

Enterprise Asset Management

May 2015

Presented by Johannes Tjoa





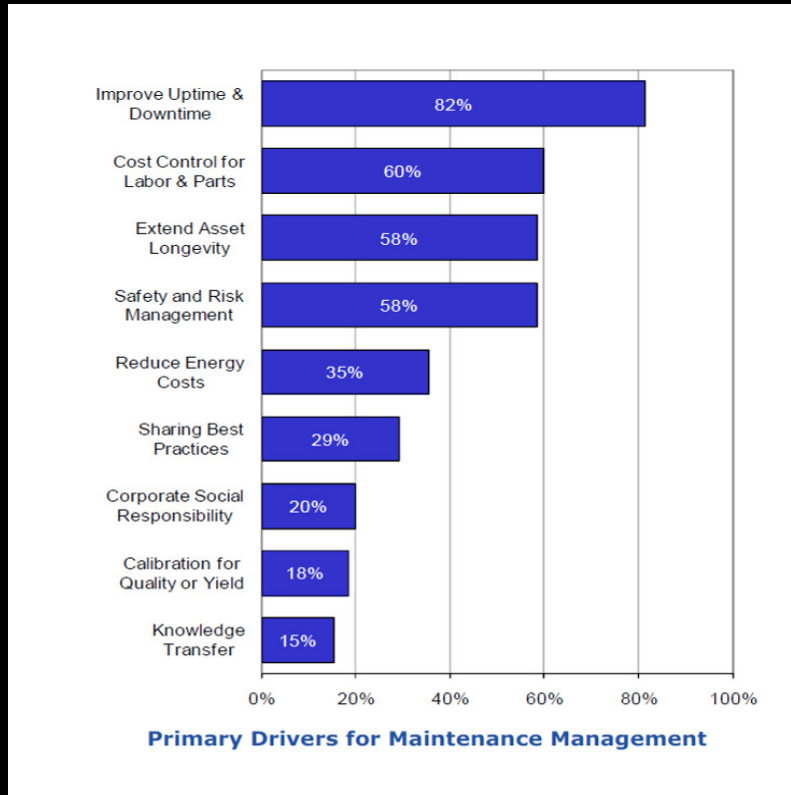
Agenda

Why is EAM critical to businesses?

Introduction to IBM Maximo Asset Management

The Impact of EAM on organisations

ARC advisory - EAM enables higher shareholder value



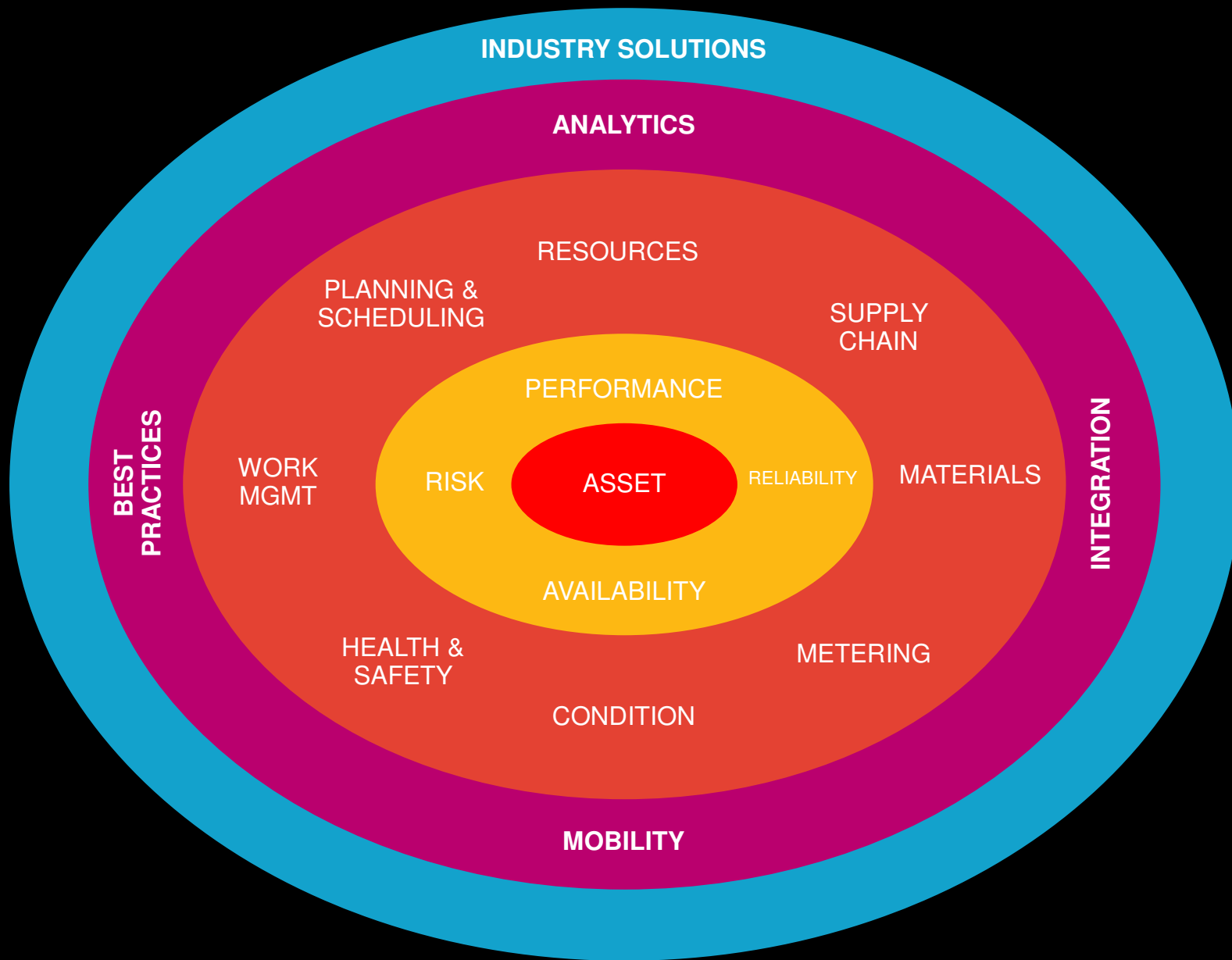
High asset performance is needed for excellent financial performance in the P&L statement and balance sheet. Good maintenance management enables higher ROA & associated improvement in shareholder value.

