



IBM Software Group

WebSphere Business Integration

Geschäftsprozessintegration als Motor zum Erfolg

WebSphere. software

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 e-business software

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05/03

e-business on demand is Powered by WebSphere

e-business on demand: An enterprise whose business processes —integrated end-to-end across the company and with key partners, suppliers and customers— can respond with speed to any customer demand, market opportunity or external threat

Sam Palmisano, IBM Chairman, Oct 2002



WebSphere software

INTEGRATION PLAY

HANDLES PENSION FUNDS AND INVESTMENT PORTFOLIOS

HANDLES TRANSACTION SETTLEMENTS AND THE FOOTBALL POOL

HANDLES BUYERS AND SELLERS

1) **WIN WITH RESULTS:** For more efficiency and faster transactions, you need open, resilient software that lets you integrate internal and external business processes.

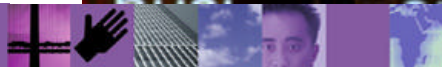
2) **WIN WITH WEBSHERE:** The leader in integration software, WebSphere includes built-in templates and application adapters specifically for Straight Through Processing. You get outstanding financial services with virtual play-and-play conversion, WebSphere. Part of our software portfolio is including QES[®], Lotus[®] and Tivoli[®].

3) **MAKE THE PLAY:** Visit ibm.com/webSphere/finance

e-business is the game. Play to win.[™]

IBM

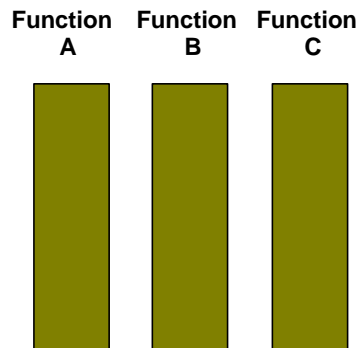
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Vom Transaktionsmanagement zur horizontalen Integration für das on demand Unternehmen

Access

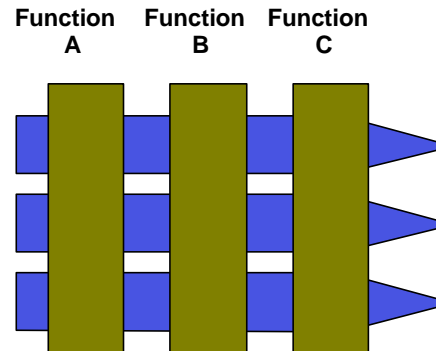
Processes are bounded by Functions



Integration has little focus

Integration

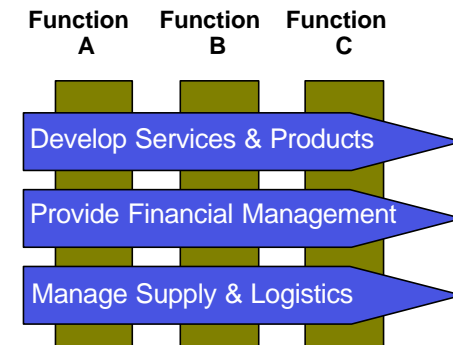
Processes led by Functions, extend beyond Functions



Integration is typically an "afterthought" (reactive)

