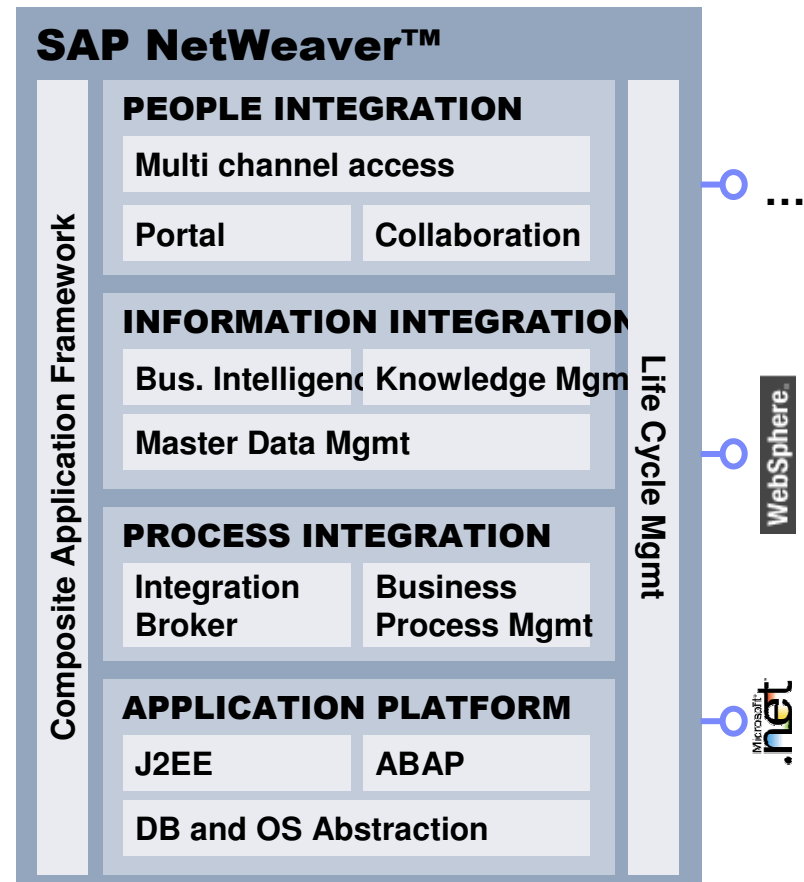# SOA for SAP Customers
Accelerating Customer Value with SOA

Lloyd Adams, Global Software Group Executive, Solutions for SAP
July, 2007

IBM and SAP are partnering to deliver SOA solutions for customers

- SAP is IBM's largest partner. IBM is SAP's largest partner

- Until SAP NetWeaver was introduced, life was simple
    - SAP provided packaged applications
    - IBM provided hardware, services, and middleware software

- Customers were asking many questions
    - IBM Software Solutions for SAP Team was formed
    - Team of 50 dedicated professionals globally
    - Lloyd Adams, Martin Arnoldy (WW Sales), Gary O'Leary (UK)

- Customers are selecting both IBM and NetWeaver

SAP NetWeaver™

Composite Application Framework

PEOPLE INTEGRATION

Multi channel access

Portal | Collaboration

INFORMATION INTEGRATION

Bus. Intelligenc | Knowledge Mgmt

Master Data Mgmt

PROCESS INTEGRATION

Integration Broker | Business Process Mgmt

APPLICATION PLATFORM

J2EE | ABAP

DB and OS Abstraction

Life Cycle Mgmt

...

