Asset Management

IBM Maximo

Magnus Törrönen
Maximo Sales
What do we mean by Asset Management?

**INPUTS**
- Raw Materials
- Components
- Sub-Assemblies
- Consumables
- Data

**OUTPUTS**
- Information
- Finished Goods
- By-Products
- Waste

**ASSETS**
- Software Applications
- Equipment
- Buildings
- Machinery
- Infrastructure
- Tools
- Vehicles
- Hardware

**PEOPLE**
- Users
- Engineers
- Agents
- Managers
- Customers
- Intermediaries
- Contractors
- Third Parties

**PROCESS**
- Plans
- Procedures
- Instructions
- Schedules
- Regs & Policies
- Templates
- Diagrams
- Schematics

**Maximizing Return on Assets**
- Compliance Framework
- Limited Resources
- Highest reliability
- Lowest cost

Reduce Inventory

IBM Confidential © 2004 IBM Corporation
Enterprise Asset AND Service Management

- Service Management (in an Asset context): the operation and maintenance of the asset and its infrastructure to provide an optimal level of service to the customer at a justifiable cost.

Spectrum of different service models

- Break/fix Maintenance
- Asset management
- Internal Service Provider
- Asset management as a service
- Asset management as a business
- Profit/Loss
Asset-intensive Industries

- Banks
- Insurance
- Financial Institutions
- Education
- Hospitals
- Government Facilities
- Transportation Repair Depot
- Utilities
- Process Manufacturing
- Discrete Manufacturing

For Illustrative Purposes
Why is asset management important?

- Customer Demands for Performance
- Regulatory Attention to Performance
- Limited Revenue Growth Opportunities
- Supply and Demand Pressures
- Increased Environmental Pressures
- Capital Asset Requirements
- Restricted Access to Capital
- Financial Market Earnings Pressures

Legend:
- Strategic
- Tactical

Cost Reduction
Data to Information
Asset Management
Risk Management
What Are Some Of The Challenges Associated With Asset Management?

- Planning & scheduling to **minimize impact to, and optimize, production**
- **Ensure the appropriate resources,** materials, tools, and documents are ready for execution
- Ensure deficiencies (work orders) are recorded and recorded properly
- **Evaluate priority of new work orders** against those already in the backlog
- Combine multiple work orders against the same equipment where possible
- Does the maintenance organization have the correct number and skills of resources
- Properly record work order closures for future analysis
IBM Maximo is a software solution for

- Enterprise Asset management
- Asset Management for IT
- Service Management for IT & EAM

...or any combination of the above
IBM SWG and IBM Maximo
Think of Maximo when you have the following needs:

- Asset Management, e.g. maintenance management
- Material / Inventory / Warehouse Management
- Procurement management
- Service Management / Service Support
- Workforce Management
- ITIL processes
- Departmental Help / Service Desk / Call Center Services (HR, 311)
- Performance Management (people, work, process)
- Operations & Maintenance Execution
- Standardization of Business Processes
MRO, the acquired company, in a nutshell

- Global company based in Bedford, MA, founded in 1969
- Develops and sells Maximo, a software system solution for Asset & Service Management
- ~ 900 employees totally, yearly sales ~ $200M
- Acknowledged leader in the Asset & Service Management Market by leading analysts
- Strong customer base of over 10,000 companies representing over 300,000 end-users
- Customers are located in 103 countries and represent all industry segments, local MRO office in Stockholm
- Products are supported in over 20 languages
Maximo Enterprise Suite

- Addresses business challenges of Operations and IT
- Provides Service Management capabilities for
  - Asset Owners
  - Asset Managers
  - Service Providers
- Consolidates point solutions for Asset and Service Management
- Consolidates point solutions for various asset classes
- Next generation J2EE Technology Platform
- Support for e.g. ITIL processes

Maximo Asset Management – Modules

**Asset Management**
- Locations
- Asset Failure Codes
- Condition Monitoring
- Meters
- Meter Groups

**Work Management**
- Job Plans
- Routes
- Service Requests
- Service Items
- Work Order Tracking
- Safety
- Quick Reporting
- Labor
- Qualifications
- Lock-Out/Tag-Out
- Tools/Crafts/Companies
- Preventive Maintenance
- Master PM
- Assignment Manager

**Materials Management**
- Item Master
- Storerooms
- Inventory
- Lot Management
- Kitting
- Issues & Transfers
- Condition Codes
- Stocked Tools
- Service Items

**Purchasing**
- Request for Quotation
- Receiving
- Receiving Inspections
- Purchase Requisitions
- Invoices
- Purchase Orders
- Desktop Requisitions

**Contract Management**
- Purchase Contracts
- Master Contracts
- Warranty Contracts
- Lease/Rental Contracts
- Labor Rate Contracts
- Payment Schedules

**Service Management**
- Service Catalogs
- SLA Management
- Incidents
- Problems
- Changes
- Releases
- Solutions

**Dynamic Workflow Engine** – Event Driven – Context-based – Escalation Manager

**KPIs / Reporting / Analysis**

**Security & Administration**

**Service Oriented Architecture Technology Platform**
IBM Maximo Mobile Suite

- IBM Maximo Mobile for Work Management
- IBM Maximo Mobile for Inventory Management

Developed on Maximo’s standards-based architecture (XML, Java)

- Built into Maximo making it easy for organizations to centrally manage and extend their Maximo applications to remote workforces.
Maximo Spatial, geographical user interface towards assets and work orders
MRO Software is the only vendor to have been placed in the EAM Leader’s Quadrant 10 times since 1998

29 March 2006
© Gartner, Inc.
Kristian Steenstrup
William Maynard
ID: G00137606
What Values & Benefits Does The Customer Derive?

