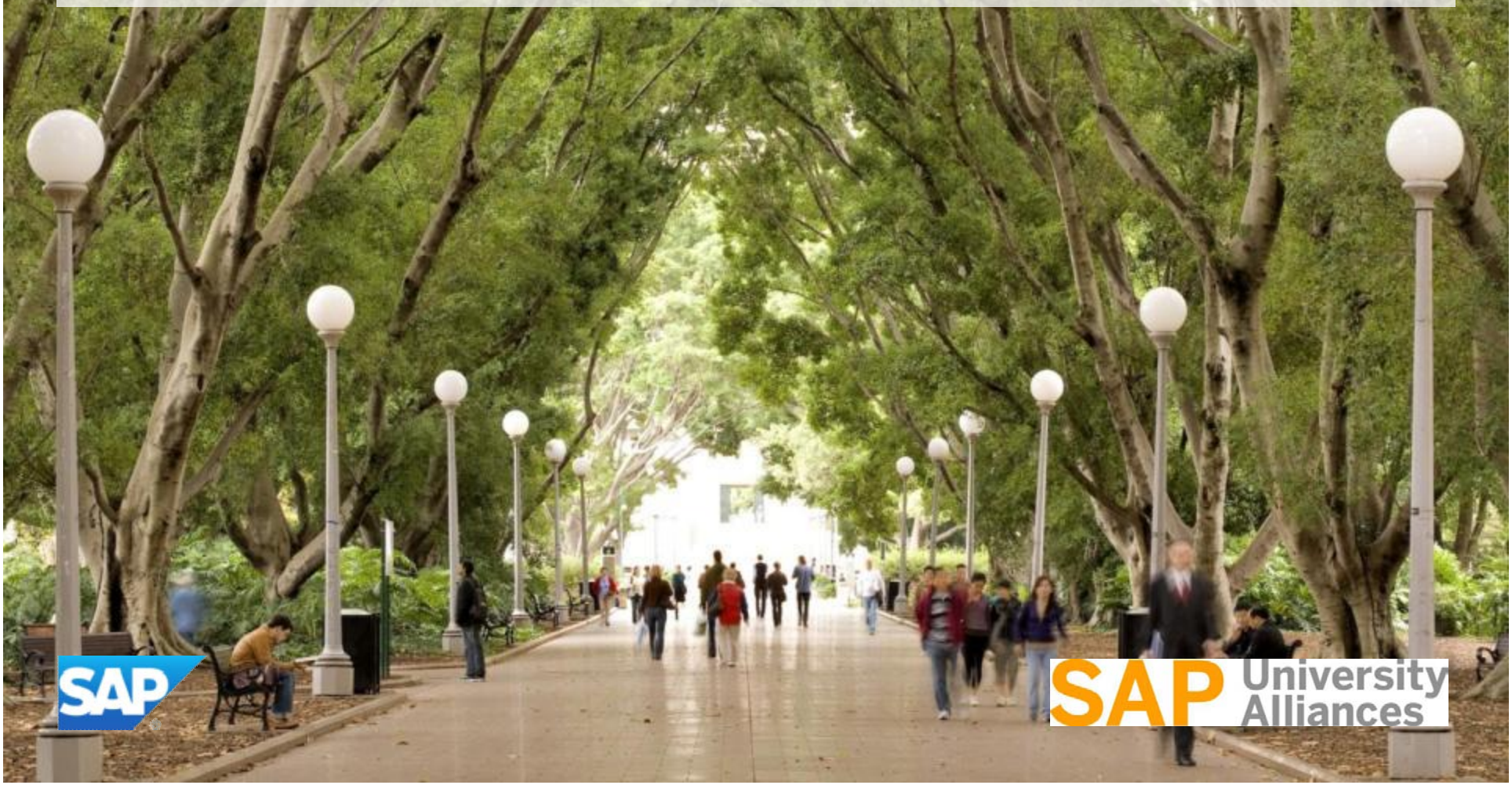
SAP Academic Conference Americas

ERP Core: Innovation Starts Now

Armando Urias, ERP Solution Advisor, SAP

Month 23, 2012



Innovations in ERP

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Head of Asset Management Questions
What Does This Mean for Your Business?

Head of Asset Management Issues

- How do I maximize asset uptime?
- How do I make sure our assets are up and running whenever we need them?
- How do I improve the financial return on our assets?
- How do I reduce request to delivery cycle time for repair services and control maintenance costs?
- How do I increase the ‘wrench time’ of our crafts people?

How do I achieve High-Performing Assets delivering strong asset performance in demanding times?

OEE %

Asset Utilization %

Unplanned Downtime %

Wrench Time %

Who Has the Data?

"When you two have finished arguing your opinions, I actually have data!"

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Agenda

Business Improvement Platform

Achieving ERP Operational Excellence

- Immediate Visibility
- Asset Integration
- User Adoption

Questions

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A Platform for Innovation

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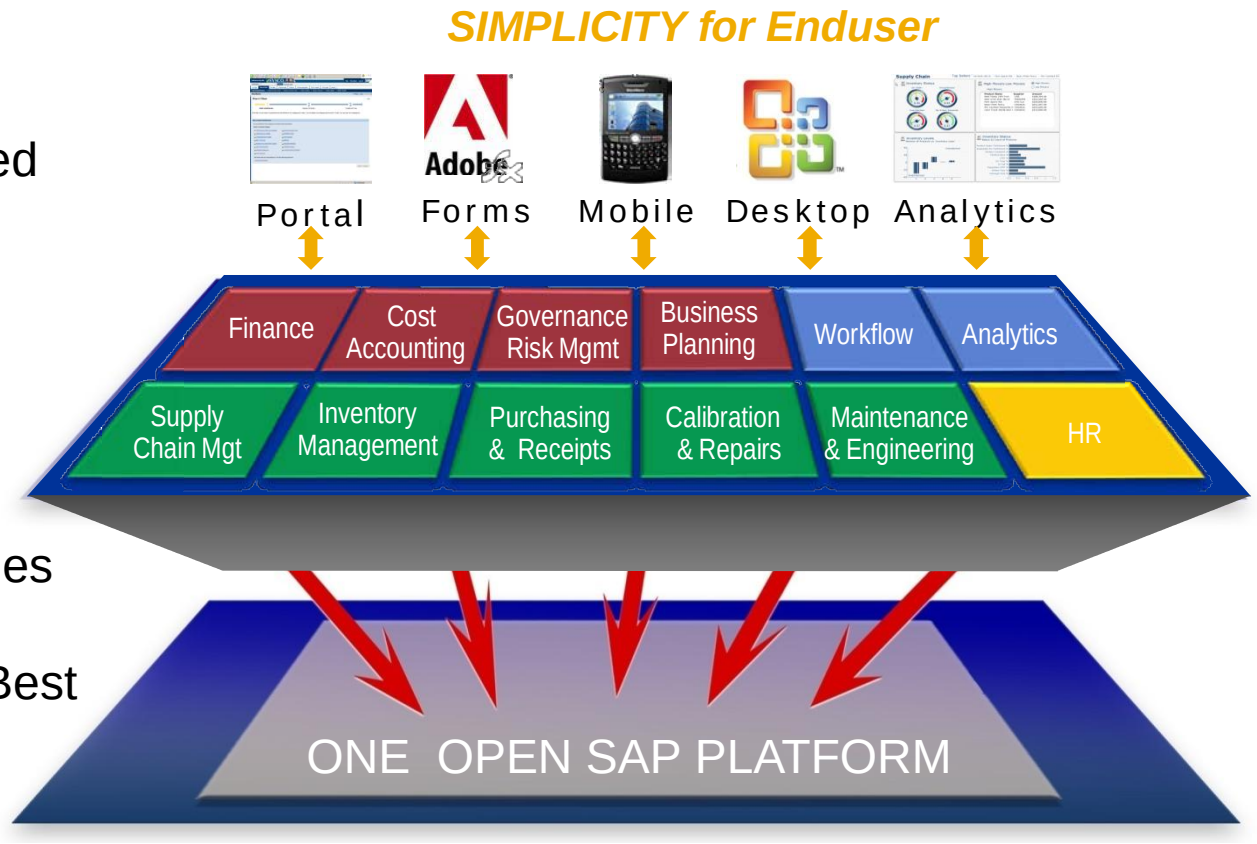
Business Process Improvement Platform

- End-to-End, Fully Integrated Business Processes
- Out-of-Box, Real-Time
- Flexible & Open
- Configurable Business Rules
- Based on Airline Industry Best Practices



1 Source of Truth
1 Common Set of Data
1 Integrated System

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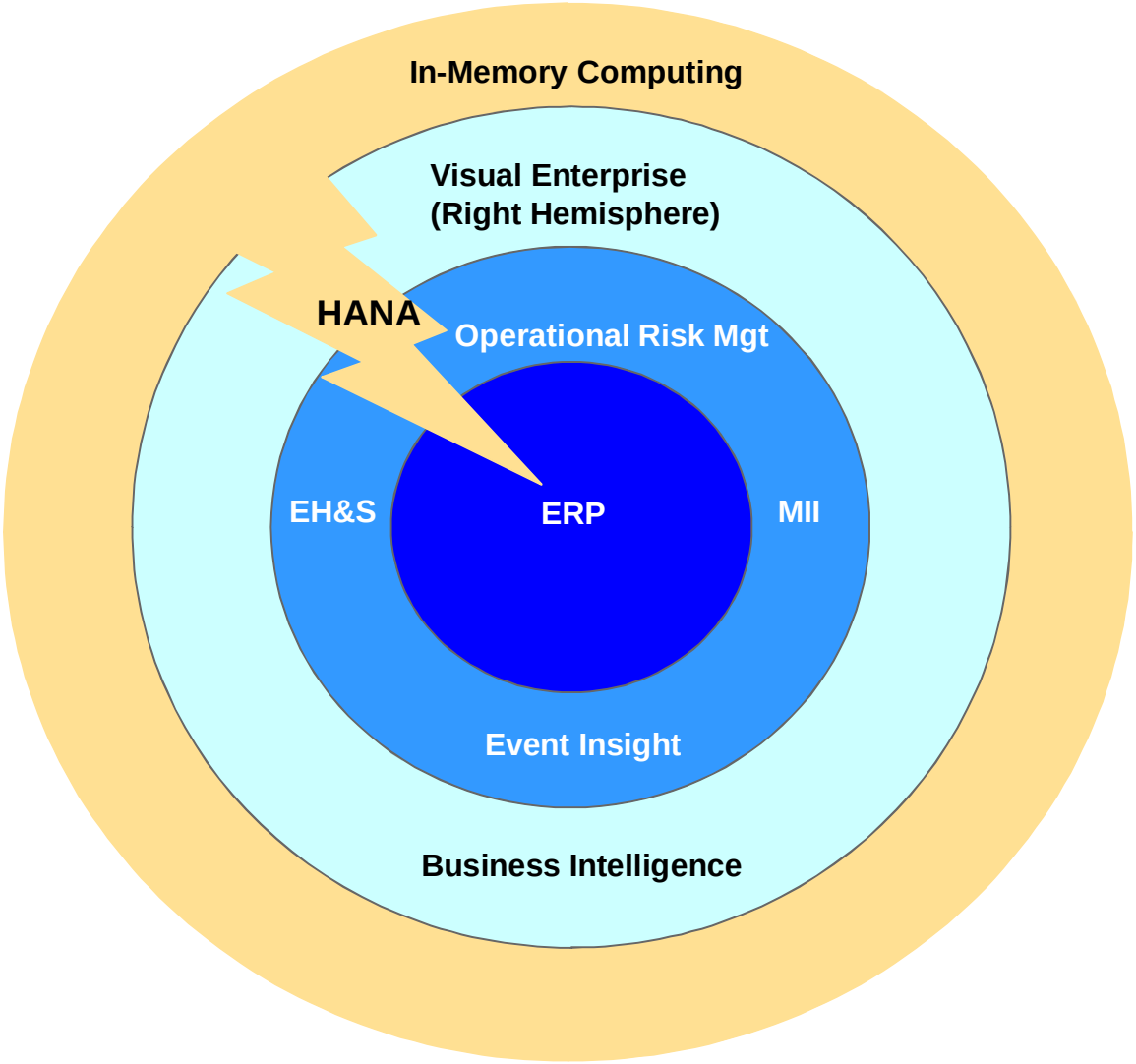
Innovations in Operations