Ralph Rio
Research Director ARC Advisory Group

Asset Management - Addressing challenges to drive ROI

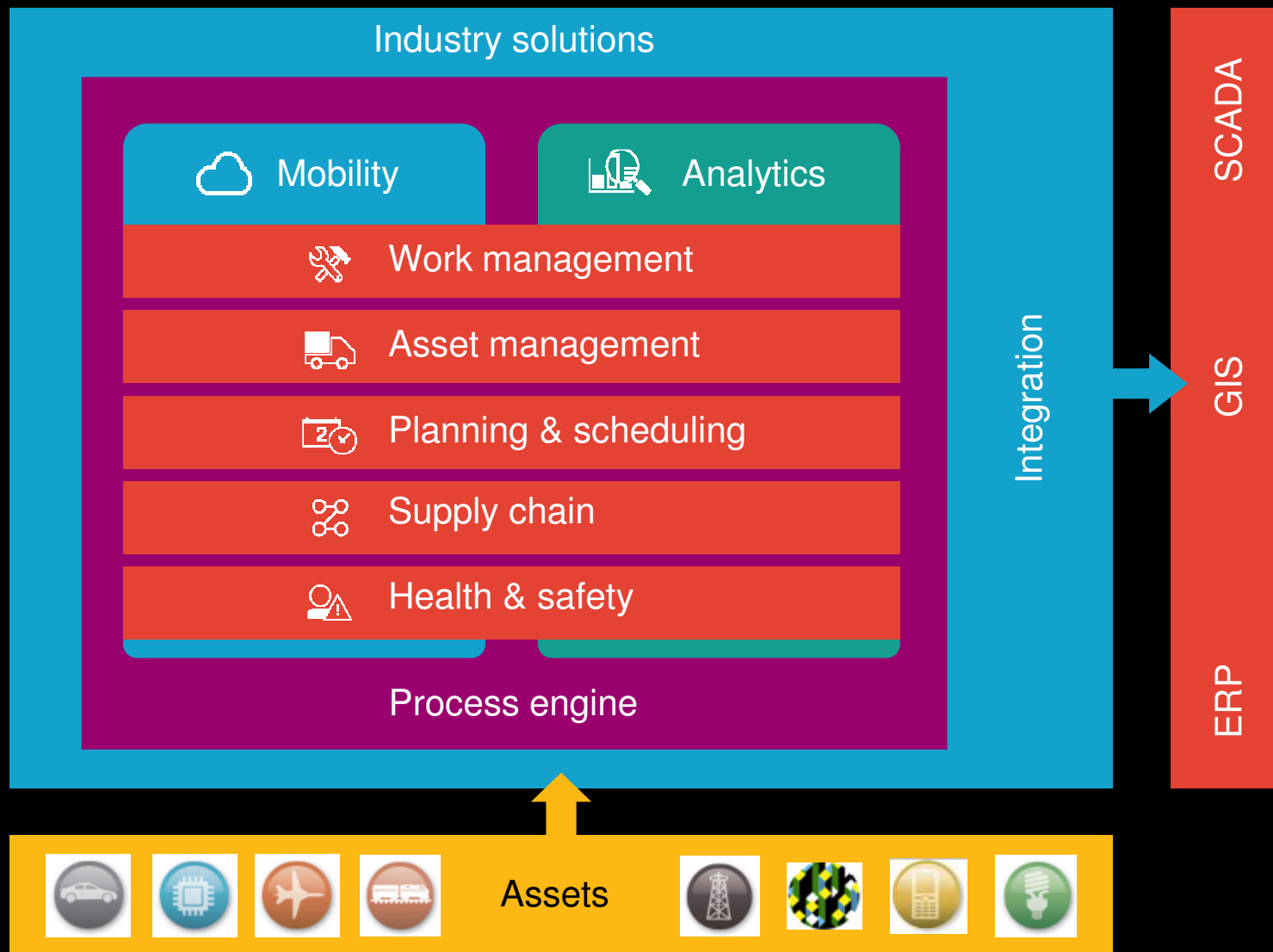


Business Scenarios	ROI Points	Customer Example: Transportation Industry
Labor Utilization	Up 10-20%	• A major US railroad saved US \$5M by better tracking labor to specific work
Asset Utilization	Up 3-5%	• A large OEM reduced overhaul process time from 56 days to 21 days
Equipment purchases	Down 3-5%	• A fleet management company saved US \$9.5M by meeting 100% availability with less
Warranty recoveries	Up 10-50%	• A consumer products company with a medium size fleet increased warranty recovery 50%
Plant Downtime	Down 5-20%	• Power generation utility 5% reduction in planned overhauls and eliminated 5% of forced outages saving \$4.6M annually.
Inventory needs	Down 20-30%	• A large passenger railroad was able to identify US \$18M in excess or obsolete inventory
Inventory carrying costs	Down 5-20%	• A railroad reduced saved US \$1.8M impacting financing, insurance, handling, overhead, etc.
Material Costs	Reduced 10-50%	• A rail maintenance service company reduced costs 20% by optimizing material purchases
Purchasing labor	Reduced 10-50%	• A fleet management company reduced purchasing staff by 20%



Functionality to support the asset

Asset	Planning & scheduling	Assignments	Contractors	PM Schedules
		Work Schedules	Crafts/Skills	Maintenance Plans
	Work management	Work Orders	GIS/Maps	Self-service
	Condition	Warranties	Inspections	Meter Readings