On Demand

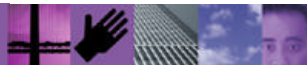
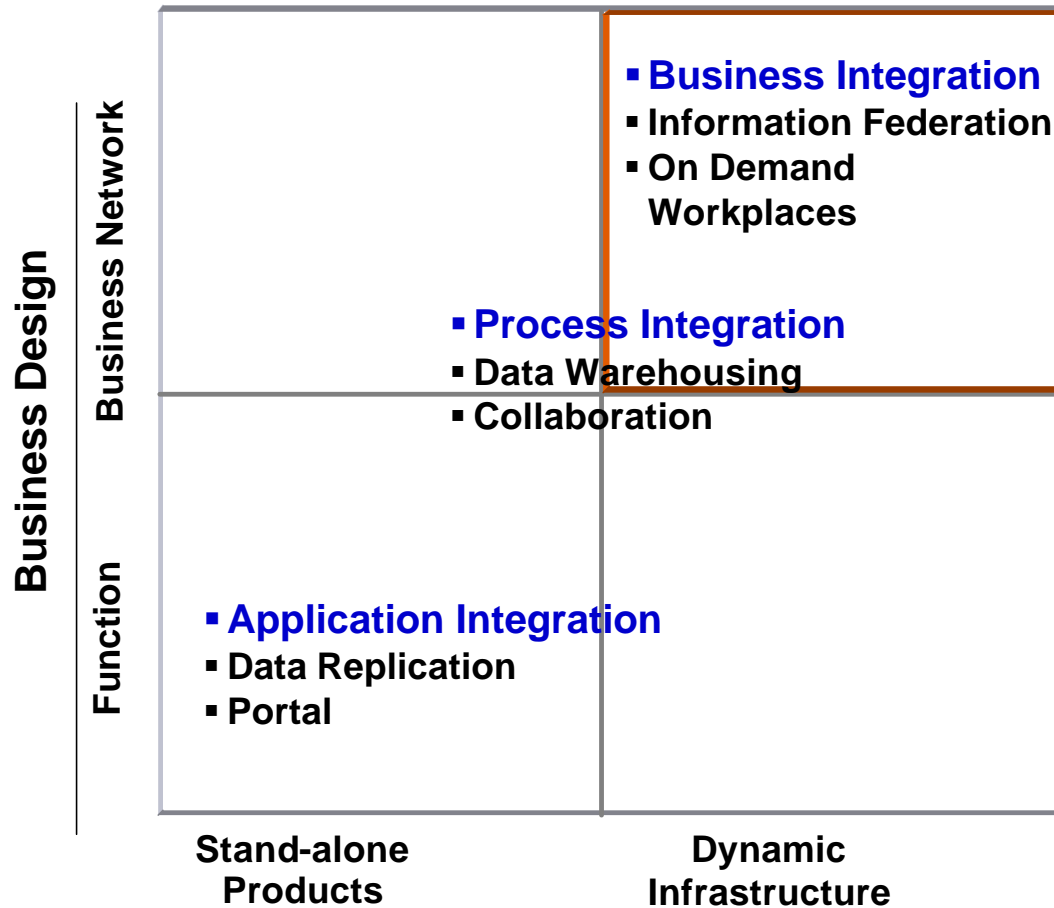
Processes led by Business, extend to value nets