1. ERP are the master records to ensure speed & accuracy of operational activities

2. Real time insight to drive precision in execution is provided by ORM, MII, Event Insight, and EH&S

3. Real time, interactive visibility is achieved through Visual Enterprise, Mobility, and BI

4. In-Memory Computing through HANA yields unprecedented processing speeds to support Real-Time analysis at all levels

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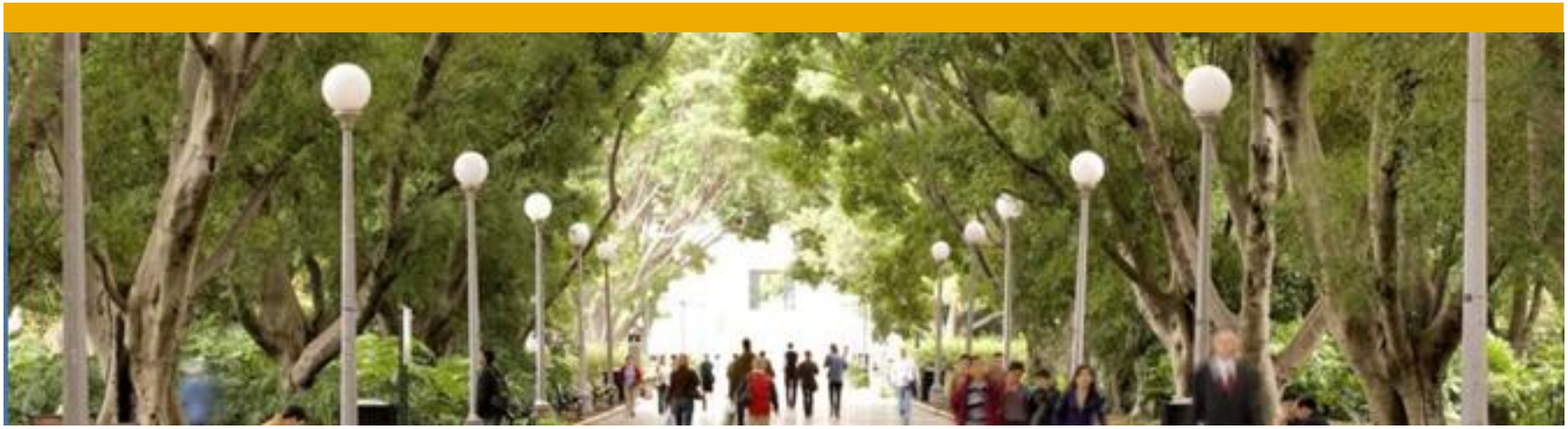
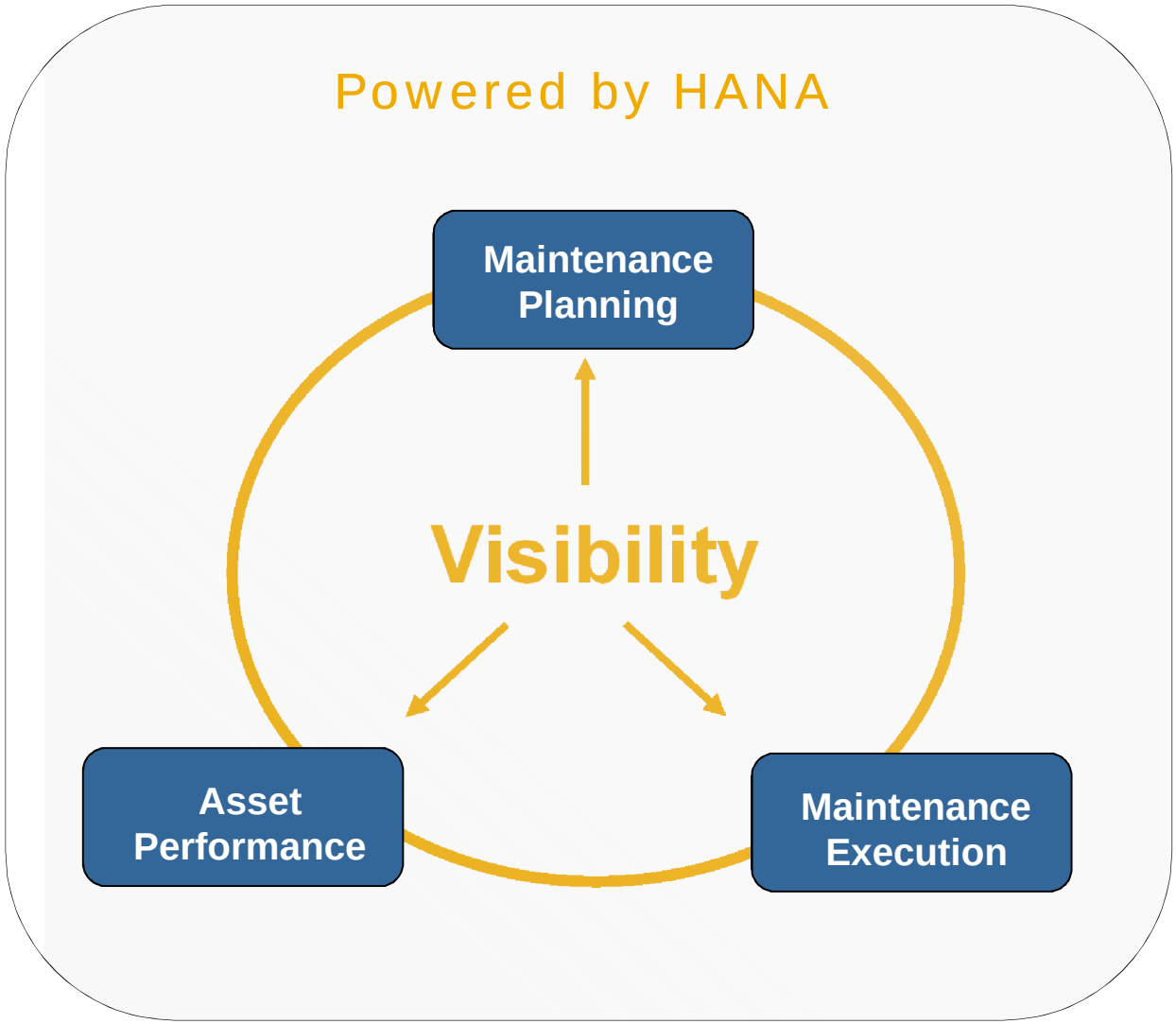


A Platform for Innovation

Operational Excellence

SAP Value

Gain Visibility across Planning, Execution, Asset Management



The Perfect Plant

Maintenance Planning

Adjustments are not driven primarily by unplanned events in manufacturing but rather by demand shifts and other factors. Manufacturing is able to manage these changes more rapidly and reliably

Maintenance Execution

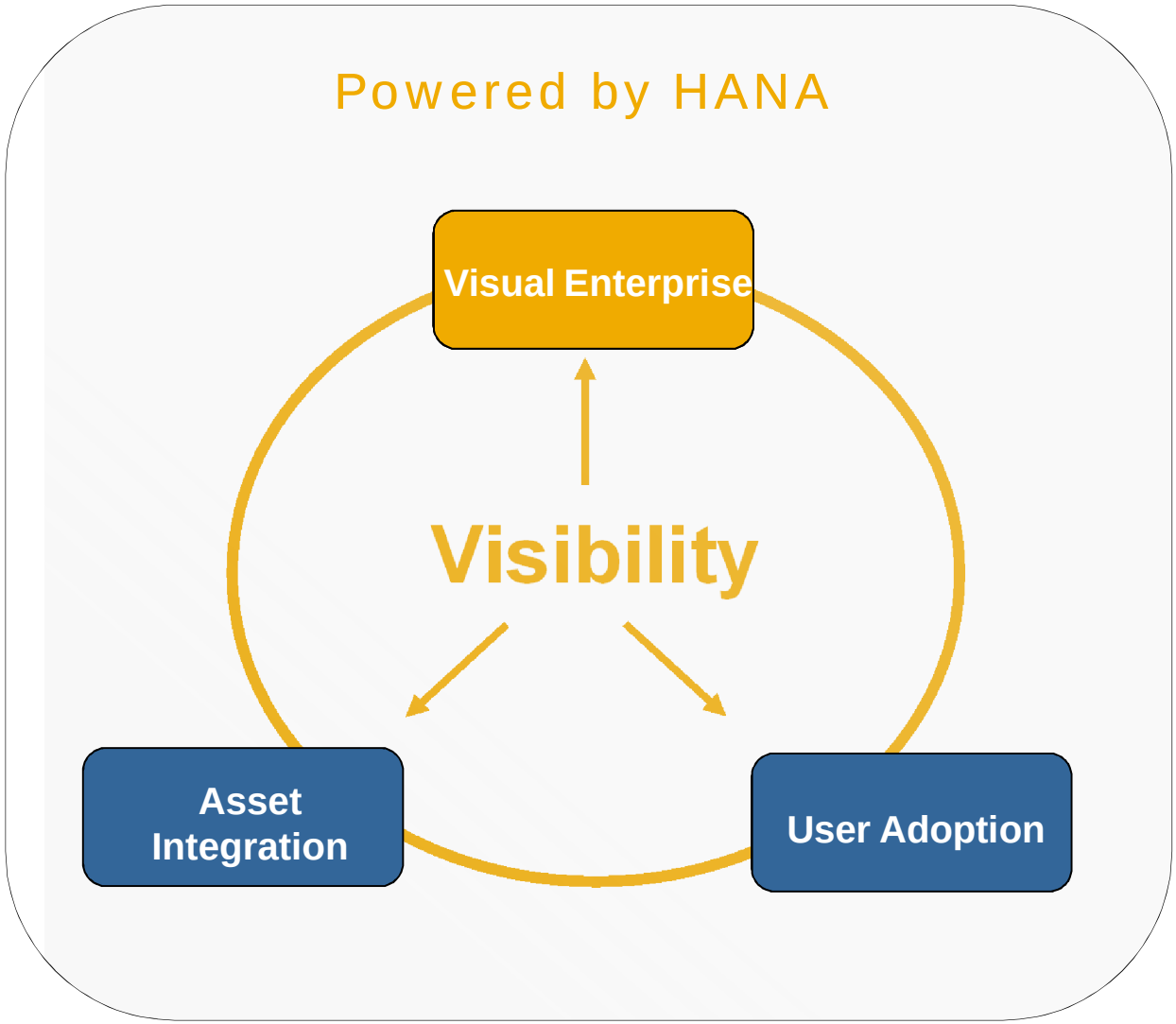
All events are proactively monitored with automated event handling that is tighly coupled with the enterprise