WebSphere

Microsoft .net

Customers are selecting IBM Software AND NetWeaver

Renault	- GBS & SWG teamed to extend ESB domain (already connecting 300 apps) to improve time-to-market of cars with PLM integration - Proved superiority of SOA composite application vs package apps extensions for Dealer order integration in a proof of concept - First "business services" with a proven re-use delivered in 2006 and populating a Registry and Repository
Lenovo	- Lenovo has embarked on an effort to integrate the heterogeneous systems inherited from IBM into new mySAP apps - Strategic platforms selected: - IBM WebSphere for the strategic front end, BPM, monitoring, and data migration - mySAP for the back-end systems
Audi	- SAP NetWeaver lighthouse customer (early adopter) - Instituted a Corporate-wide WebSphere/NetWeaver joint strategy - Recently successfully moved customizations out of SAP CRM into the WebSphere SOA platform

Other example customers who run SAP and have selected IBM Software

- Audi/VW
- Renault
- EADS/Airbus
- Bombardier Aerospace
- Spirit Aerospace
- McKesson
- Cardinal Health
- Lenovo
- DHL
- TNT
- Petroleum of Mexico (PEMEX)
- Repsol (Spain, Latin America)
- Varian Semiconductor
- American Airlines
- Compass Group (world's largest foodservice)
- Guidant
- Universal Robina Corp (Asia CPG)
- CP IT
- Goodyear
- Lastar
- DB Regio IT Achan (Germany)

- Modelo (Corona)
- Sobeys (largest Canadian retailer)
- Cencosud
- Home Depot
- Metro Group
- Kaufland
- Warner Brothers
- Gas Natural (Spain)
- Bridgestone NA Tire
- Viessman
- Indian Tobacco Co. (SAP & Oracle)
- DVLA (Public – UK)
- Bank of Austria
- Standard Bank of S. Africa
- Grohe
- T-Com
- Comcel
- Deutsche Telcom

Separate SAP references .pdf available

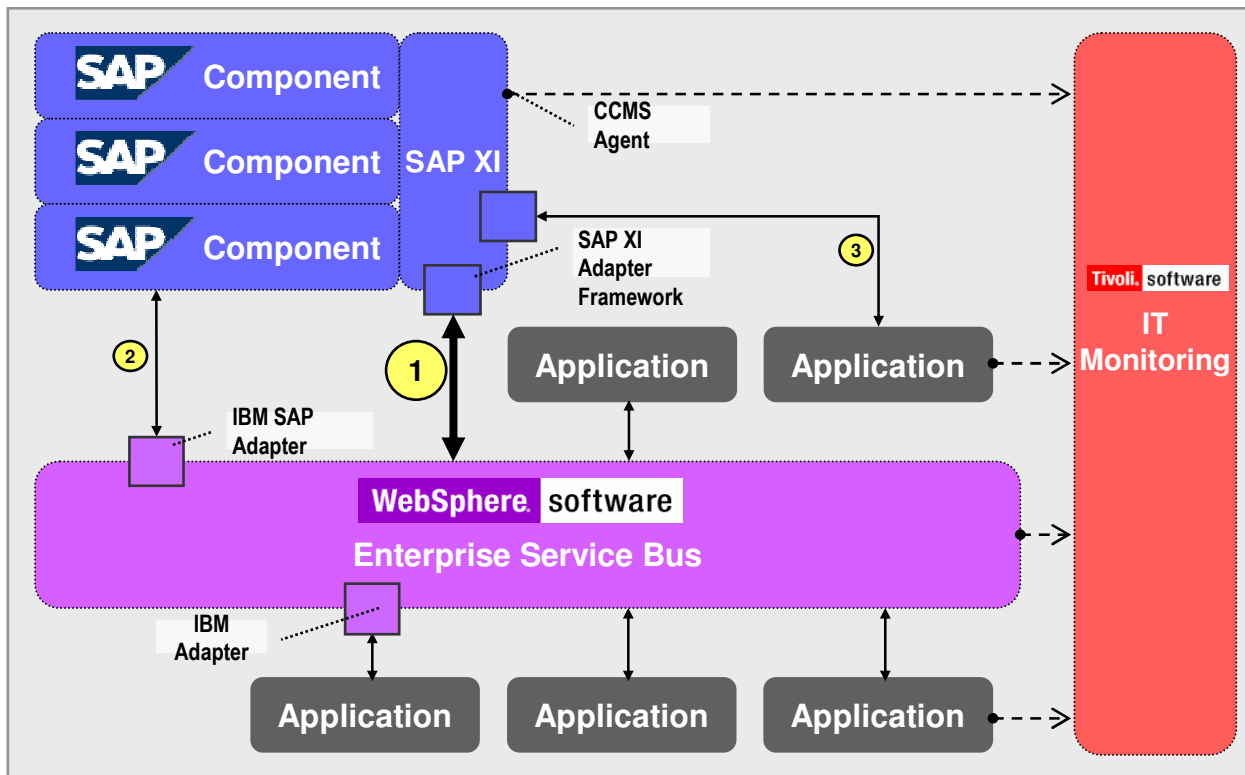# Four areas of interoperability were reviewed...