Integration is a "forethought" (planned)

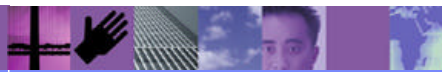
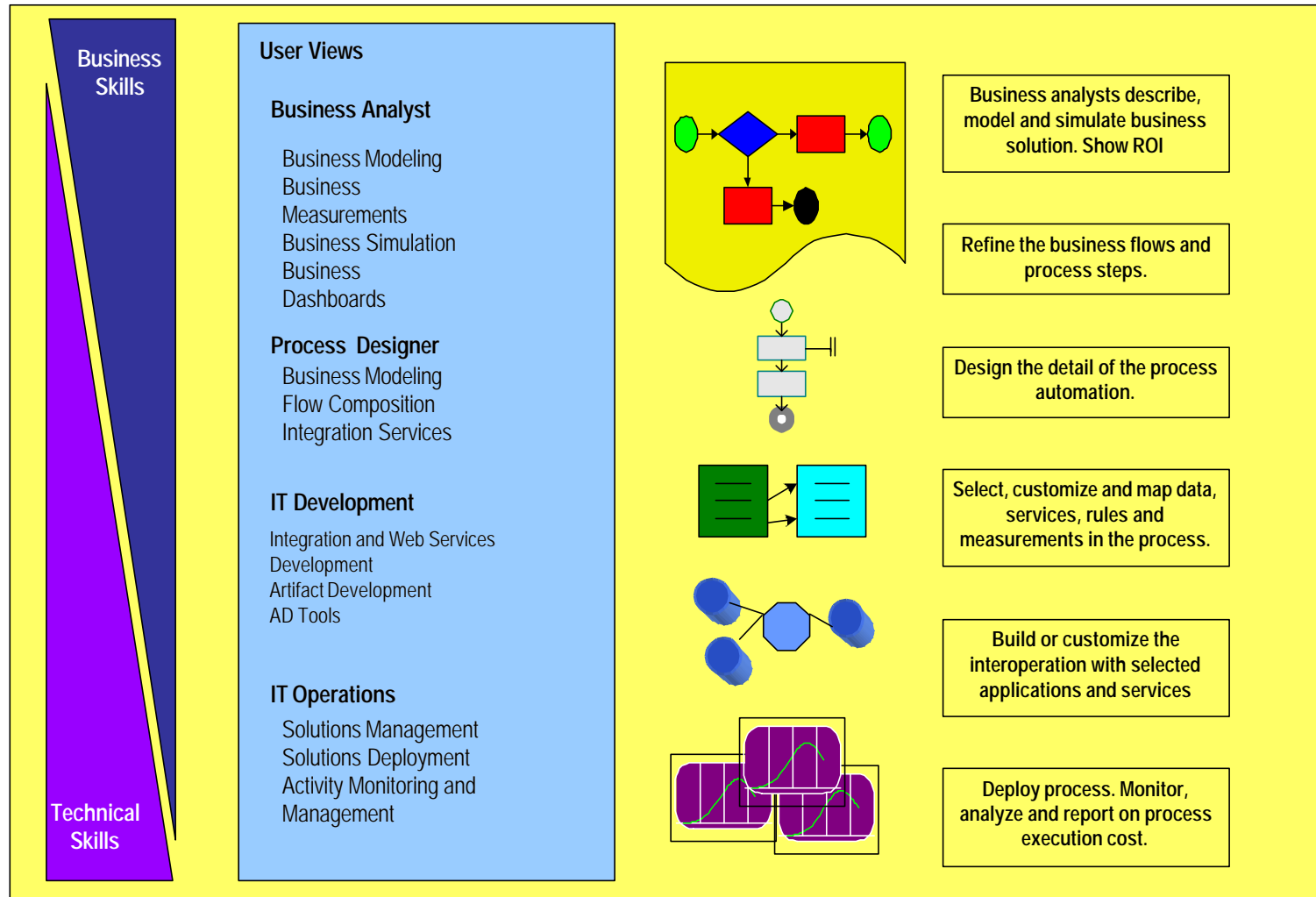


