

ORACLE®



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Enterprise Asset Management It Takes a Suite

Why “Asset Management?”



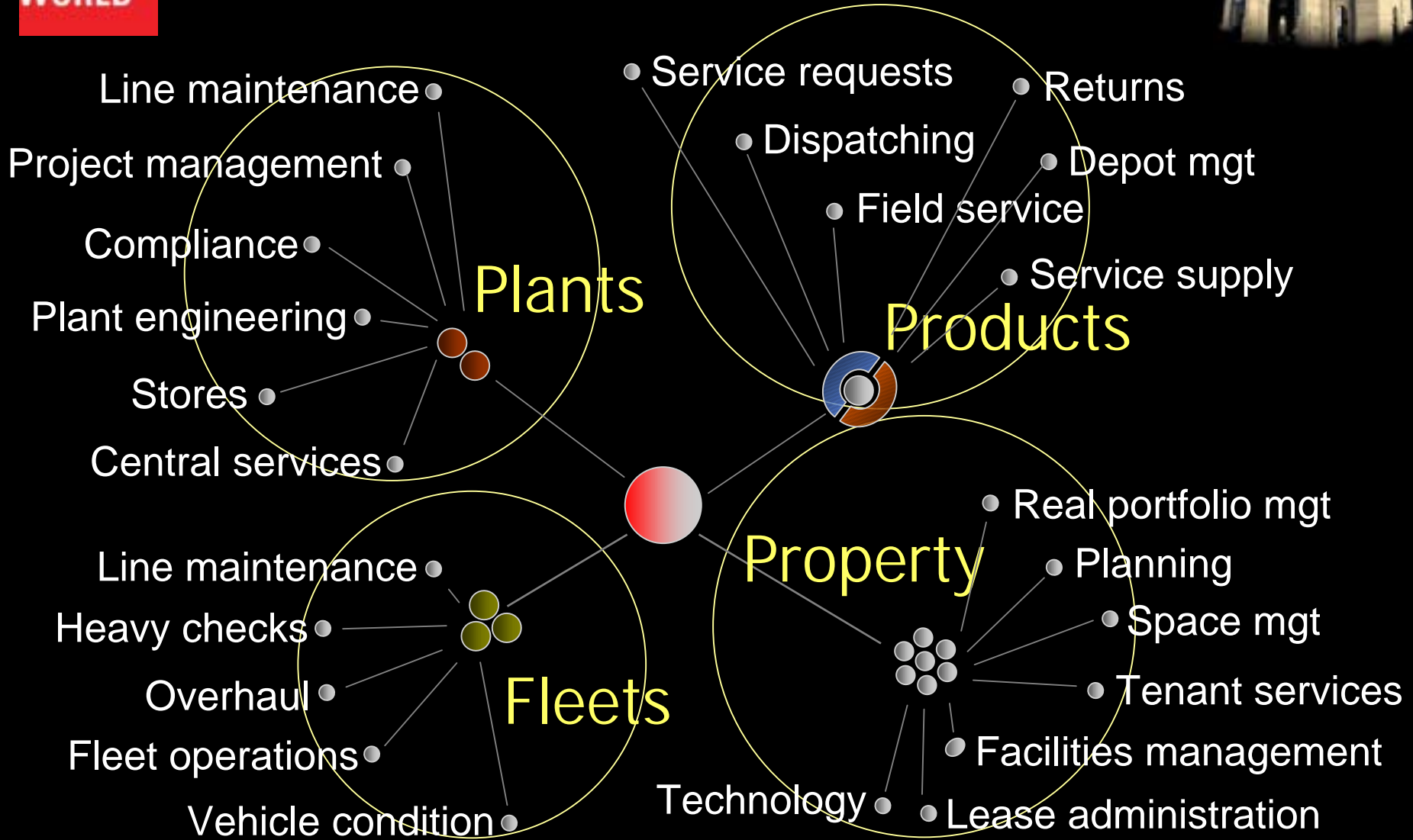
- Every enterprise requires maintenance
- How much depends on balance sheet
- Every asset has a life cycle ...
 - Specify, Buy, Install, Maintain, Retire
- Maintenance is more than break/fix
- It is managing the asset life cycle
- Hence, “asset management”

What's Asset Management?



- Does maintenance prevent failure?
- Necessary evil or top-level concern?
- What does technology contribute?
- Can resistance be overcome?
- Why should I worry, or even care?

“Left side” of Balance Sheet



Manufacturing “Musts”



- Must balance manufacturing throughput with costs
- Must manage business risk of plant operations
- Must control plant overhead

Balance Throughput & Costs



- Capital replacement costs are high
 - Must prolong life of aging assets
- Unplanned failure can effect SOM
 - Must predict, prevent or respond with agility
- Over-maintaining is both costly and risky
 - Must do enough, but not too much
- Maintenance is disruptive to production
 - Must coordinate schedules

Manage Business Risk



- Accidents can be ruinous
 - Must enforce safety, permitting and regulatory compliance
- Fines are costly
 - Must disseminate information about hazards and maintain audit trails
- Service providers can be unreliable
 - Must monitor contractor activities to insure the accuracy and quality of work

Control Overhead



- Hi-skill technicians are scarce
 - Must hire what's cost effective, rent the rest
- Keeping every spare in stores is costly
 - Must optimize to prevent stock outs
- Mandated training and work rules increasing
 - Must train efficiently and track competencies
- Outsourcing is on the rise
 - Must monitor provider service levels

Balancing Throughput, Risk & Overhead Costs



Prescribed programs ...

- Asset life cycle management
- Compliance & enforcement
- Maintenance/service collaboration

Asset Life Cycle Management



Life Cycle

Maintenance Core Processes

Shop-Floor Processes

Specify

Buy

Install

Maintain

Retire

Asset Documentation

Service Supply Chain

Service Incident Processing

Service Network Management

Workforce Management

Plan, estimate, & approve work

Schedule crews & providers

Manage safety & permitting

Track training & competencies

Execute transactions & budget

Compliance & Enforcement



- Training and certification
 - Right worker, right job, right tools
- Close direction for all validated tasks
 - Every step, every decision monitored
- Real-time process management
 - Alerts for limits, conflicts & deviations

Maintenance/Service Collaboration



- Integrate the physical and financial
 - Integrate in-house and contracted
- Coordinate production & maintenance
- Personalize work space, priorities & alerts
- Supplier self-service and catalog sharing

Oracle's Approach



- Asset Life Cycle Management
 - Reliability and asset performance
 - Constraint-based resource planning
- Compliance & Enforcement
 - Quality plans, configuration management and condition monitoring
- Maintenance/Service Collaboration
 - Self-service supplier portal
 - Project management integration

It Takes an Oracle Suite



| Asset Documentation | Service Supply Chain | Service Network Management | Service Incident Processing | Workforce Management |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • EIB • APC • Property Mgr • Quality • Tutor • iLearning • Skills & Competencies • Contracts • cMRO ⁽¹⁾ | <ul style="list-style-type: none"> • APS • Inventory • Purchasing • iProcurement • Spares Mgr • Warehouse Mgr | <ul style="list-style-type: none"> • iSupplier Portal • Projects Collaboration • Services Procurement | <ul style="list-style-type: none"> • iSupport • TeleService • Work Request • Field Service ⁽³⁾ • Depot Repair | <ul style="list-style-type: none"> • eAM • cMRO ⁽²⁾ • Field Service ⁽²⁾ • Depot Repair ⁽²⁾ |

The Scorecard



- More than failure management ✓
- A top-level concern ✓
- Technology helps ✓
- Resistance is futile ✓
- Complete solutions available ✓

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