Potential Cost Savings/ROI Benefits:
- Labor Utilization up by 10-20%
- Asset utilization up by 3-5%
- Increased planned maintenance by 50-80%
- New Equipment purchases down by 3-5%
- Lost warranty recoveries up by 10-50%
- On-hand inventory needs down by 20-30%
- Inventory carrying costs down by 5-20%
- Material costs reduced by 5-10%
- Purchasing Labor reduced by 10-50%

Other benefits:
- Improved warehouse productivity
- Support for Sarbanes-Oxley compliance
- Improved regulatory/safety compliance
- More accurate data for improved decision making
- Improved work planning/coordination
- Sales growth through improved service
### Some references

- ACEA (ITA)
- ACEGAS (ITA)
- AGEA (ITA)
- Aleyska Pipeline
- Arizona Public Service
- Asahi (Japan)
- AstraZeneca (UK)
- Atlantic Coast Airways
- BA Engineering (UK)
- BAE Systems
- BC Ferries Corp (CDN)
- Belgian Railway (BEL)
- British Gas Storage (UK)
- British Military of Defense (UK)
- Bombardier
- Boston Gas
- BP Amoco (UK CDN US VN EGY)
- Calpine Energy
- Cargill
- Caterpillar Logistics
- Citrosco
- Colorado Springs Utilities
- Columbia Gas
- ConEd
- Connexus Energy
- Cytec Industries
- Danish Railway (NETH)
- Defense Contractor (CDN)
- Detroit DWSD
- Detroit Energy (DTE)
- Duke Energy
- Dynegy
- EDF (FRA)
- Edison Mission Energy (UK)
- Elizabethtown Water
- ELF (UK)
- Energieversorgung Oberhausen (FRG)
- EPAL (POR)
- ESB (IRE)
- Eurotunnel (UK)
- Evta Mining
- FleetEdge
- Frito Lay
- Greensboro, NC
- Hydro Quebec (Canada)
- ICI (UK)
- Johnson & Johnson
- Kansas City Pub Util
- Keyspan Energy (East)
- Keyspan Gas
- Lattice – Transco (UK)
- LOGMOD (US Army)
- Long Island Light
- Lonza Group
- Los Alamos Lab
- Mead
- MDC-Metropolitan District Commission
- Minnesota Power
- Mohegan Sun
- MOL Oil (Hun)
- MRO Software SAP Link
- National Grid Company (UK)
- National Steel Pellet
- NAVSEA (Navy Fleet)
- NCE (Xcel Energy)
- Netcom (Australia)
- New York Subway
- Nstar
- Nynas Oil (UK)
- Philadelphia
- Pirelli Cable
- Powergen/East Midlands Electricy (UK)
- Prepa
- Ruan Transportation
- Ryder Trucking
- SABIC
- San Diego DWSD
- Saur Water (UK) (So East Water)
- SEABO (ITA)
- SETECH
- Schott Glass Industries
- Scottish and Southern Energy (UK)
- Scottish Power (UK)
- Scottish Water (UK)
- Shell Oil (Neth)
- Southern California Gas
- Southern Energy
- SR Technics-Swissair Engineering (SWZ)
- Stadtwerke Chemnitz (FRG)
- Stadtwerke Erfurt (FRG)
- Stadtwerke Heidenheim (FRG)
- TetraPack (UK)
- Texaco (UK)
- Texas Utilities
- Thames Utilities
- Tifftn Aluminum
- TIWAG (Austria)
- T Mobile (UK)
- UK Post Office (UK)
- University of Chicago
- US Mint
- Via Systems
- Xcel Energy
- Vodaphone (UK)
- Wake County GSA
- Yorkshire Electricity (UK)
- Yorkshire Water (UK)
Some screen shots
Current trends?

- 1st generation "ERP" system deliveries and IT Service Management

- Unified approach towards asset management, regardless of asset type
  - IT is more and more becoming embedded into production equipment, cars, devices, appliances, etc.

- Workforce generation shift issues
IBM Service Management for Converged Assets

Extending IBM Service Management with MRO

- Manage all critical assets and services across the enterprise
- Align their performance with overall business objectives
- Meet Regulatory and Compliance Standards
- Modern Web Technology Standards Based
- Leverages the current IBM Service Management architecture