Asset Performance

and Utilization are monitored and events are triggered automatically. EAM processes are optimized and all asset content is available in a single source. EAM process are tightly linked to operations

SAP Value

Gain Visibility across Planning, Execution, Asset Management



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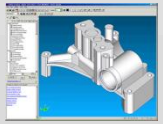
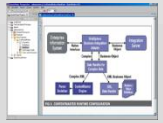
Why Visual Enterprise Solutions Are Needed

EXISTING SYSTEMS AND DATA



CAD Data (SolidWorks, CATIA, UG, Pro/E…)



Product Metadata

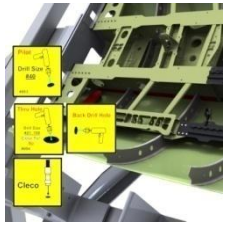
(WindChill, ENOVIA, Tce, SAP…)

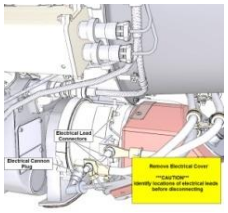
Enterprise Data

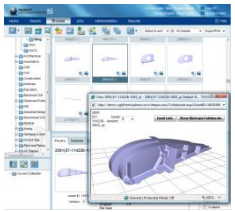
Demo

Ad-hoc, [illegible]ncontrolled

Streamlined, automated, controlled







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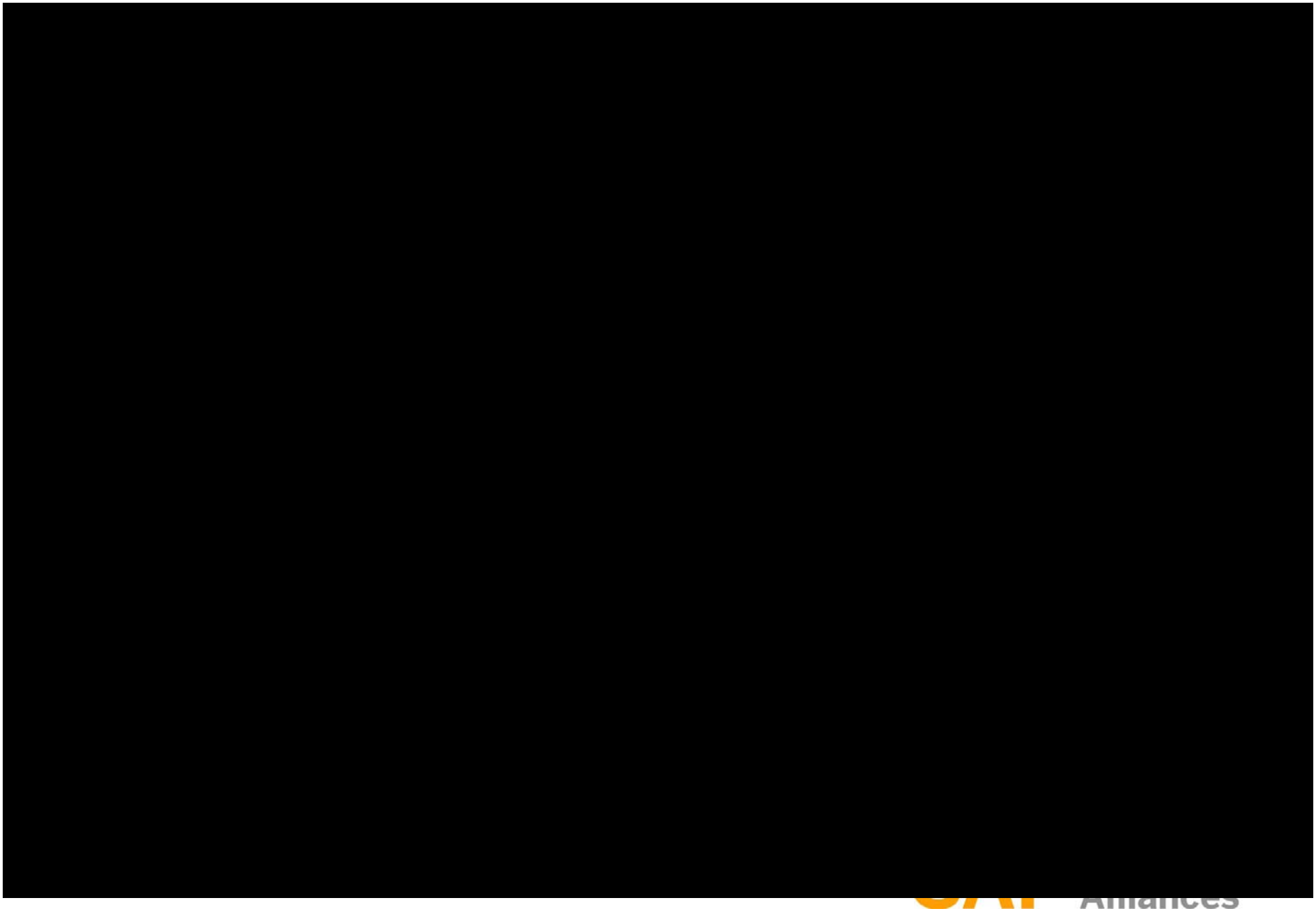

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ERP Process Visualization

Change Notification: 10002038

Change Notification: 10002038 Side Panel Help

Notification 10002038 **Notification type** M2, Malfunction report **Technical Object** P-1000-N013 **Priority** Very high **System Status** NOPR

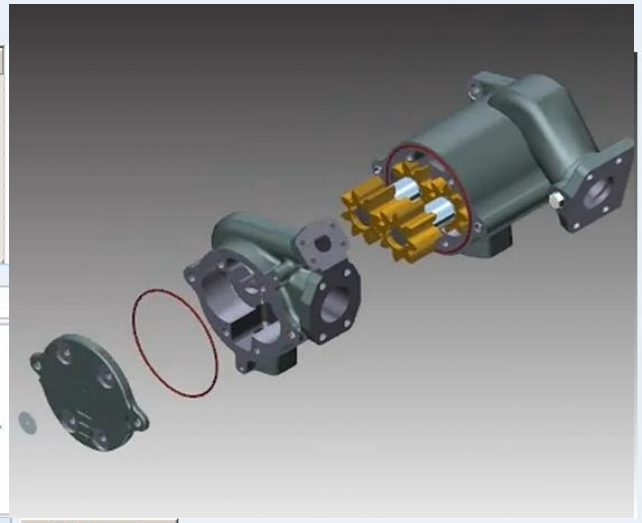
Save | Close | Read Only | Check Entries | Status Information | Set System Status | Additional Functions | You can also

General Data | Location Data | Organization Data | Malfunction Data | Task Data | Documents

Pump Pressure Alert !!!!!

New Additional Text:

Dismantle instructions per 3-D model



Step List | **Step Name and Description**

Step 4
Step 5
Step 6
Step 7
Step 8
Step 9

8 Service Operation 11290877 GEAR REPLACEMENT

1) Reassemble Front Case Unit to Hydraulic Pump.
2) Reassemble Seal Ring to Front Case Unit.
3) Reassemble front Cover Plate.
4) Make sure all washer are on appropriate bolts before reassembly.
4) Reassemble 6 10 IN X 1/2 IN Bolts and 14 Washers to secure fianl assembly.

Add to Order

General Data

Pump Pressure Alert !!!!!

Description:	Replace rear landing gear	Priority:	Very high
Required Start Date/Time:	08.12.2011 12:51:33	Required End Date/Time:	09.12.2011 12:51:33
Technical Object:	P-1000-N013 Port Landing Gear Rr	Technical Object Type:	Equipment
Material:	Visualize	Serial Number:	
Assembly:		Task List:	
Order:	819441 Delete Order Assignment		

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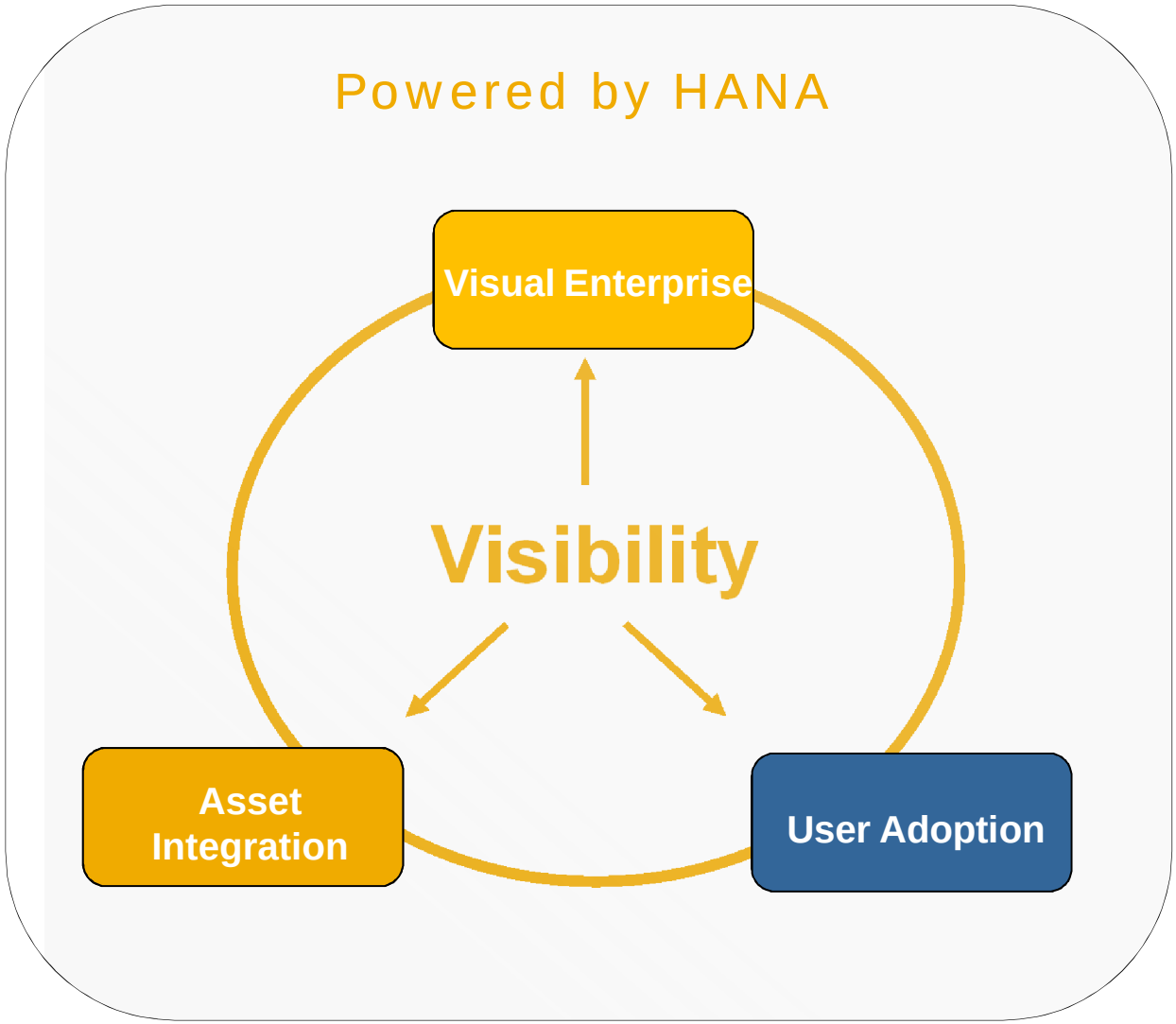
SAP Value