Integration Roadmap

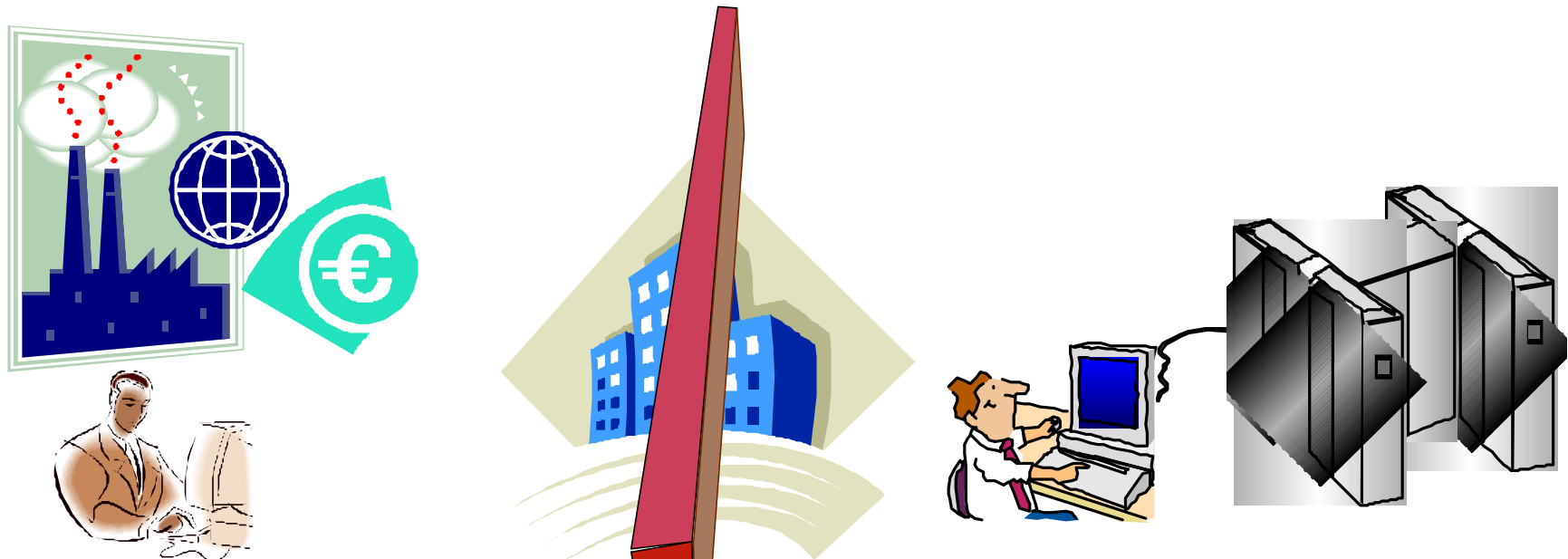


Technology Transformation

Aufgabenteilung beim Einsatz von Business Process Management

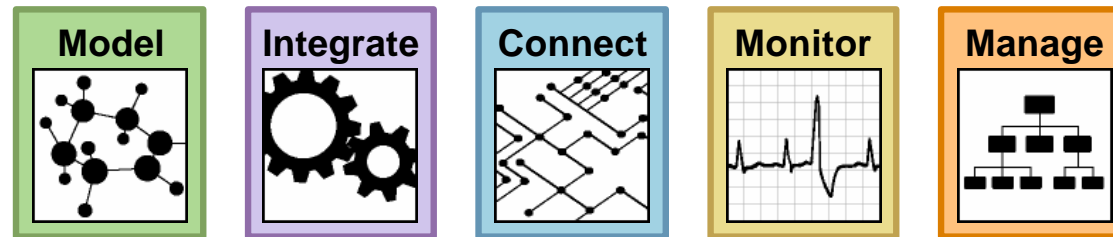


Hindernisse für die Einführung von Business Process Integration



- **LOB hat Projektbudget für die Umsetzung der Geschäftsprozesse, kennt aber die Kosten für die Implementierung nicht**
- **Keine Kenntnis, ob und wie die IT Infrastruktur neue Geschäftsprozesse unterstützt**
 - **Kommunikationsprobleme, unterschiedliche Interessen/Vorgaben**
 - **Keine gemeinsamen Planungstools**
- **IT muß Betriebskosten für Infrastruktur reduzieren**
- **Keine Kenntnis der LOB Geschäftsprozesse**
- **IT muß beweisen, welchen „Business Value“ sie erbringt**

WebSphere Business Integration bietet die 5 Funktionen für die Implementierung von Geschäftsprozessintegration



	Model and simulate the enterprise business processes.
	Integrate the islands of processing.
	Connect customers and business partners.
	Monitor the business processes end to end.
	Manage the business effectiveness and improve the processes.

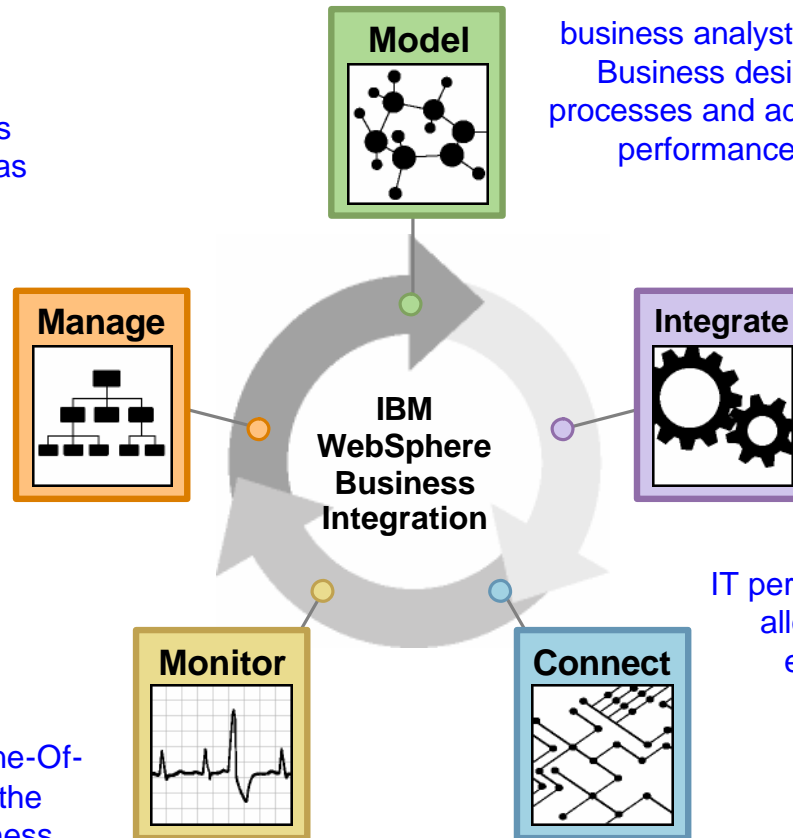


Kontinuierliches Geschäftsprozessmanagement (BPM)

