

# Pulse

IBM SolutionsConnect 2013

## Enterprise Asset Management Trends and Future Direction

*Ken Donnelly, IBM Global Industry EAM leader, USA*

*Kim Woodbury, IBM Smarter Infrastructure Product Manager, USA*

06/12/2013





## Please note

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion.

Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.

The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

© Copyright IBM Corporation 2013. All rights reserved.

- ***U.S. Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.***

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml)





## Agenda

---

- Trends
- Portfolio Overview
- Investment Focus for 2013 and Beyond

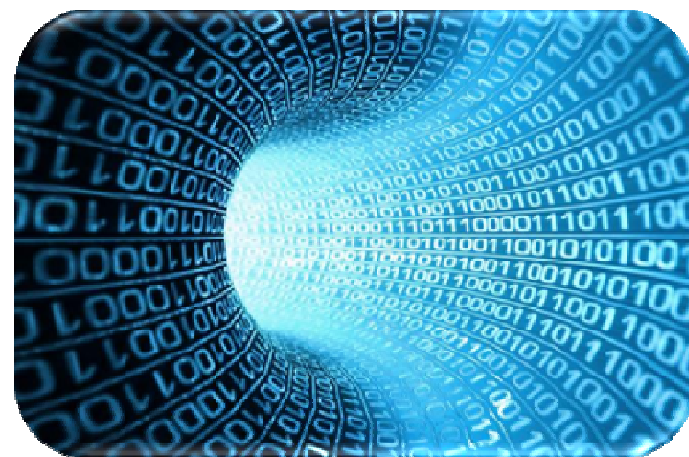
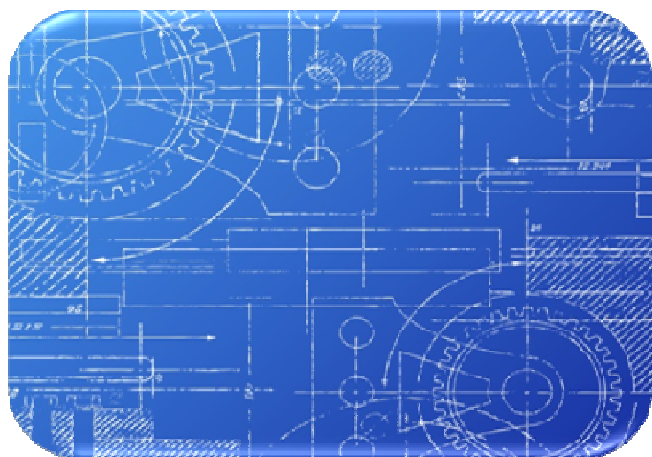


# Infrastructure Is Increasingly Complex



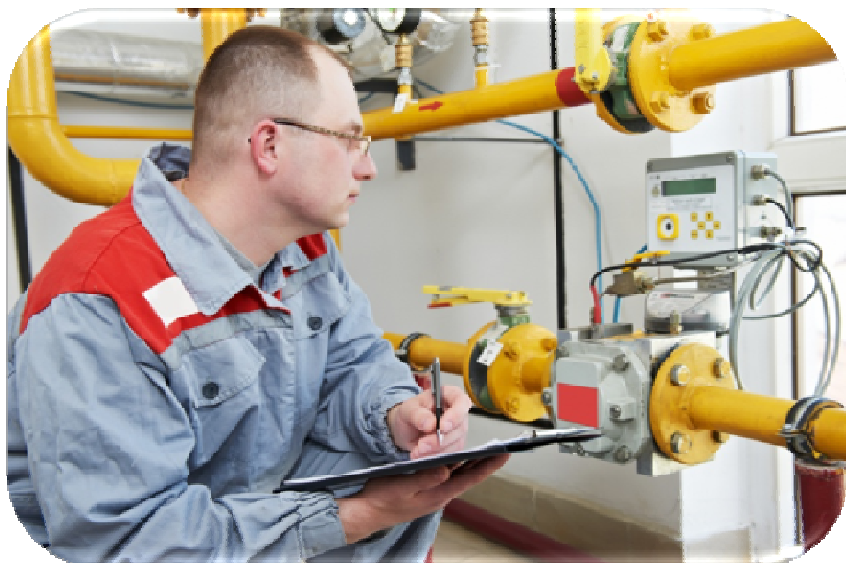


# Variety, Volume and Velocity Of Data is Increasing





# The Way We Work Is Changing





## Persistent challenges remain to maximize life cycle performance

- Organizations can no longer afford the status quo, due to intense economic, regulatory, and competitive pressure