Gain Visibility across Planning, Execution, Asset Management



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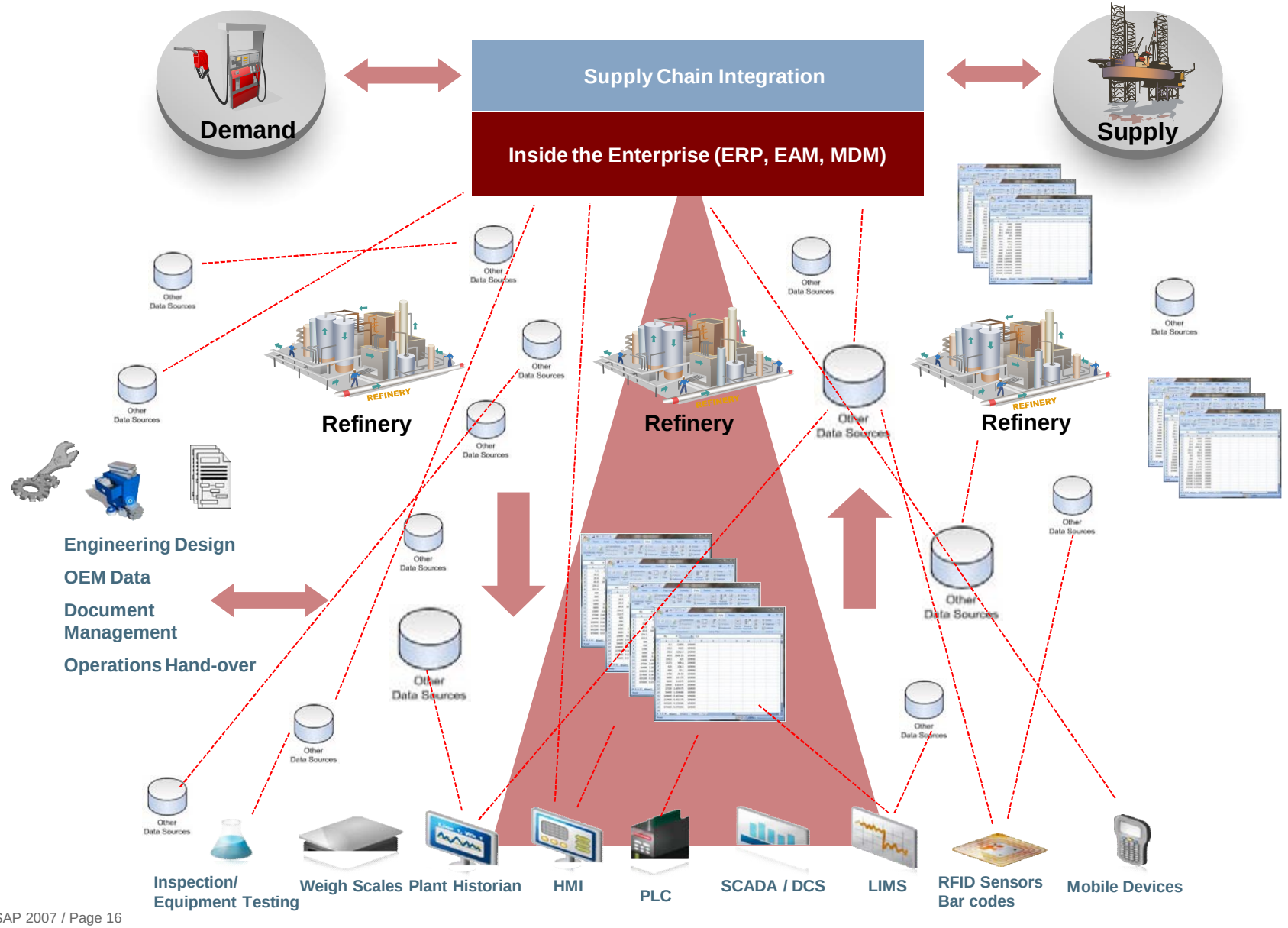
Operational Excellence
The Missing Links - Almost-in-time Systems



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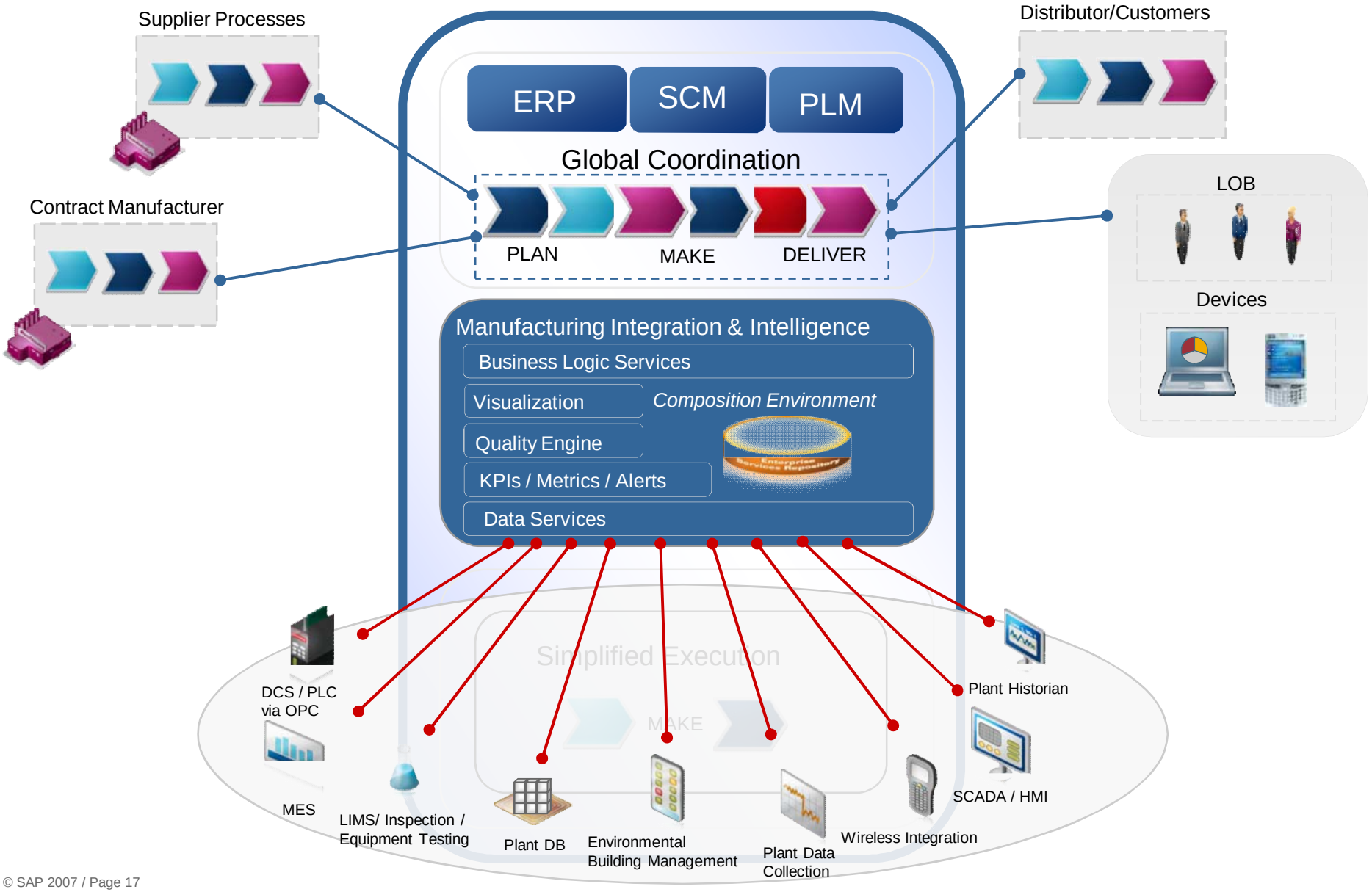
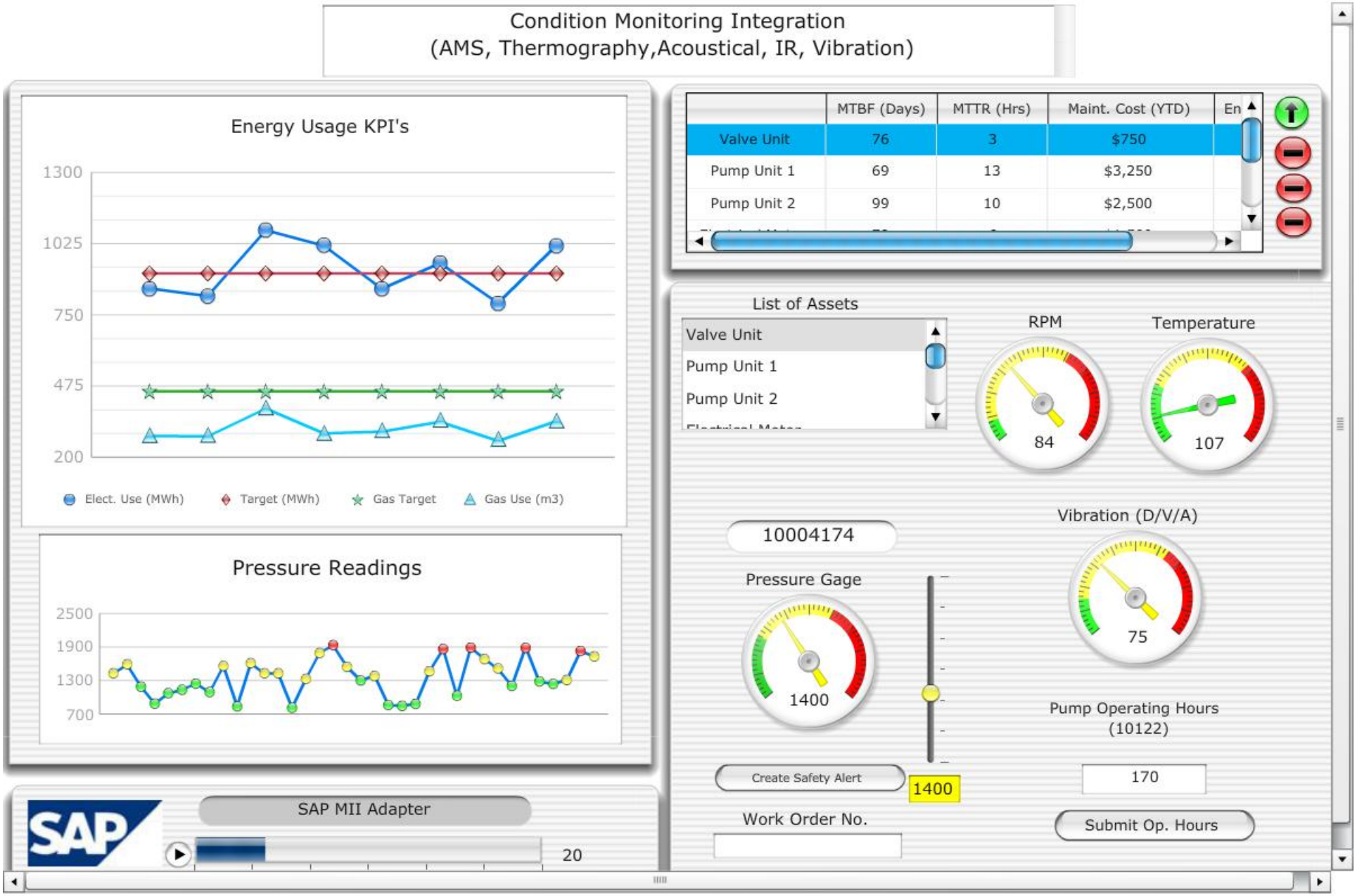
SAP Integration Platform
Delivers Information and Process Integration