- Enterprise Application Integration
  - ▶ SAP XI is the preferred interface to future SAP Applications
  - ▶ IBM WebSphere is the integration tool for all heterogenous applications

- Business Process Management
  - ▶ SAP XI will be used to coordinate intra-SAP processes
  - ▶ IBM WebSphere will be used in the heterogenous environment

- Portal
  - ▶ SAP NetWeaver Portal will be used as interface to SAP applications
  - ▶ IBM WebSphere Portal will be the overall portal, providing access to all applications

- Application Development
  - ▶ Netweaver Development Studio for SAP Application Development
  - ▶ IBM Rational Tools Suite for development outside SAP

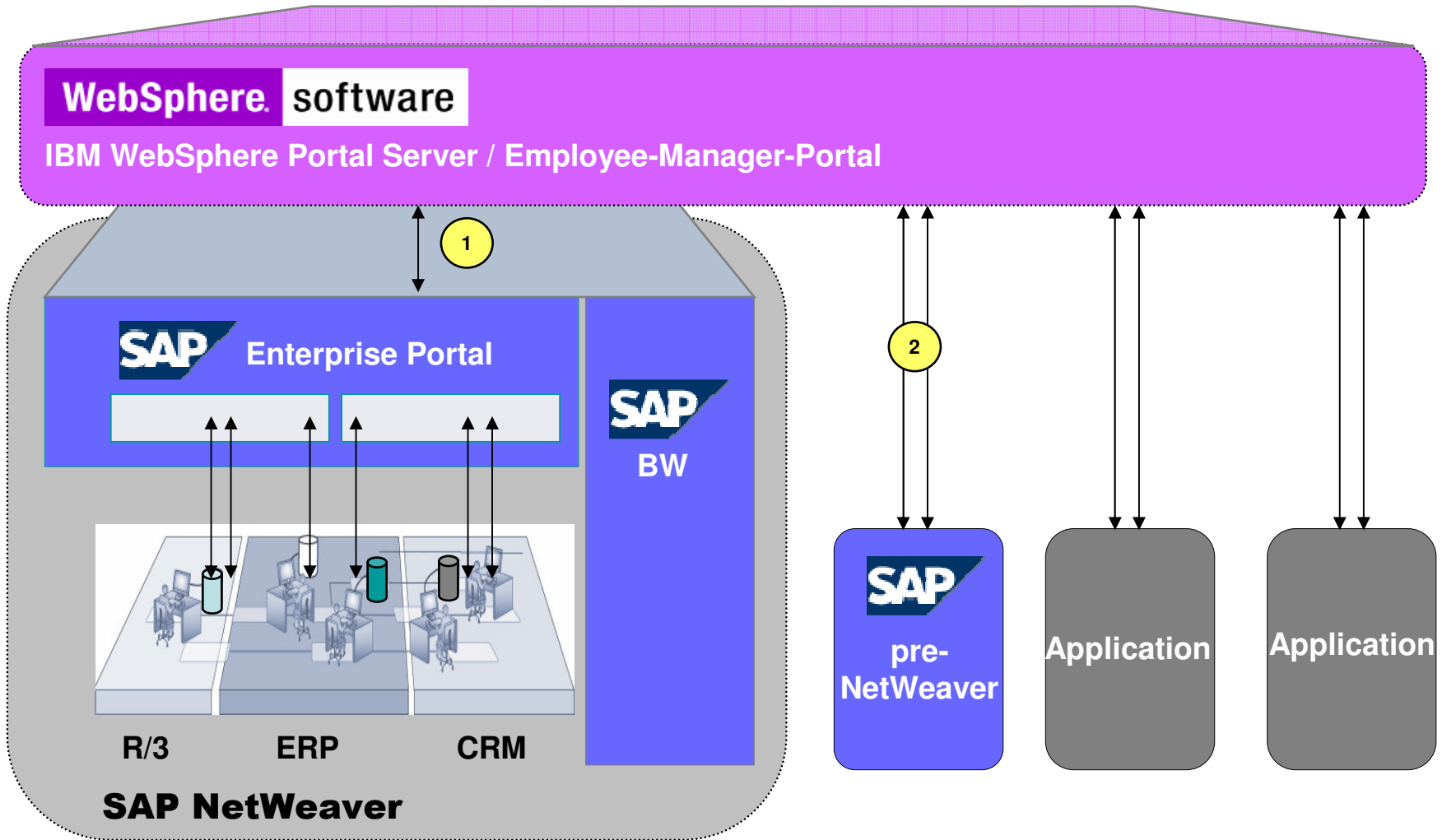**SAP XI** is the strategic tool to integrate SAP Applications