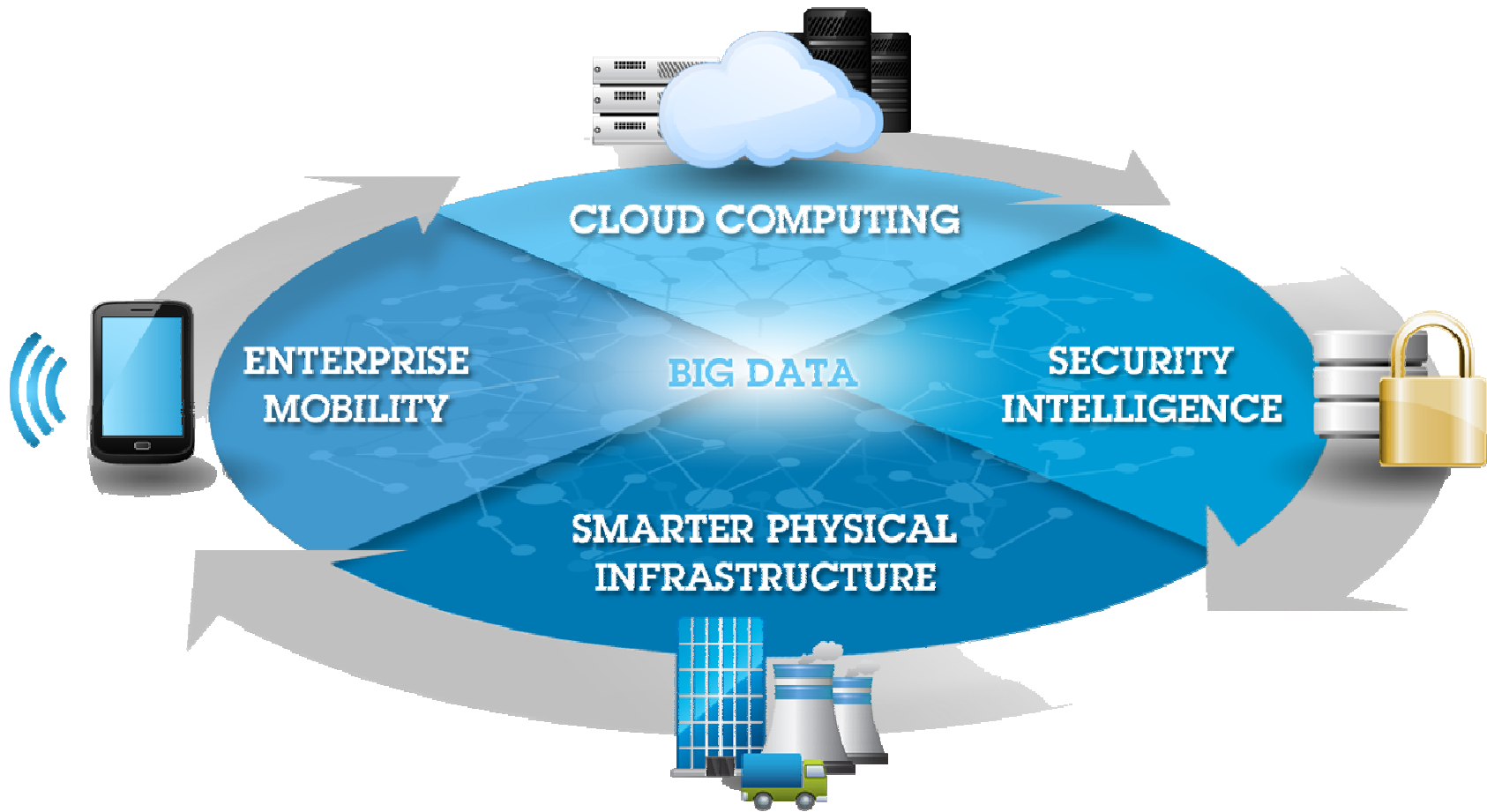
Companies are investing in complex physical infrastructure that is increasingly instrumented, interconnected, and leveraging ‘operational technology’

- Value creation is being limited by process, information and cultural silos

IBM believes there is a new approach to solve these persistent challenges; we call this ‘Smarter Physical Infrastructure’

- Enabling process and data integration throughout the life cycle
- Managing and securing ‘operational technology’
- Turning vast amounts of operational data into insights and outcomes







How customers are benefiting from IBM solutions ....