LoB besitzt das Geschäftsprozess-Know How

business analysts identify need for business process improvement areas and manage business transformation

business analysts and Line-Of-Business design business processes and add key business performance indicators



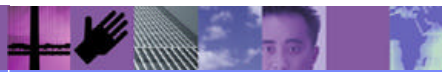
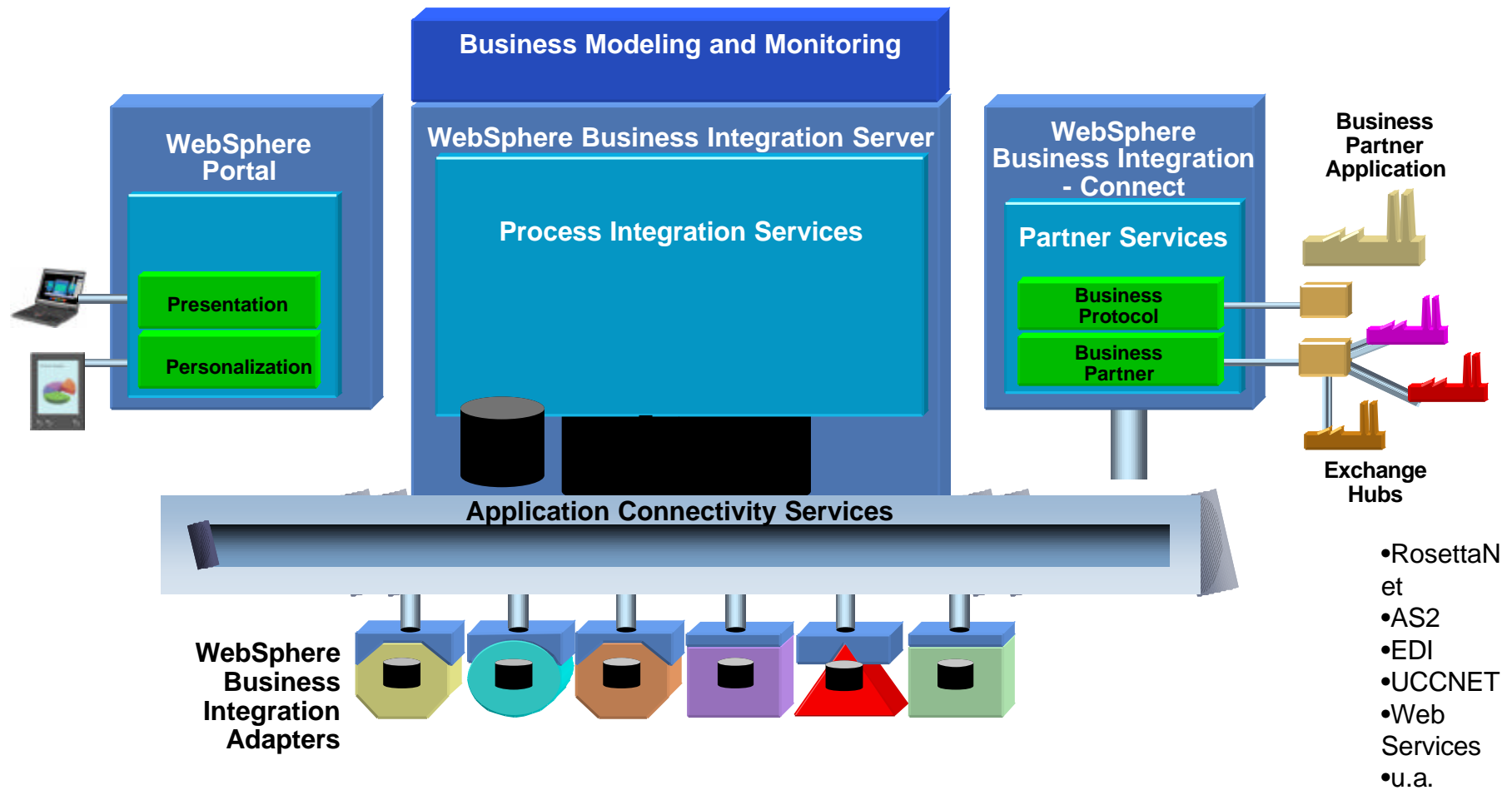
IT personal and Line-Of-Business control the execution of business processes

