries with limited functionalities often supplemented with additional partner products.

The IBM Maximo Asset Management is a clear leader in the EAM marketplace. Proof points include:

- Very mature market, 50+ vendors
- ARC Advisory Group market leader
- Leader in Gartner Magic Quadrants for Utilities (Energy Delivery and Power Generation)
- Maximo meets stringent demands of PAS 55 for optimal performance of physical assets

- 11 of the 12 largest pharmaceutical companies in the world are using Maximo
- 8 of the 10 largest automotive companies in the world are using Maximo
- 5 of the 10 largest oil and gas companies in the world are using Maximo
- 11 of the 20 largest diversified utility companies are using Maximo
- 11 of the 12 major aerospace and defense companies in the world are using Maximo
- 9 of the 15 busiest airports in the world companies are using Maximo
- 6 of the 10 largest energy companies in the world are using Maximo

Maximo solutions are well proven in the industry, as they have had the leading overall market share in their class for the past five years. Specifically, IBM holds the leading market position in the following segments: EAM worldwide and in North America, EAM software revenues and service revenues, EAM for oil and gas, pharmaceutical and biotech, electric power, water and wastewater, automotive, logistics, government and independent maintenance service providers” ARC Advisory Group