# Portfolio Overview

Enterprise Asset Management

Facility and Real Estate  
Management

IT Asset & Service Management



## TECHNOLOGY

Enterprise Asset Management  
**Maximo**

Facility and Real Estate  
Management **TRIRIGA**

IT Asset & Service Management  
**SmartCloud Control Desk**

Configuration/ Security/ Workflow

Reporting/ KPI's/ Analytics

Adaptors

Mobility



## Enterprise Asset Management

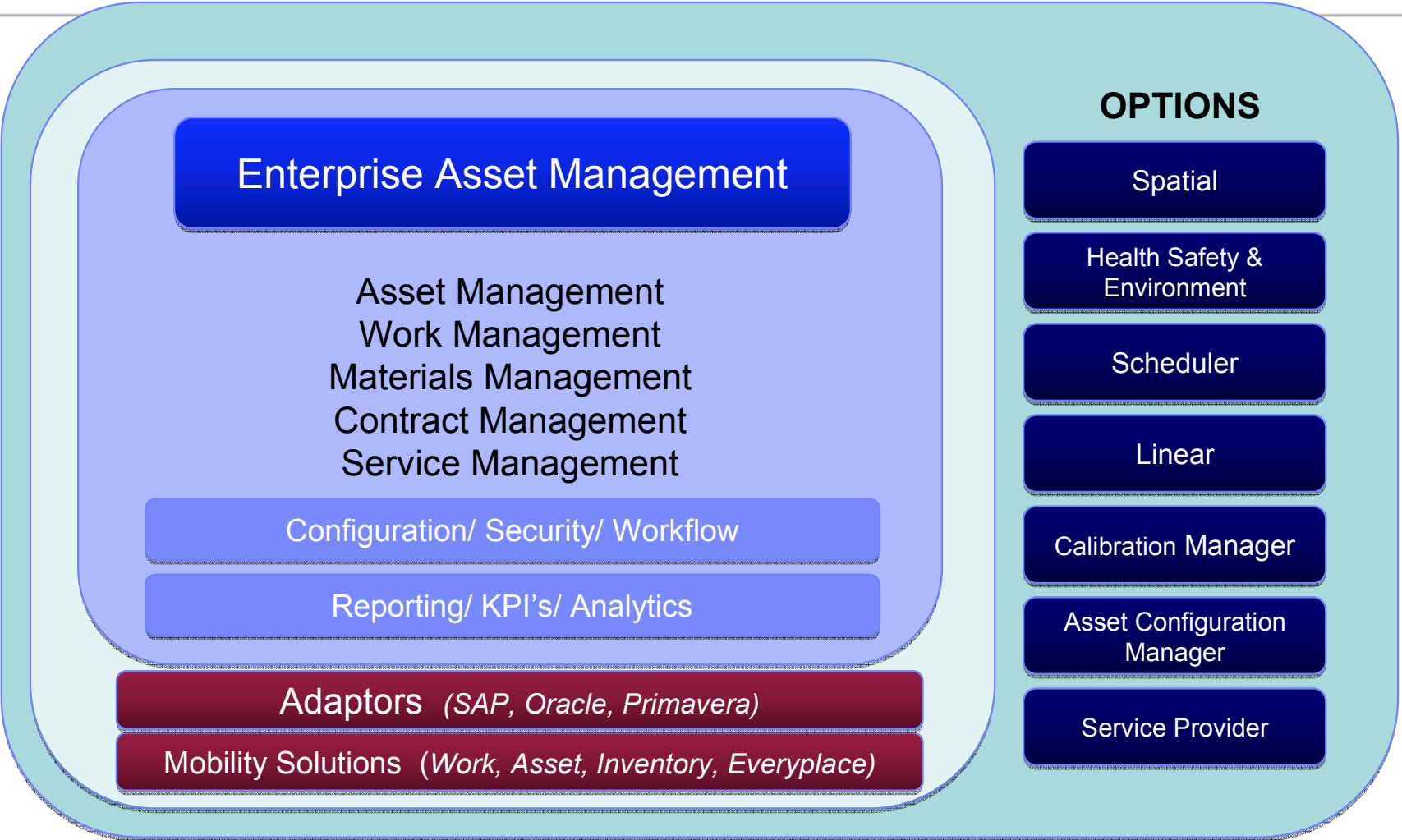
Asset Management  
Work Management  
Materials Management  
Contract Management  
Service Management