IBM WebSphere is the strategic tool to integrate the heterogeneous environment

1 Open standards based connection SAP XI ⇔ IBM WebSphere

2 IBM Adapter and open-standards based connection IBM WebSphere ⇔ SAP Application

3 SAP Adapter based connection SAP XI ⇔ Legacy Application

IBM & SAP Portals Interoperability – Overview
Example architecture

IBM WebSphere Portal Server / Employee-Manager-Portal

Enterprise Portal

BW

R/3   ERP   CRM

SAP NetWeaver

pre-NetWeaver

Application

Application

① Portal-in-Portal: iFrame/URL integration of SAP NetWeaver Portal in WebSphere Portal

② WebSphere Portal SAP Integration

How can we help you?
Common SAP-related themes among our clients

IT

SAP Integration

Safe Passage

E-SOA strategy

SAP Consolidation

SAP ROI

SAP Upgrades

SAP cost
containment

New SAP
Installation

Mature SAP
Implementation

Package App alternatives, SaaS and composite apps

B2B / Collaboration

Single View of Customer/Product

Business
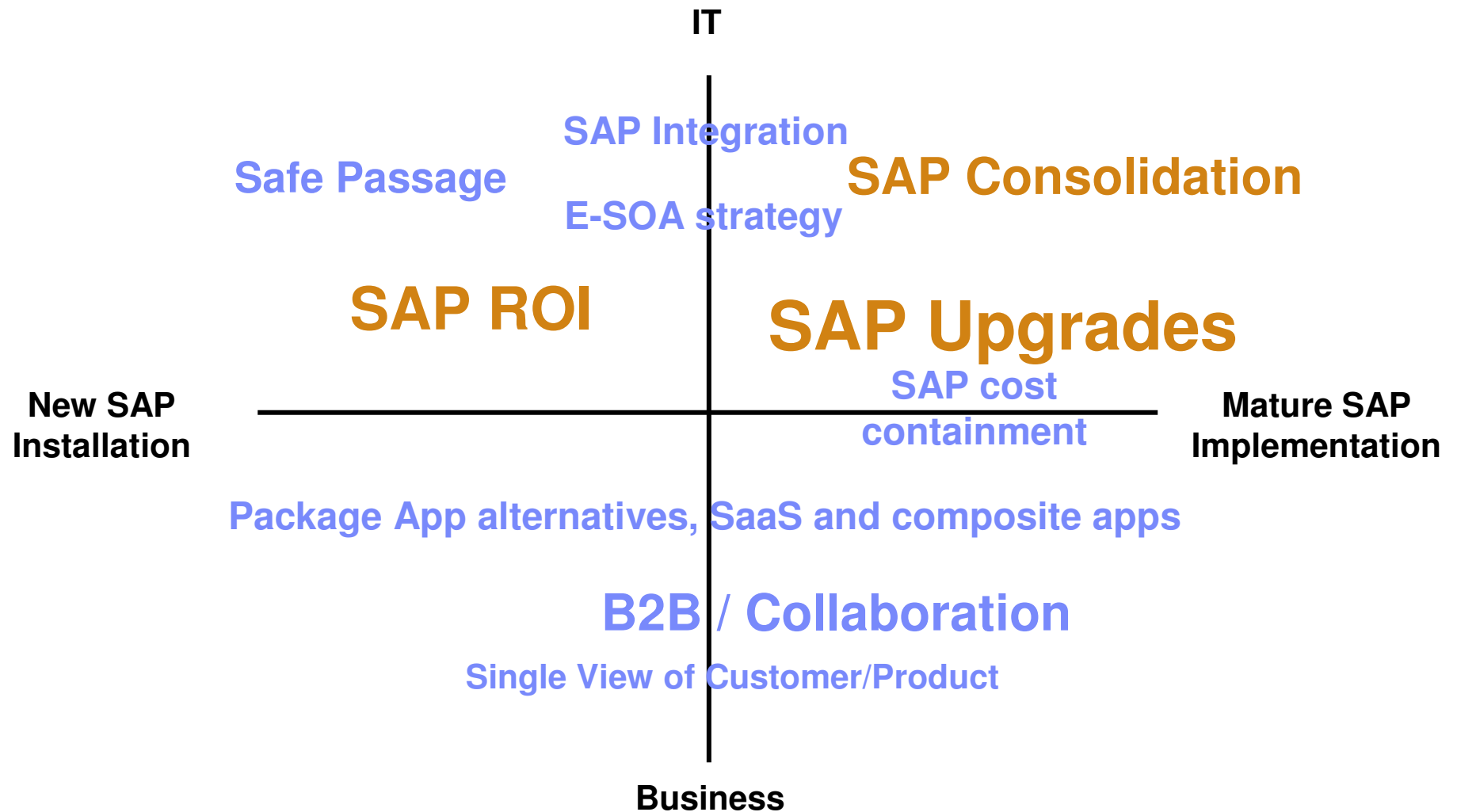