Condition Monitoring Integration
(AMS, Thermography,Acoustical, IR, Vibration)



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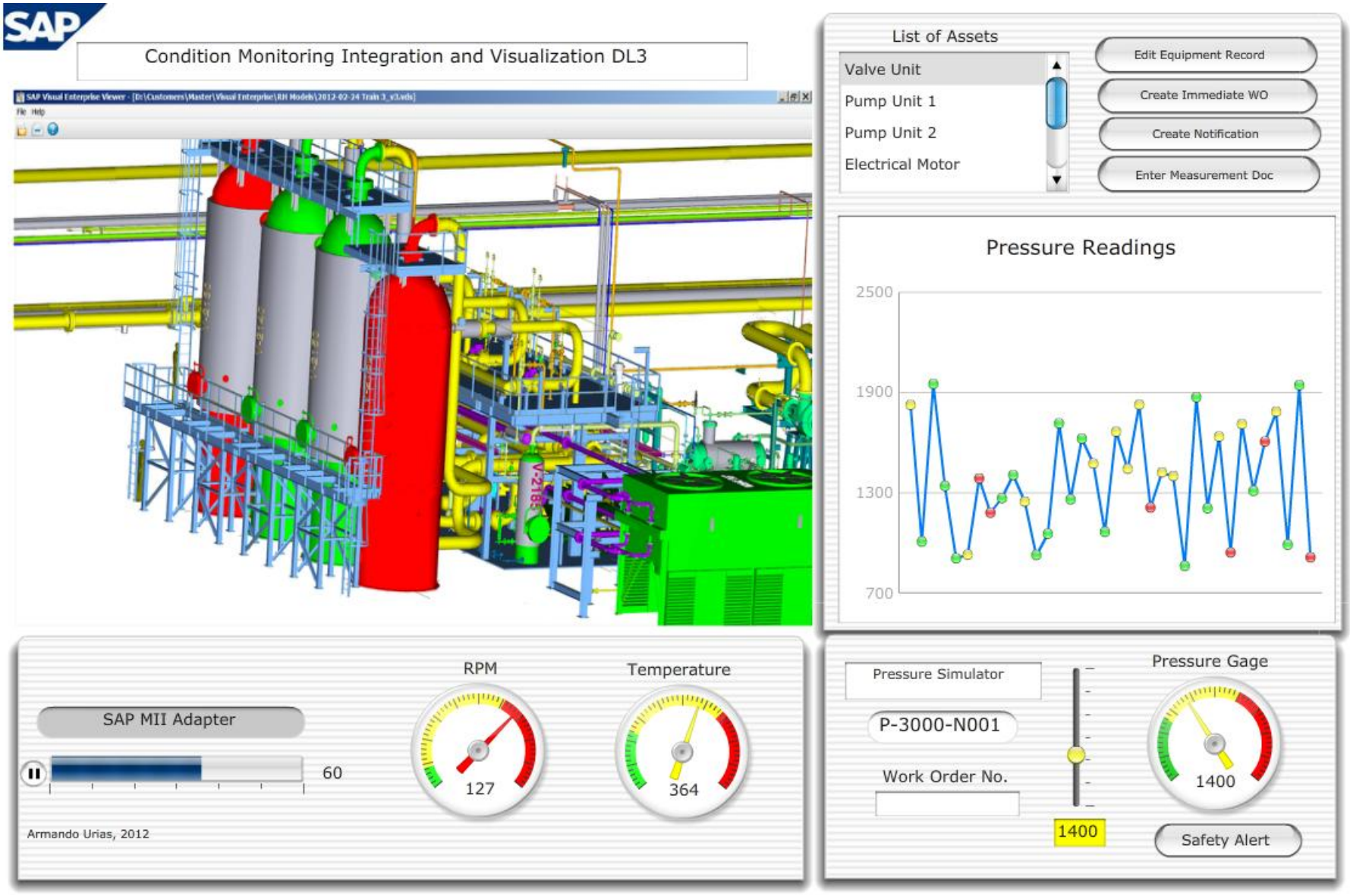
ERP Innovations: Immediate Time Visualization



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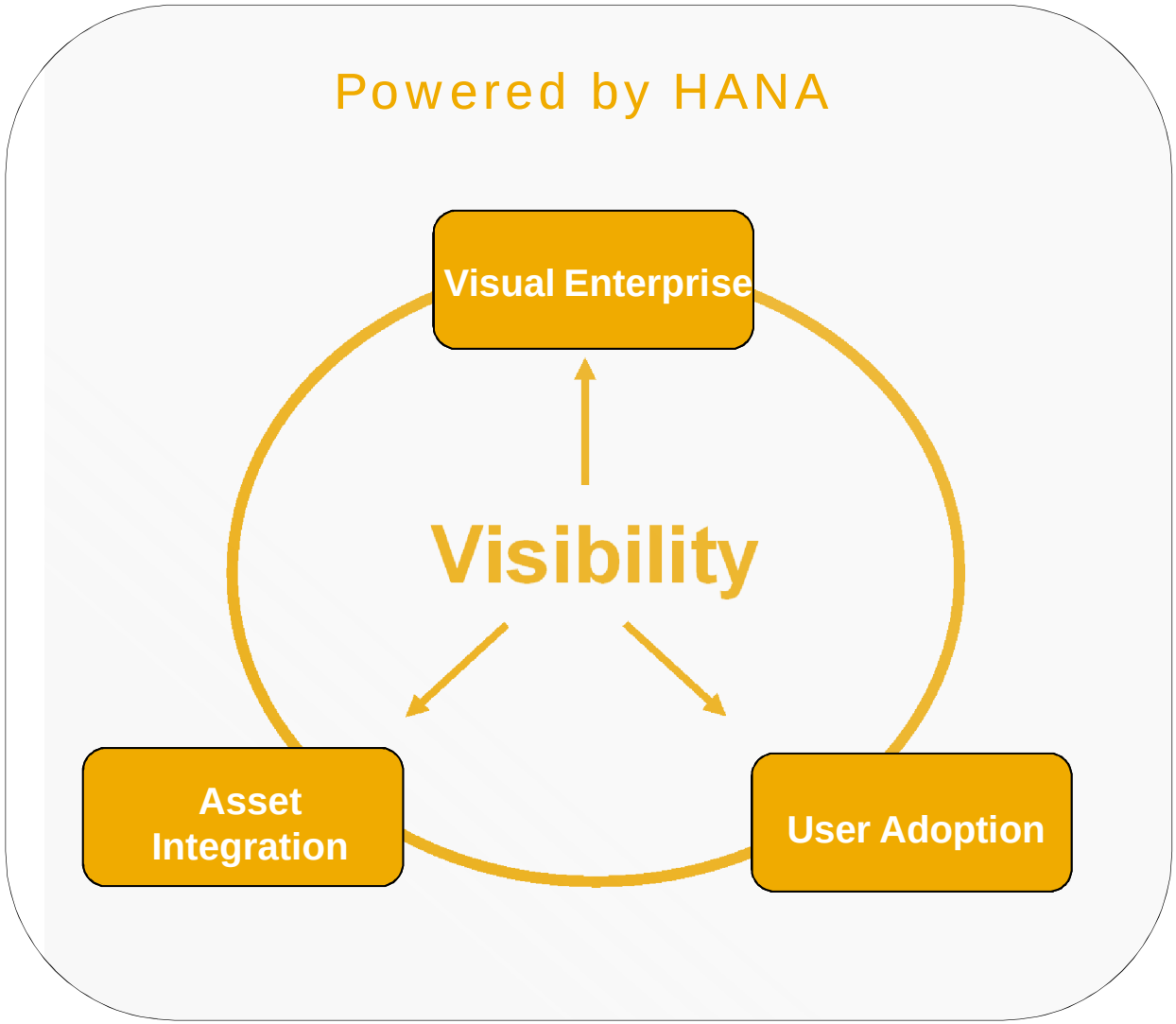

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SAP Simplicity:

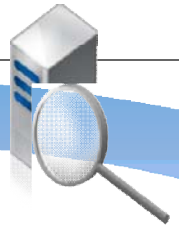
The Right User Interface for the Right Users