Configuration/ Security/ Workflow

Reporting/ KPI's/ Analytics

Adaptors (*SAP, Oracle, Primavera*)

Mobility Solutions (*Work, Asset, Inventory, Everyplace*)





## INDUSTRY SOLUTIONS

Utilities

Transportation

Nuclear

Oil & Gas

Life Sciences

Government

## Enterprise Asset Management

Asset Management  
Work Management  
Materials Management  
Contract Management  
Service Management

Configuration/ Security/ Workflow

Reporting/ KPI's/ Analytics

Adaptors (*SAP, Oracle, Primavera*)

★ Mobility Solutions (*Work, Asset, Inventory, Everyplace*)

## OPTIONS

Spatial

★ Health Safety & Environment

★ Scheduler

Linear

Calibration Manager

Asset Configuration Manager

Service Provider



## ADAPTORS

Financial

Social  
Collaboration

Endpoint  
Management

Asset Discovery

Provisioning

## IT Asset & Service Management

Service Catalog  
Incident and Problem Management  
Change and Release  
Configuration Management  
License Management & SW Contracts  
Reconciliation

Configuration/ Security/ Workflow

Reporting/ KPI's/ Analytics

Mobility Solutions (*Work, Asset, Inventory, Everyplace*)

## OPTIONS

Scheduler

Service Provider



## INDUSTRY

Financial

Retail

Education

Government

## Facility and Real Estate Management

Real Estate Planning  
Capital Project Management  
Energy Optimization  
Facility and Space Management  
Environmental Sustainability

Configuration/ Security/ Workflow

Reporting/ KPI's/ Analytics

Adaptors (*Financial Systems, ESRI, Energy Star, CAD*)

Mobility

## OPTIONS

Facility Planning

Reservation Management

Condition Assessment

Workplace Performance





## Smarter Infrastructure Growth

Four primary investment themes for 2013 and beyond.

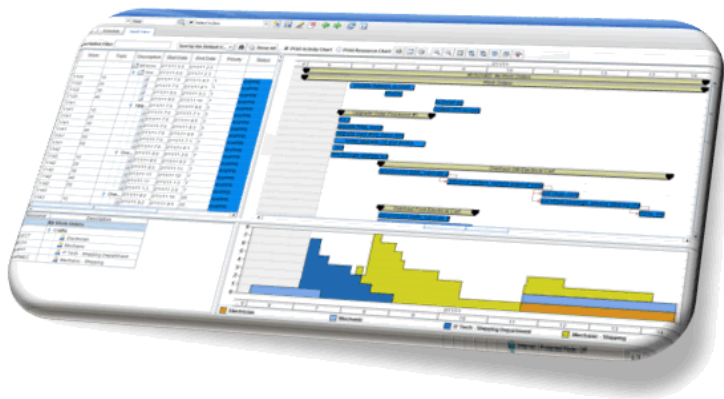
- Advanced Scheduling and Field Work Force Management
- Focus on Mobile Applications
- Data Center Infrastructure Management
- Asset Performance Management and Analytics





# A new approach to Workforce Management

## Support for optimization models, automated labor and crew assignment



Planned  
Availability  
4Q 2013

### IBM Maximo Scheduler 7.5.x

- Embedded engine delivers **objective based** optimization models
- **Scenario based** work planning
- **Graphical** crew management capabilities
- Optimized **spatial scheduling** for reduced crew windshield time

Effective resource utilization through optimized work schedules

Improves the ability to respond quickly to emergency situations

Replaces the need for pure planning and scheduling tools

Pulse





# Advancing capabilities for better business outcomes

Optimize an **increasingly mobile workforce** to increase organizational effectiveness



## IBM Maximo Mobile 7.5.1

Enhanced!