The 5-year Cycle for SAP Upgrades

Today

ECC 6.0	Ramp-Up** · Mainstream Maintenance · Extended Maint. (+ 2%)* · Extended Maintenance (+ 4%)* · Customer-Specific Maintenance	
ECC 5.0	Ramp-Up** · Mainstream Maintenance · Extended Maint. (+ 2%)* · Extended Maintenance (+ 4%)* · Customer-Specific Maintenance	
SAP R/3 Enterprise	Ramp-Up · Mainstream Maintenance · Extended Maint. (+ 2%)* · Extended Maintenance (+ 4%)* · Customer-Specific Maintenance	
SAP R/3 4.6C	Mainstream Maintenance · Extended Maint. (+ 2%)* · Extended Maintenance (+ 4%)* · Customer-Specific Maintenance	
SAP R/3 3.1I – 4.6B	Mainstr. Maint. · Extended Maint. (+ 2%)* · Extended Maintenance (+ 4%)* · Customer-Specific Maintenance	

Dec · Dec · Dec · Dec · Mar · Dec · Mar · Mar · Mar · Mar · Mar

2002 · 2003 · 2004 · 2005 · 2006 · 2007 · 2008 · 2009 · 2010 · 2011 · 2012 · 2013 · 2014

The reality: Packaged applications are no longer "off the shelf". *Heavy customization has most customers struggling*