Barcoding

Simple, intuitive productivity tools

Adobe Forms

Interactive
Connected &
Disconnected Forms



Business Explorer

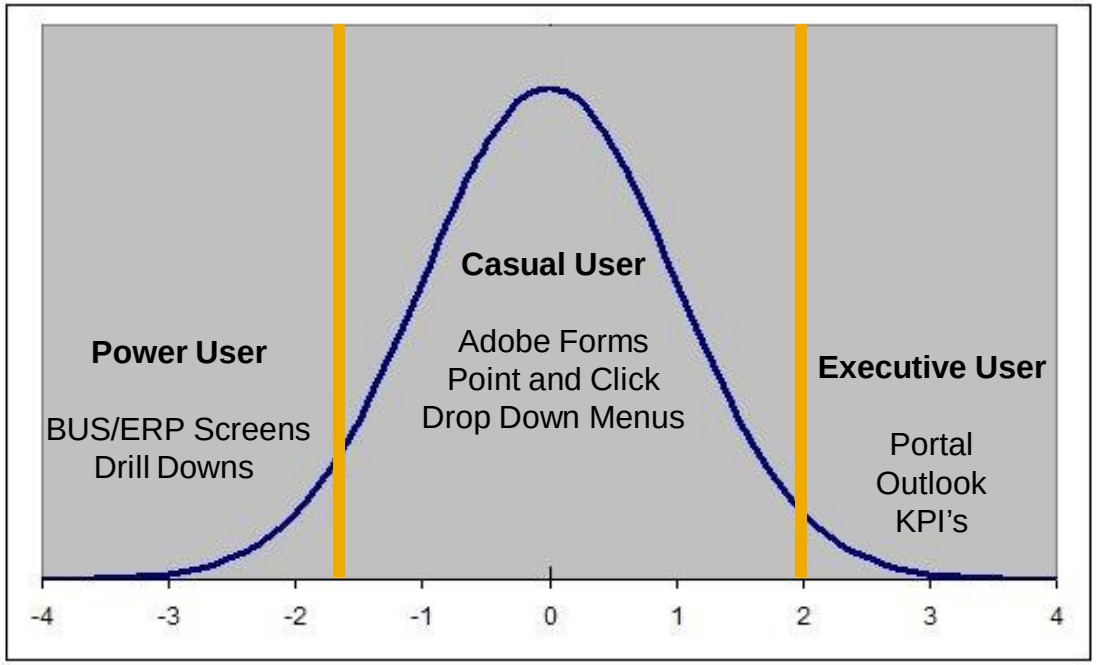
Quick answers, quick action

Analytics

Actionable information my way

Business Client

The power of SAP Navigation



Machine Integration

Anticipation and Visualization

University Alliances

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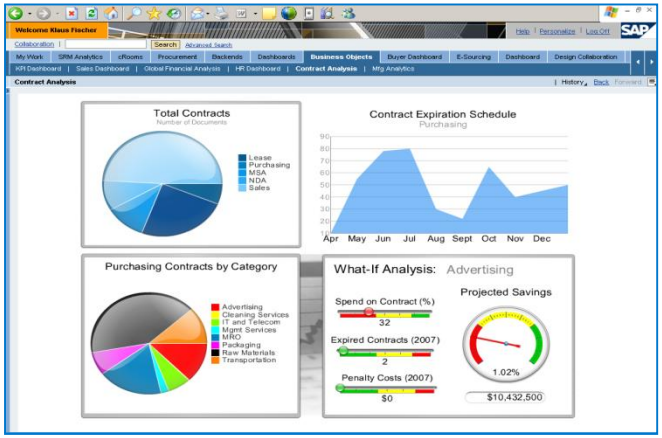
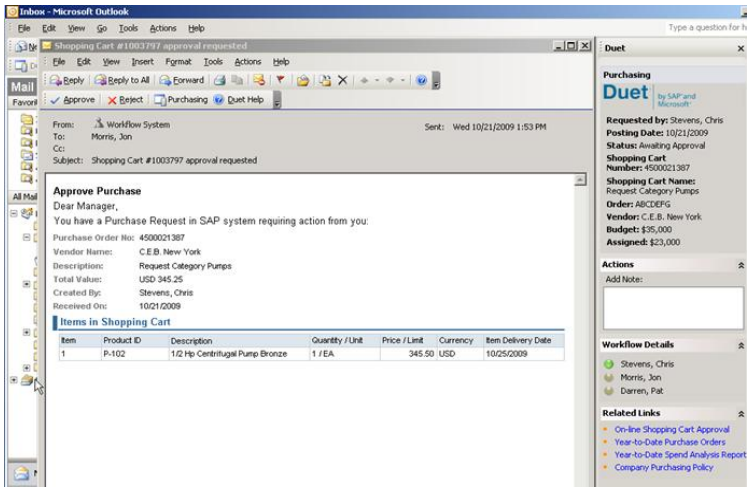
NEW SAP

Kiosk & Image based

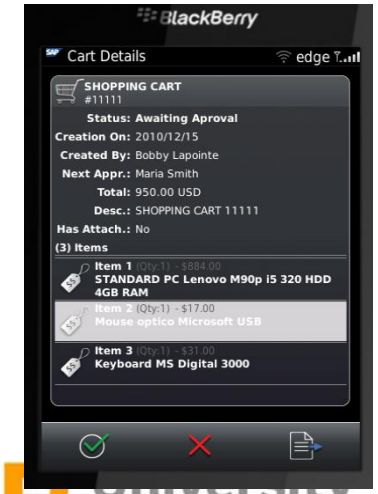
Analytics based



Email Integration



Mobile / RF based



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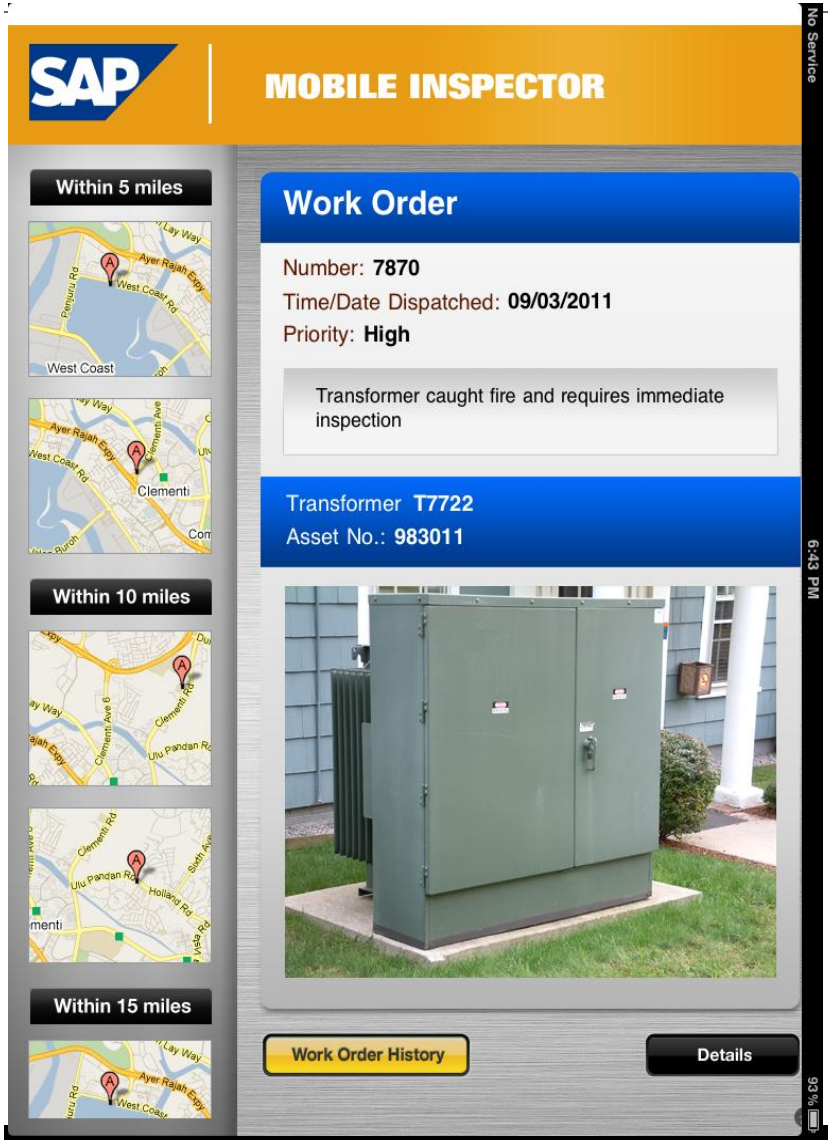
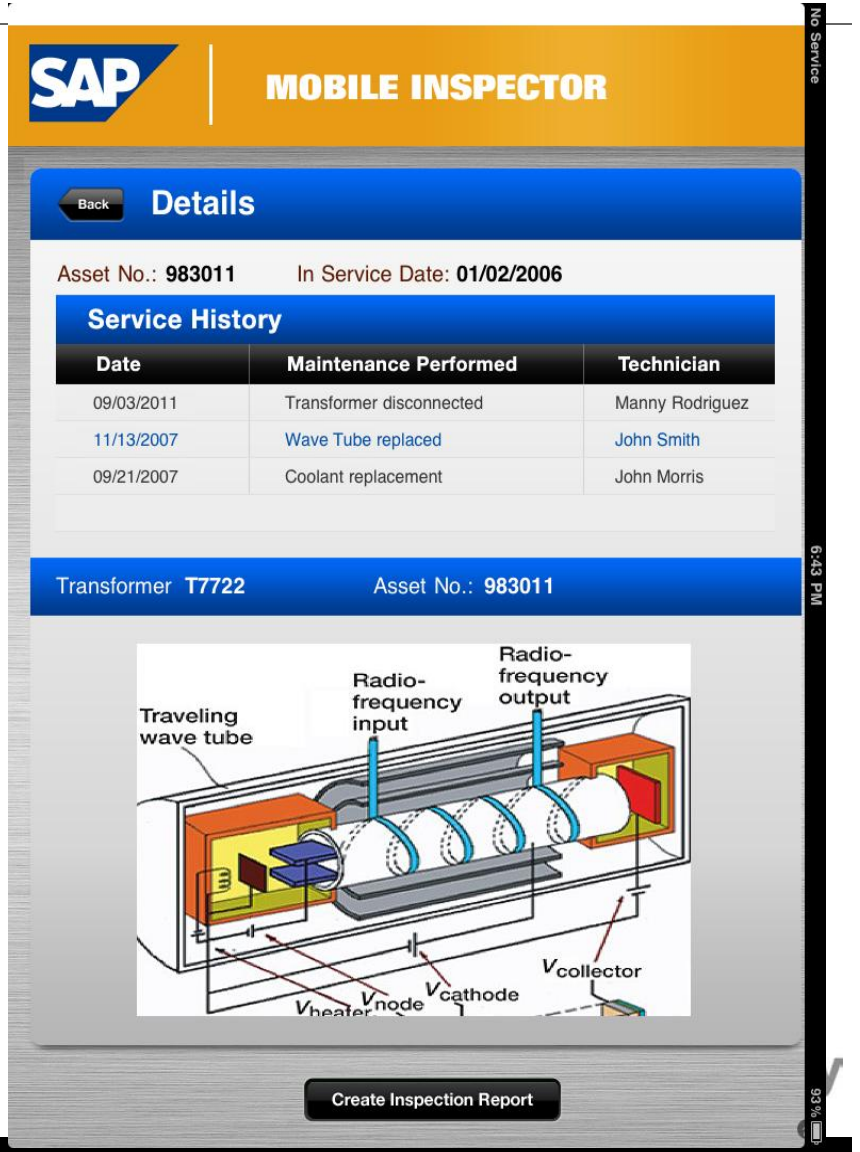
Enabling Operational Excellence - Mobility

iPad, iPhone, Blackberry, …





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Enabling Operational Excellence – Visual Enterprise