- Device support extended to the **Android platform**
- **RFID support** for Asset Audits and Enhanced history and exception handling
- **Barcoding** via camera – no scanner required
- **Supports Device inherent capabilities** - Voice to Text and Photo attachments

Expands choice of available ruggedized field devices

Improved performance for increased productivity

Enables Scheduler Field Technicians

Pulse





# Mobility Enterprise Application Platform

Planned  
Availability  
3Q 2013

- Investing in a phased rollout of a new mobile solution 'Maximo Anywhere' based on IBM's WorkLight technologies
  - Run on modern o/s and Smart devices (phones, tablets), leveraging device specific capabilities
  - Support connected and disconnected scenarios
  - Easily tailor the mobile UI, for delivered applications and ability to create custom applications
- Redefine the way work is performed and information is accessed with a common UI across the portfolio (Maximo, SmartCloud Control Desk, TRIRIGA)



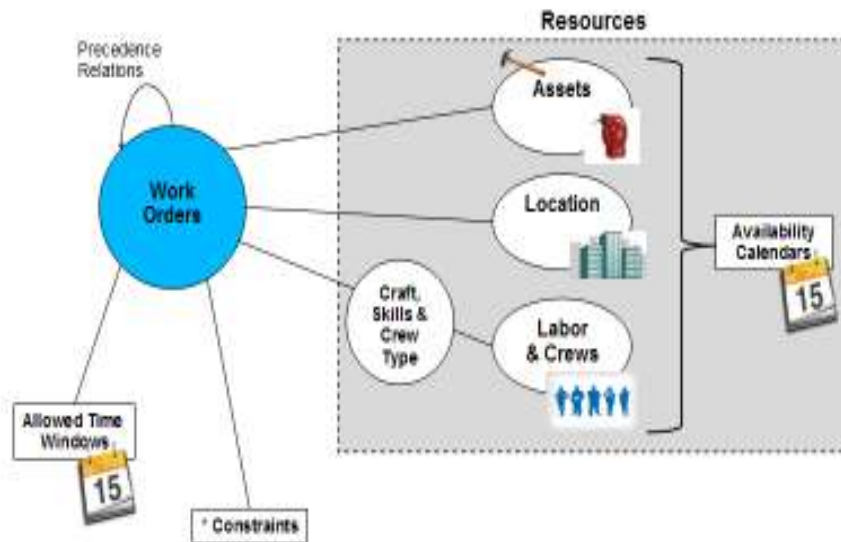


# Asset Management Based Analytics

## Scorecards, KPI's & Reporting

Scorecard	Texas Site	Buffalo Site			
			Value	Goal	Alert
<b>Asset Management</b> 	Asset Downtime		43	5	
	Number of Failures		12	5	
	Cost Variance		26	15	
<b>Work Management</b> 	Backlog		23	10	
	Reactive Response		18	16	
	Cost Variance		20	15	
<b>Inventory Management</b> 	Backlog WMATL		17	15	
	Inventory Turns		12	15	
	Vendor Compliance		21	15	

## Schedule & Resource Optimization



## Predictive Analysis

**Historical Performance Analysis**

**Failure & Remaining service life analytics**

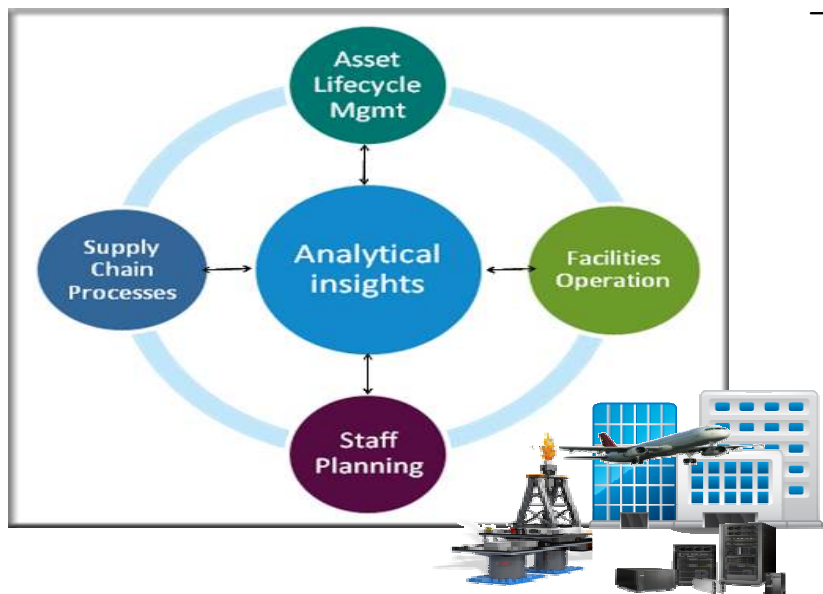
Survival function:  $S(x) = \exp[-\int_0^x \lambda(t)dt]$