Custom Code KPI
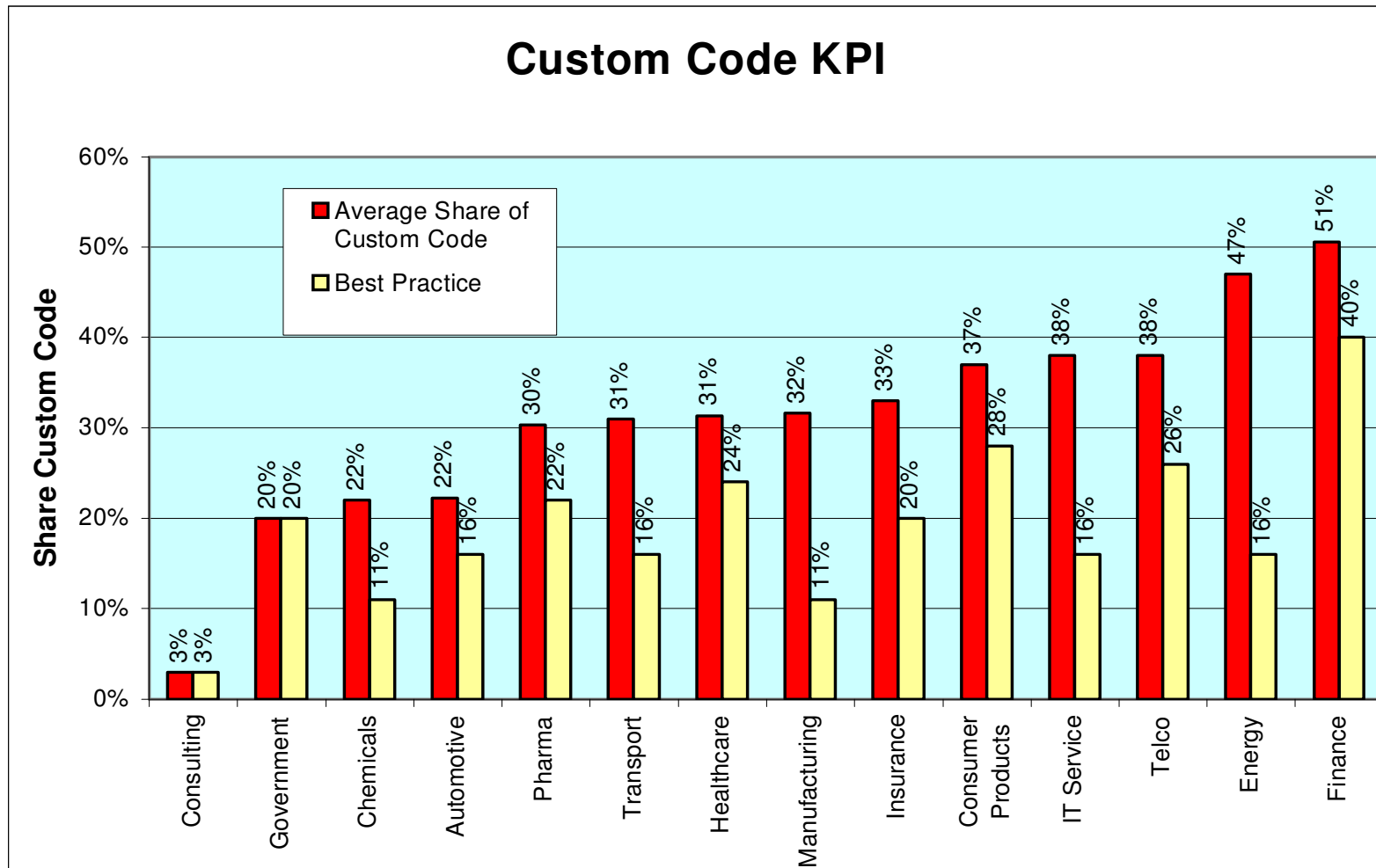
Source: 2006 West Trax study

IBM's Value Acceleration Plan.
A quantitative and individually tailored approach for our SAP customers

Sample SAP Value Acceleration Plan……..