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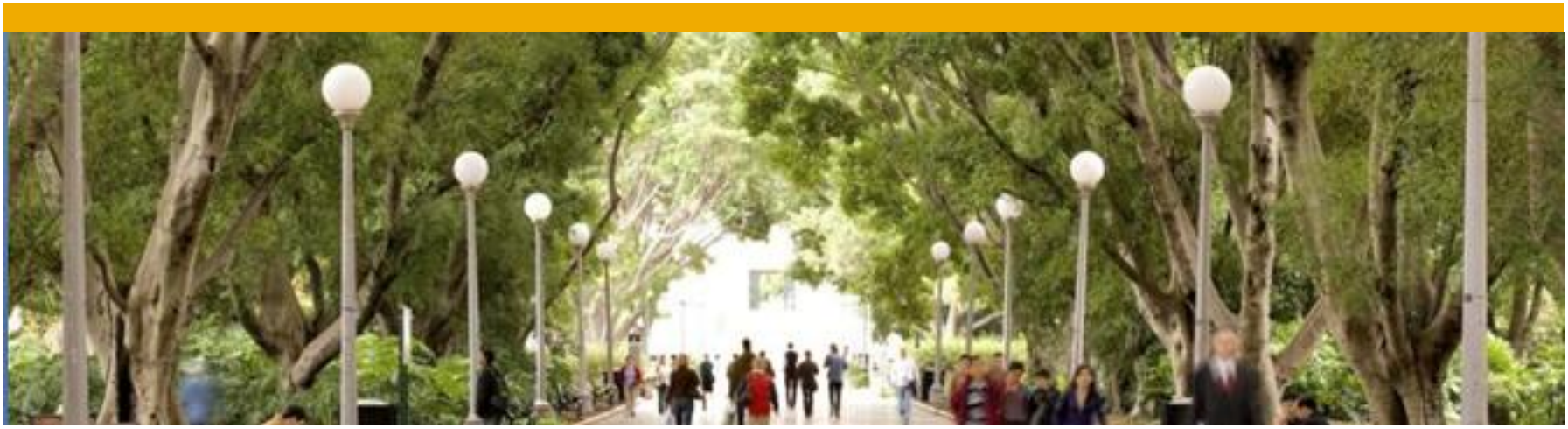
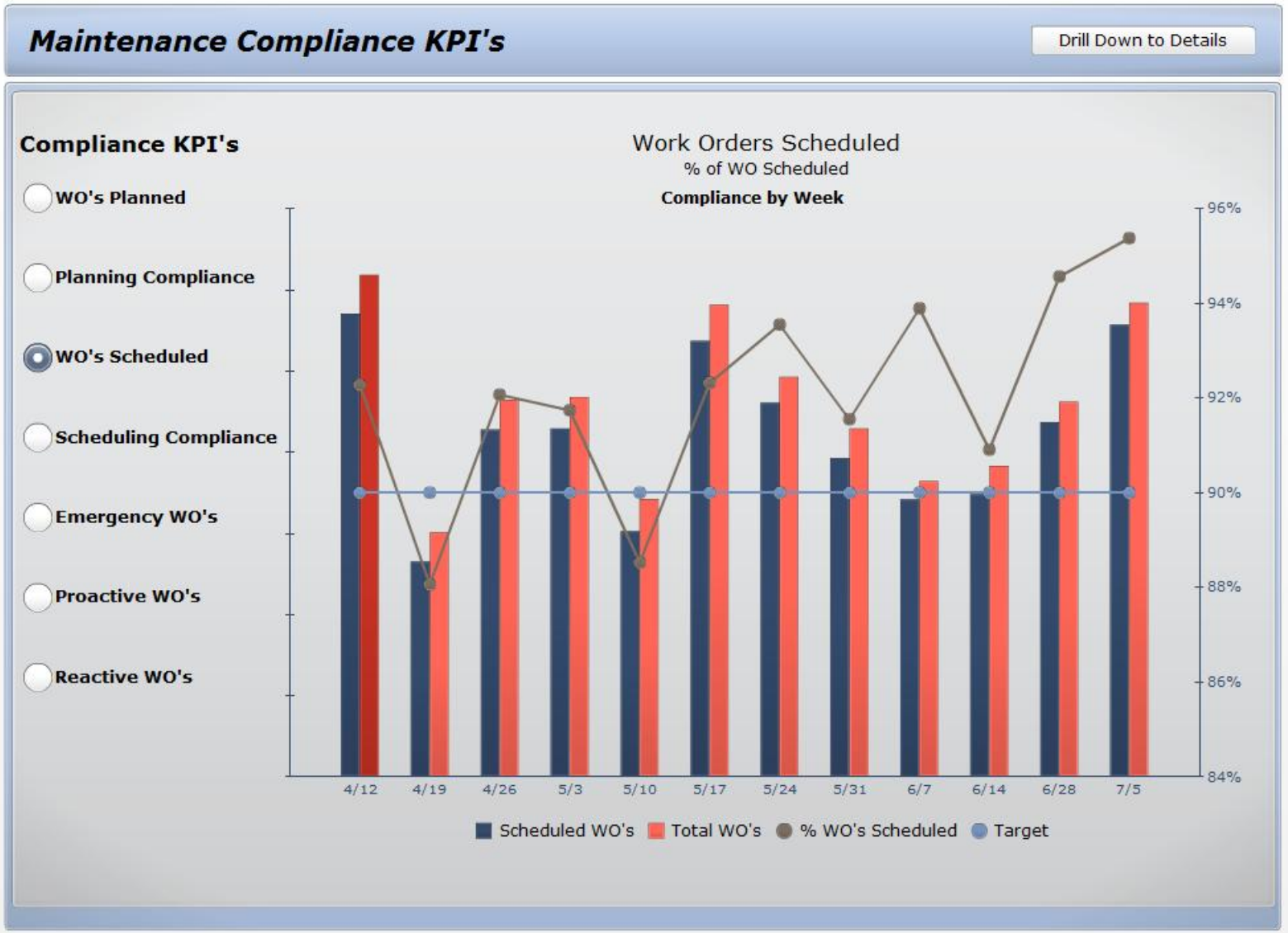


A Platform for Innovation

Full Visibility with Analytics

Maintenance Compliance KPI’s



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When Integration Matters
Asset Reliability and Cost Indicators KPI's

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Operational Excellence – Transparency and Visibility
(Operations, Production, Safety, Maintenance, Quality)

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Enabling Operational Excellence - Mobility

iPad, iPhone, Blackberry, …

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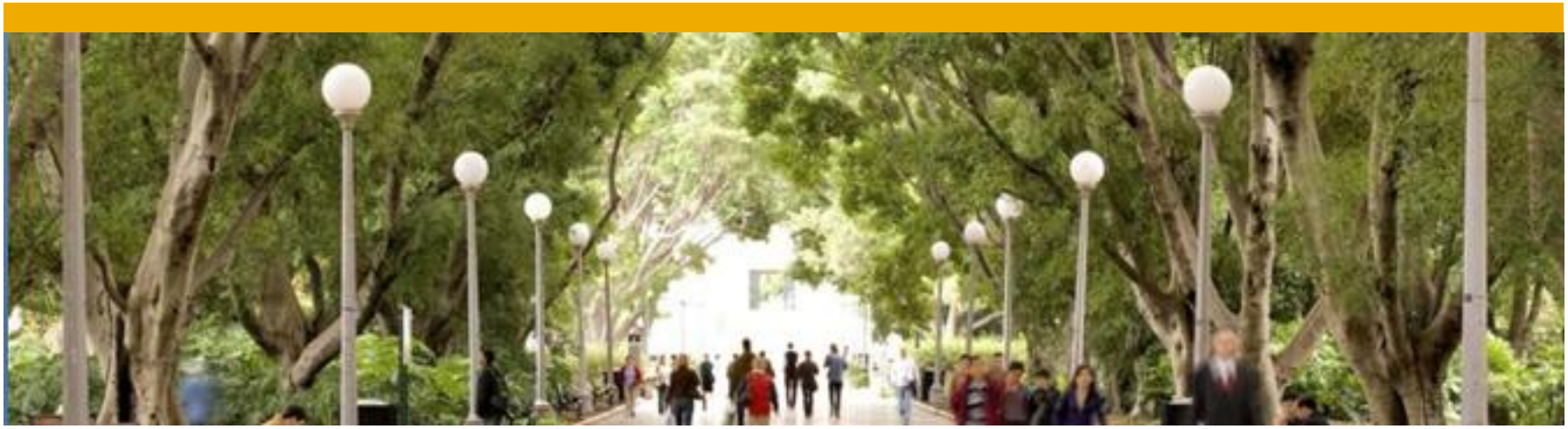
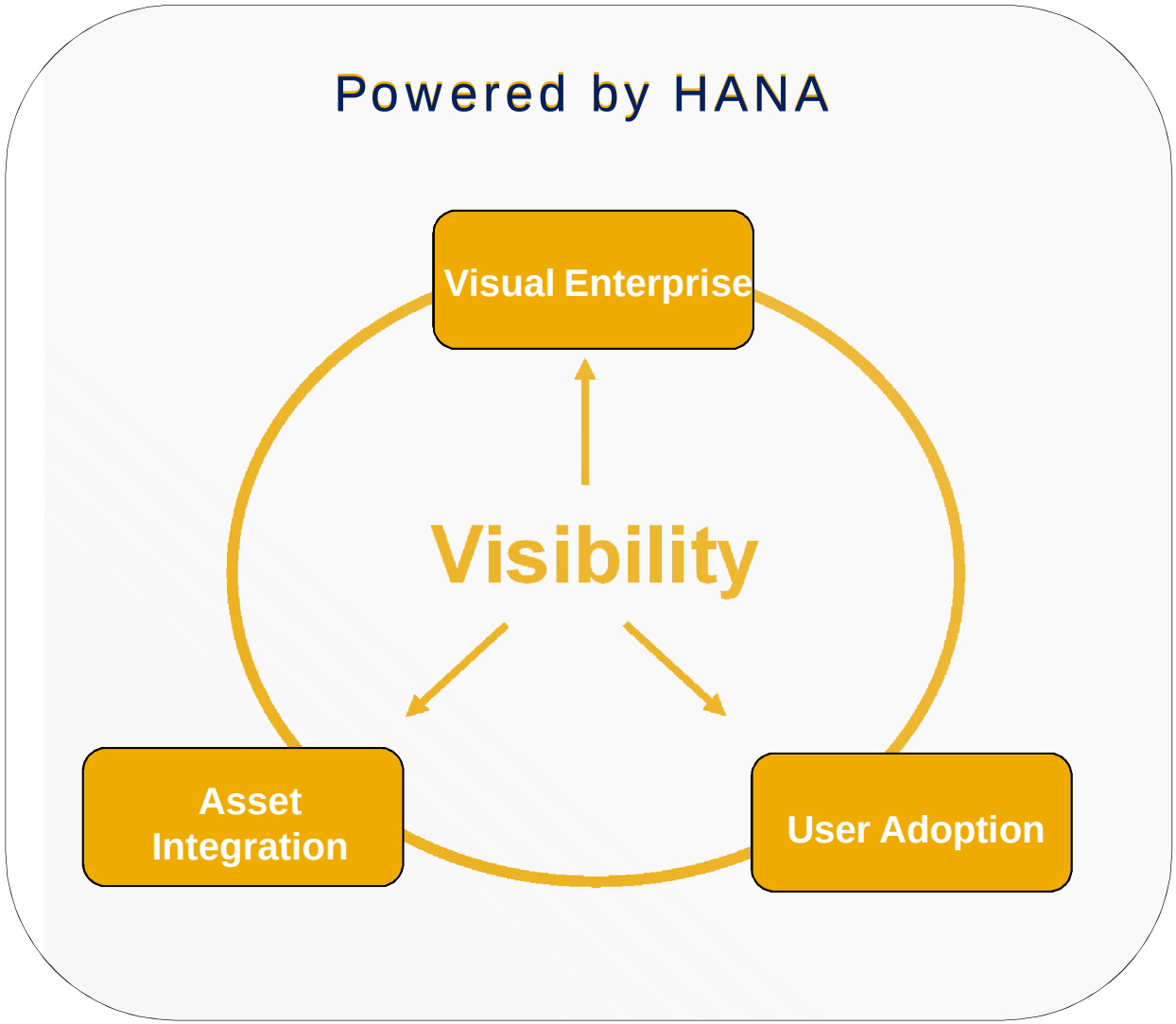