**Performance Scoring**



# Advancing capabilities for better business outcomes

Automate **execution based on insights** from operational data to increase predictability of outcomes



**New!**

## IBM Predictive Asset Optimization

- **Big Data, Asset Management and Predictive Analytics software and services** with a pre-built solution framework
- **Analyzes structured, unstructured and streaming information** to determine asset performance
- **Predicts asset failure** to optimize quality and supply chain processes
- Integrates data and predictive insights to **proactively enable corrective actions**

Reduces repeat repairs by up to 50%

Reduces overall accident rates by 20% or more

Reduces utility network incidents by up to 41%

**Pulse**





# Extending IT Asset Management Solutions

**Manage complexity and risk** by enabling increased visibility and automation across digital and physical infrastructures



## IBM SmartCloud Control Desk

Enhanced!

- **Integrated view of resources & relationships** beyond the data center; can visualize on maps
- **Automated logical fixes** thru endpoint management integration
- **What-if impact analytics**



## IBM Data Center Infrastructure Mgmt

New!

- Partnership with Emerson linking management of the logical and physical aspects of the data center

Accelerated cross-functional coordination of resources and tasks

Enhance visibility of business impact of issues across IT, space, power, cooling

Enhance problem identification & resolution by correlating IT & non-IT events

Pulse





## Maximo Oil & Gas/HS&E 7.5.1 - Q1 2013

Address **critical gaps** that remain in the HSE market, which will address opportunities in both the Oil & Gas market and the overall Safety market:

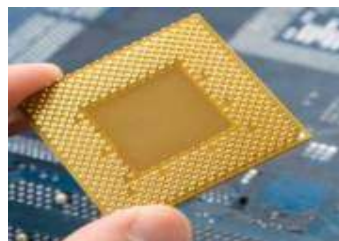
- **Survey and Audit** is required by Maximo customers to meet “Quality Management System” requirements.
- **Permit to Work** supports full permit to work process including initiation of a permit from a Work Order and an ability to incorporate permit information into Operator Logs.
- **Turnarounds and Modifications** introduces the capability to manage turnaround and modification project preparedness and execution. Customers are now able to create resource profiles associated with a turnaround and modification project.
- **Creation of certification records** for assets, locations, surveys and audits fulfills compliance requirements for asset intensive companies.



Corporate  
Responsibility



GHG & Energy  
Management



Product  
Stewardship



Environmental  
Management



Health & Safety  
Management



Operational Risk  
Management



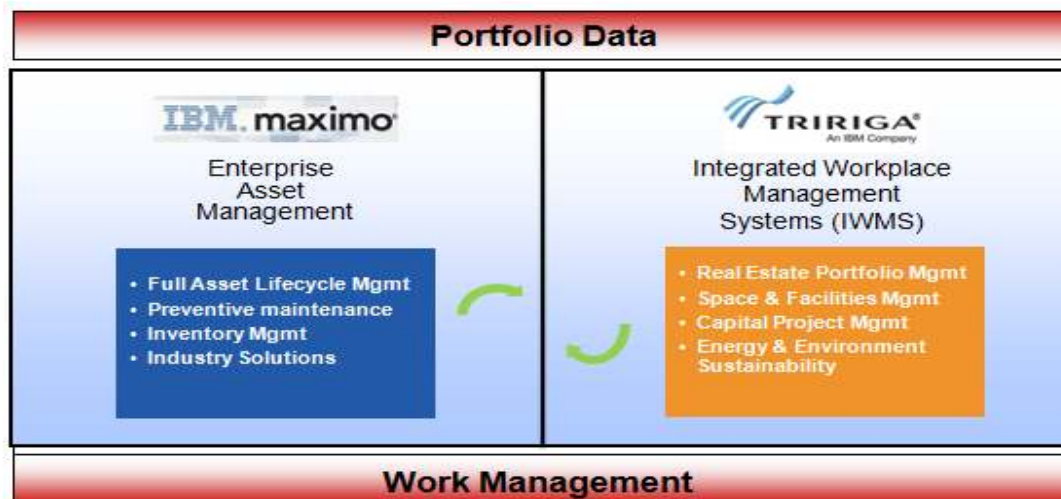


# IBM Maximo Integrators for TRIRIGA

Available Now!