- **Step 1: Benchmark your SAP deployment against best practices**
  - ► **Deliverable: Analysis of current deployment in terms of level of custom code in SAP system and potential for elimination or migration**

- **Step 2: Build your roadmap and vision**
  - ► **Deliverable: Roadmap optimized for SAP**

- **Step 3: Bridge your business and IT gap**
  - ► **Deliverable: Deployment plan**

- **Step 4: Define the solution / proposal**

The plan is tailored to fit your specific needs and timeframe

Data collection tool: Insight for mySAP ERP

IBM Insight for mySAP ERP

Results of Analysis for

Customer XYZ

R/3 System: PRD

Wednesday, August 23, 2006 - Saturday, August 26, 2006

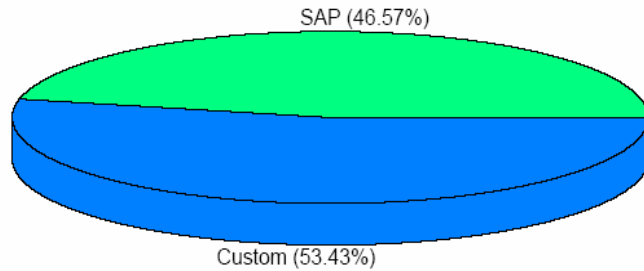Report Prepared by IBM America's Techline

September 14, 2006

http://www.ibm.com/erp/sap/insight

- **Automated tool collects information about SAP execution over a 3 day period**

- **Focus is on top 20 transactions in use**

  ► **Share of custom vs. standard SAP**

  ► **System Performance**

Example output

Database Wait Time by Code Type

wilma - Database Wait Time

SAP (46.57%)

Custom (53.43%)

Top Transactions by Database Wait Time

Time (s)	%	Steps	Avg (s)	Module	TCode/Report
323195	6.4	17792	18.2	BC	RBDAPP01
299145	5.9	3251726	0.1	BC	SAPMSSY1
257499	5.1	10827	23.8	OT	ZVTX_CALL_RFC
217789	4.3	172	1266.2	OT	ZRPV0092
185526	3.7	689576	0.3	SD	VA01
143864	2.9	1378647	0.1	BC	RSM13000
142656	2.8	6227	22.9	SD	RV50SBT1
128597	2.6	6924	18.6	SD	SDBILLDL
84222	1.7	6135	13.7	OT	ZVTX_SEQUENCE
82511	1.6	115	717.5	PM	RIQMEL20
81641	1.6	80	1020.5	OT	ZUTS5200
80633	1.6	206	391.4	OT	ZRESCHED_VBBE
60322	1.2	64	942.5	FI	RFITEMGL
58596	1.2	75	781.3	OT	ZOTVL17A
56050	1.1	18812	3.0	SD	RSNAST00
52858	1.0	35	1510.2	OT	ZRPV491B
52275	1.0	81	645.4	OT	ZRPV0095
51938	1.0	26	1997.6	OT	ZRPV463A
51389	1.0	38	1352.4	OT	ZUTV411A
47485	0.9	44	1079.2	SD	RV21A010
45774	0.9	187	244.8	OT	ZRESCHED
44420	0.9	160562	0.3	PM	IW51
44261	0.9	32	1383.2	SD	S3VBRKDLS
43793	0.9	35	1251.3	OT	ZRPV0019
43620	0.9	18	2423.3	OT	ZOTVV06A
43420	0.9	21	2067.6	OT	ZRPV482A
41796	0.8	97	430.9	OT	ZUTI441A
41114	0.8	188530	0.2	SD	VA02
40843	0.8	185297	0.2	OT	ZV33
39845	0.8	26	1532.5	OT	ZRPF425A
38200	0.8	100	382.0	BC	RBDMANIN
36458	0.7	40	911.5	OT	ZRPV0044
33361	0.7	38	877.9	OT	ZRPF414A

In this example, you can see a preponderance of custom code and it's impact on the database. These programs would be inspected by our team

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