A Platform for Innovation

Full Visibility with Immediate Performance

SAP Value

Gain Visibility across Planning, Execution, Asset Management



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Vision: In-Memory Computing

Background and Context

Technology that allows the processing of

massive quantities of real time data

in the main memory of the server

to provide immediate results from

analyses and transactions

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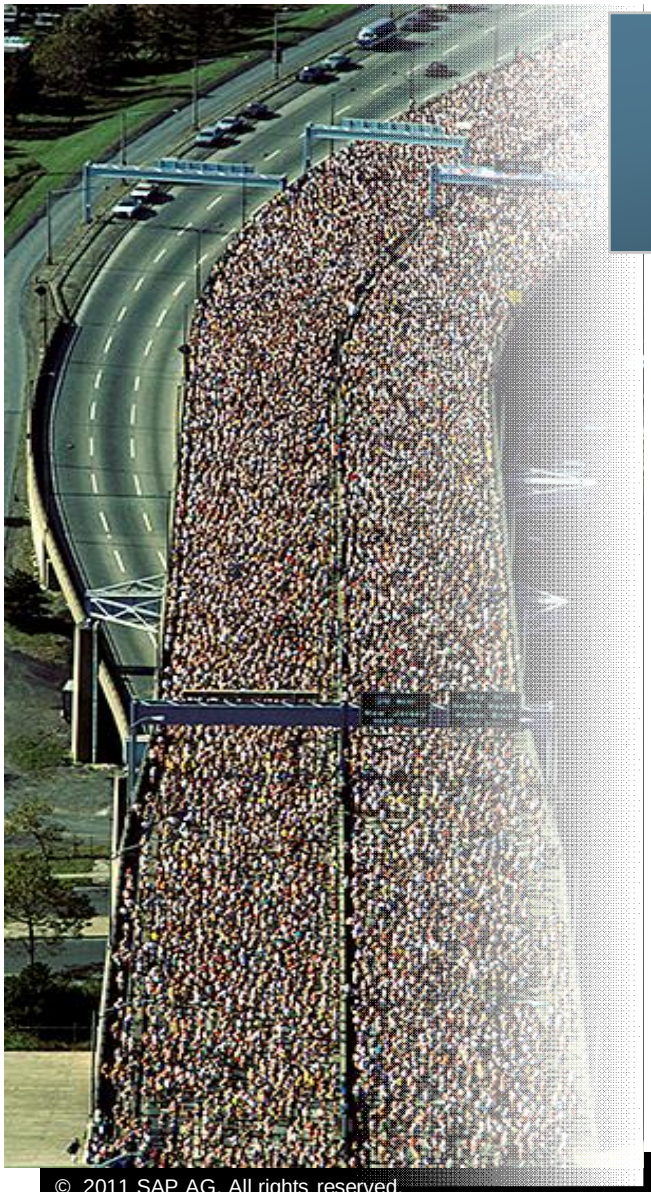
A Breakthrough Innovation That Enables the "Real Real-Time" Enterprise



Time becomes your competitive advantage

- SAP Delivers High Performance Appliance
- Game Changing in Terms of Volume, Speed and Cost

Volume of Company and External Data

- Entire company data resides in memory- providing immediate decisions without compromise
  - Analyze massive amounts data in fractions of a second

Speed of Business Analysis

- Dramatic processing speed that enables detailed analysis of real-time data

Real-time – no time latency, no aggregation

Infrastructure Costs of Data-Intense Businesses

- Higher performance for lower total cost (30% lower than a traditional database approach)

Performance and lower cost benefits increase as data increases

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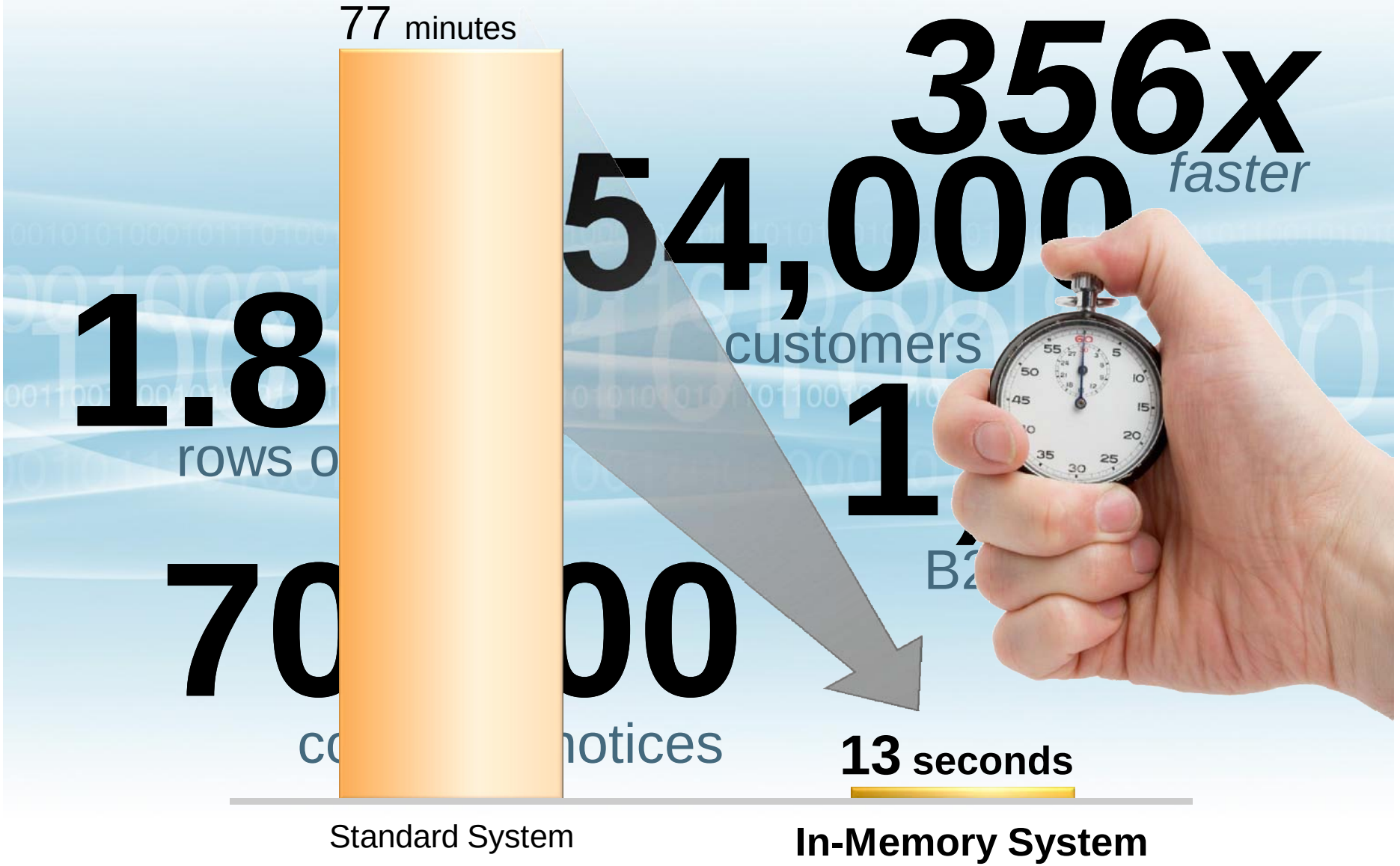
SAP HANA in Action at a CPG Company



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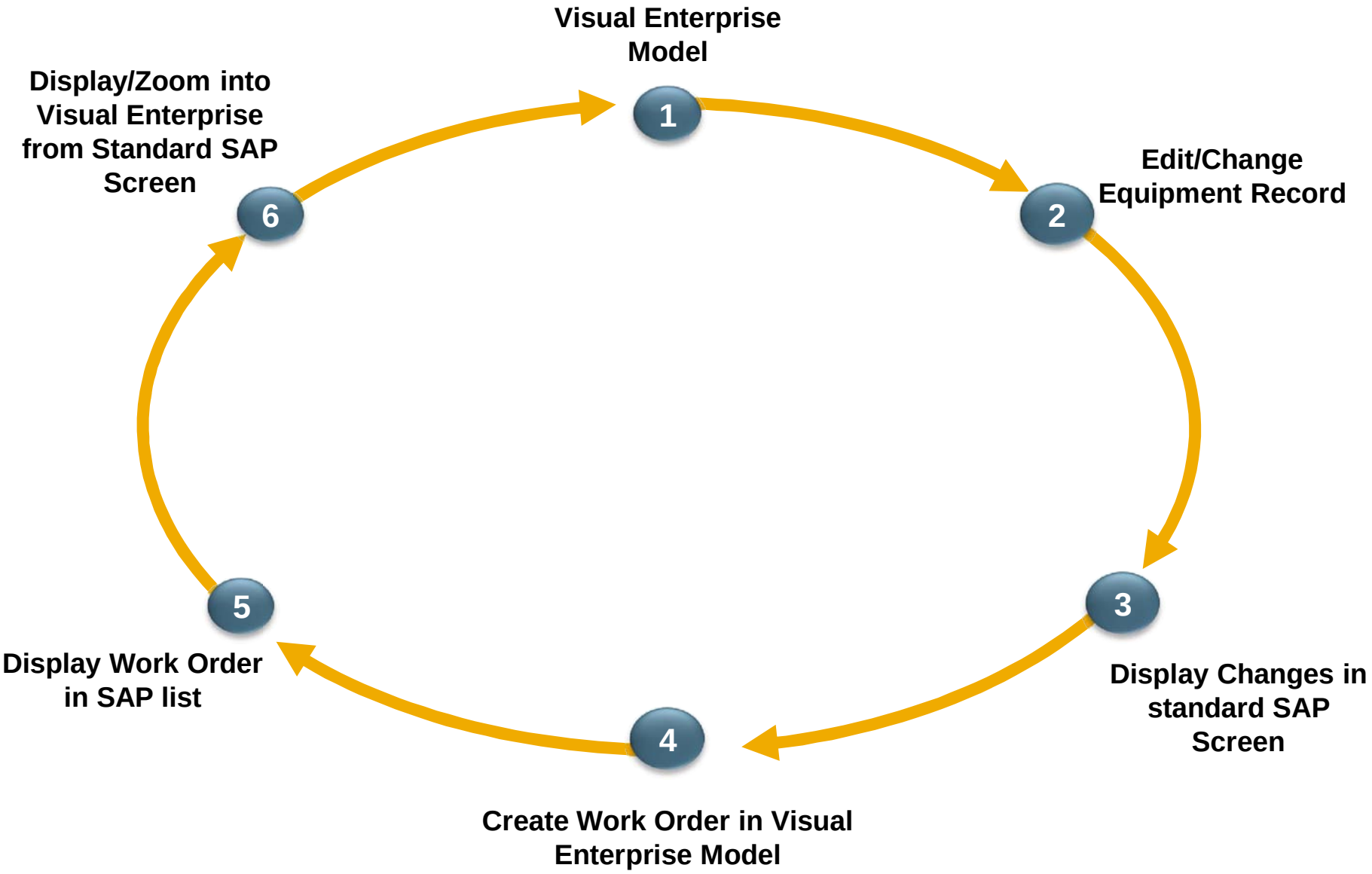
Visual Enterprise Integration Process



Thank You!

Contact information:

Armando Urias
Executive Solution Engineering
SAP America