Maximize operational efficiencies by using best-of-breed capabilities in TRIRIGA and Maximo

Enables bi-directional integration of IBM TRIRIGA Facilities Manager space and move management and Maximo Asset Management functions



- Plan asset and people moves in TRIRIGA
- Execute and manage the move-related work items in Maximo
- Analyze the results and costs of the work and improve processes in TRIRIGA

**Availability – posted on Jan. 31, 2013**

Available for download from the ISM Library at: [www.ibm.com/software/brandcatalog/ismlibrary/details?catalog.label=1TW10TR02](http://www.ibm.com/software/brandcatalog/ismlibrary/details?catalog.label=1TW10TR02)



# Service Management Connect



**30,000+**  
Peers and subject matter  
experts

**18**  
Open beta projects

[www.smconnect.net](http://www.smconnect.net)



An opportunity to think and act in new ways.

Predict demand and optimize capacity and assets

Provide consistent visibility to asset information

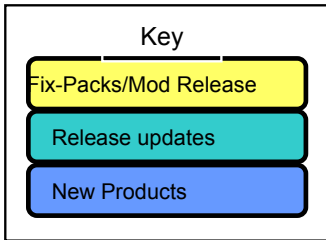
Improve operational efficiency while reducing environmental impact

Enabling safety, security and compliance

# THANK YOU



# 2013 Capabilities Roadmap



**2013 Focus:**

- Optimization, Mobile Applications and Analytics
- Address high-value customer requirements across multiple industries
- Continued maintenance for multiple releases

**SmartCloud Control Desk Next**

**Maximo Next**

- Multi Tenancy Support
- Updated Platforms
- Usability improvements
- Crews
- Service Addresses
- Mapping

**TRIRIGA Energy Optimization**

- Real-time energy & operating analytics
- Event filtering & root cause analysis
- Work request generation

**Smart Cloud Control Desk 7.5.1**

**SmartCloud Control Desk Fix-pack 7.5.0.2**

**Maximo Mobile 7.5.1**

- Android support
- RFID

**Maximo Integration for TRIRIGA Capital Project Tasks**

- ISM Library download

**Maximo Fix-pack 7.5.0.4**

**Maximo ACM/Transportation 7.5.x.x**

- Aviation/Spec 2000
- Flight Log Book
- Progressive Inspections

**TRIRIGA 10.x**

- Implementation accelerators
- Localization enhancements
- Lease accounting enhancements



**Maximo Integration for TRIRIGA 1.1**

- Space & Move Mgmt
- ISM Library download

**Maximo Oil & Gas/HS&E 7.5.1**

- Permit to Work
- Audit and Surveys

**TRIRIGA 10.3.x**

- Enhanced browser support
- Energy Star and ESRI updates
- Phase 1 508 Accessibility;

**Trellis Real-time Infrastructure Optimization Platform 2.0**

**Maximo 7.5 on PureApplication System**

**SmartCloud Control Desk Fix-pack 7.5.1.1**

**Mobile**

- Mobile platform
- Android support
- Connected/Disconnected
- Maximo Work Mgmt applications