	Metering	Asset Availability	Service Levels	Failure Codes
	Resources	Uptime	Costs	Custodians
	Health & Safety	Spare Parts	Procurement	Replenishment
	Supply chain	Consignment	Storerooms	Item Kits
	Materials	Counts	ABC Analysis	Vendors



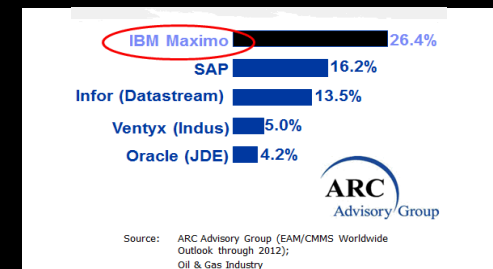
Analysts agree on Enterprise Asset Management solutions



Gartner Magic Quadrant for Power Generation EAM
Sept 2014



IDC Energy Insights: Vendor Assessment
Worldwide EAM Software for Power
Generation, 2014



ARC Worldwide Outlook 2012

Impact of Enterprise Asset Management

Smart in Transportation

Decreasing asset downtime to help keep operations running smoothly



KiwiRail New Zealand

- 4,000km of tracks
- Improved compliance reporting by 83%
- Increased field crew productivity by 2x
- Improved safety & asset availability

Smart in Utilities

Improved safety & operations to help keep the lights on



Trustpower New Zealand

- 38 hydro power stations & 2 wind farms generating 5% of NZ electricity
- Improved health & safety reporting by 200%
- Improved field data capture by 2 hours per person per day
- Reduced data entry & reporting time by 20%

Smart in Ports

Keeps maintenance costs low with smarter asset management



Port Taranaki New Zealand

- NZ's second largest export port
- Only deep water seaport on NZ western seaboard
- Decreased asset downtime & failures
- Improved safety for workers & cargo
- Reduced inventory costs
- Improved accuracy of financial planning