**Maximo Fix-pack 7.5.0.x**

**Maximo Scheduler 7.5.x.0**

- Automated Schedule Optimization
- Automated Route Optimization

**Maximo Fix-pack 7.1.1.xx**

**Analytics**

- KPI/Reporting
- Enhanced Predictive capabilities

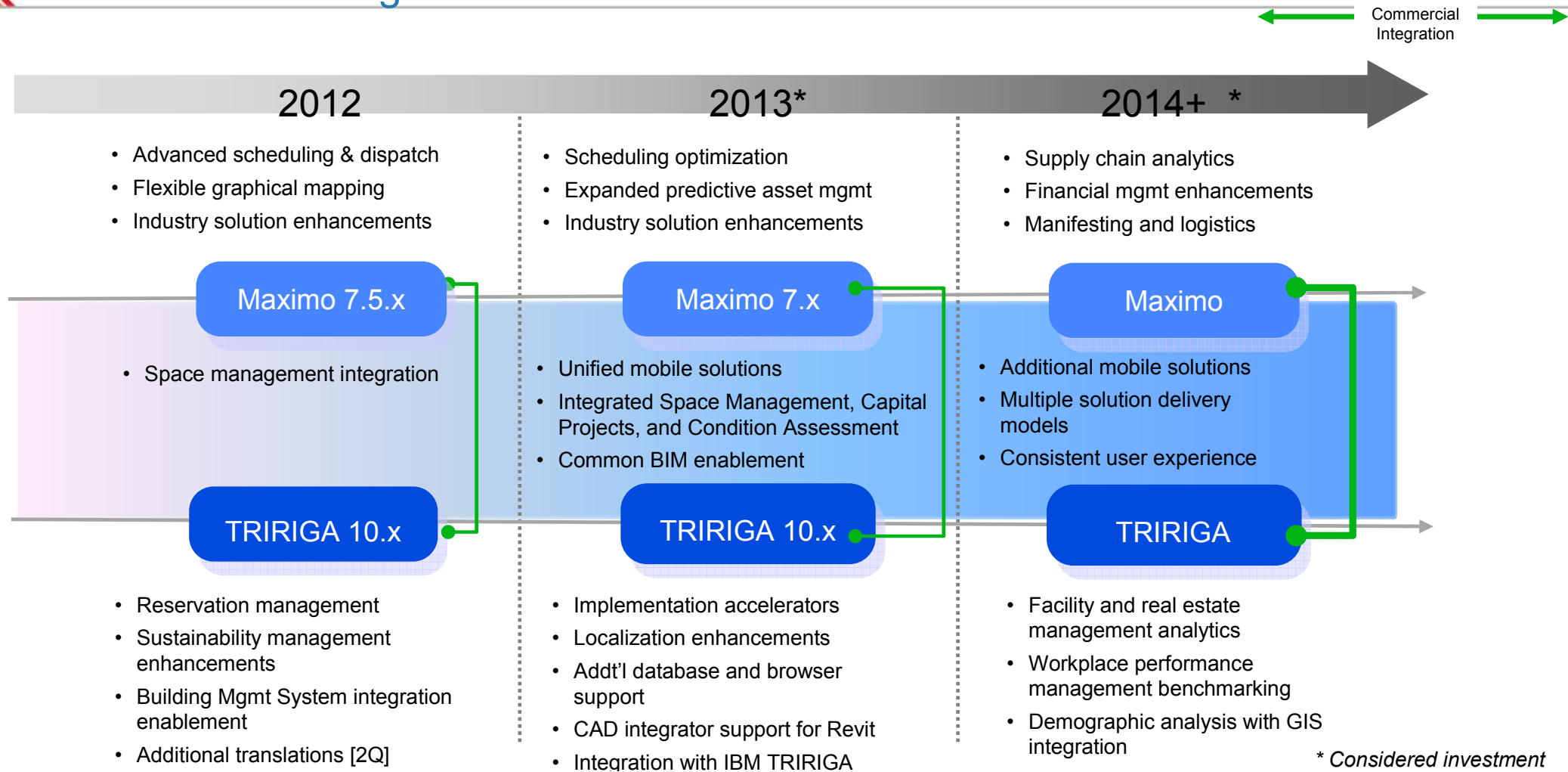
**Mobile**

- Mobile platform updates
- iOS Support
- TRIRIGA, SCCD, Maximo applications
- Appl Designer

The information on the new product is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information on the new product is for informational purposes only and may not be incorporated into any contract. The information on the new product is not a commitment, promise, or legal obligation to deliver any material, code or functionality. The development, release, and timing of any features or functionality described for our products remains at our sole discretion.



# Roadmap: continuous innovation in advanced solutions for asset, facility, and real estate management



The information on the new product is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information on the new product is for informational purposes only and may not be incorporated into any contract. The information on the new product is not a commitment, promise, or legal obligation to deliver any material, code or functionality. The development, release, and timing of any features or functionality described for our products remains at our sole discretion.