IT personnel refine business processes to allow automation in heterogeneous environments across enterprise boundaries

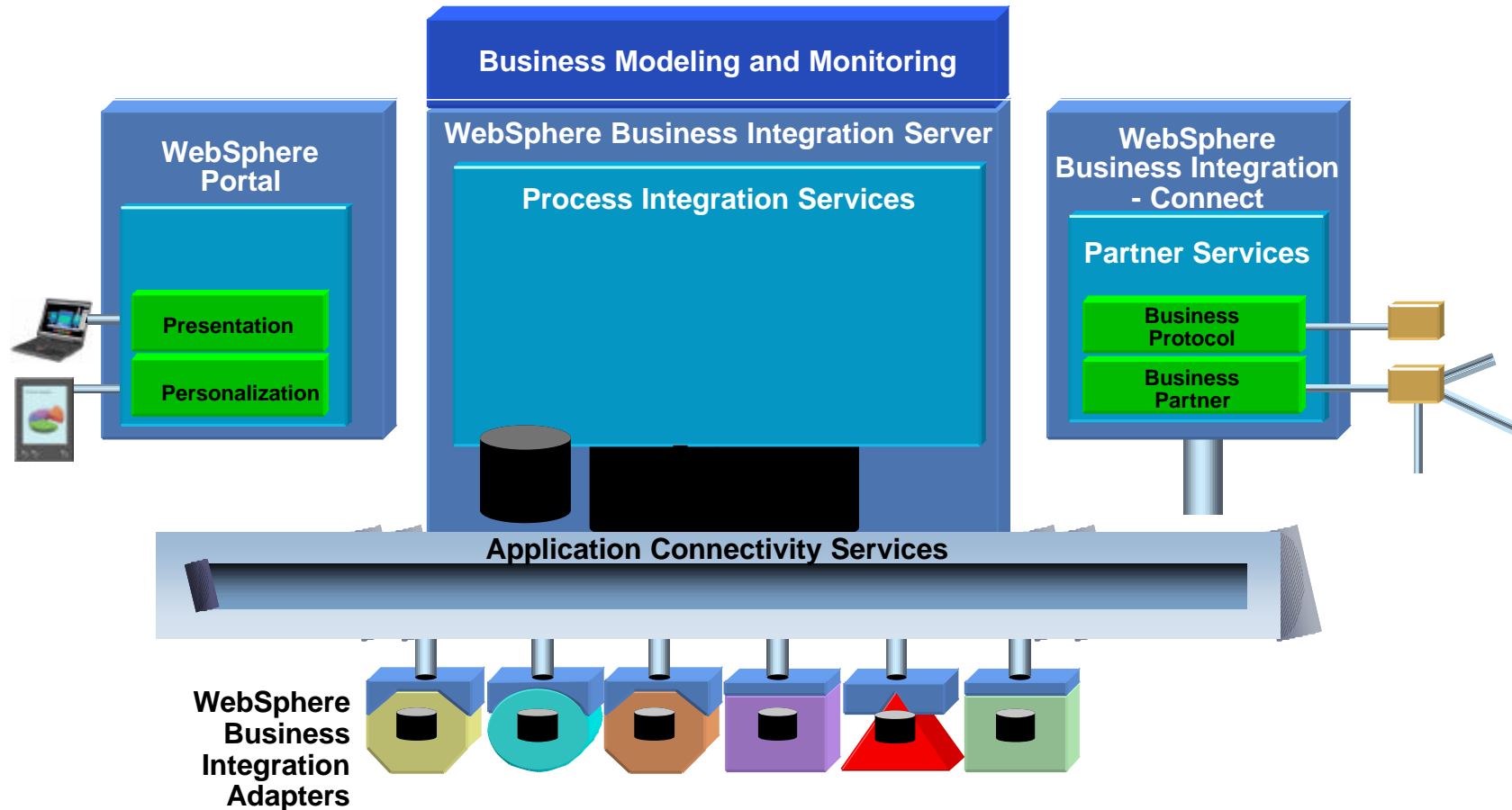
IT kennt die Systemtopologie und die verfügbaren/benötigten Applikationen

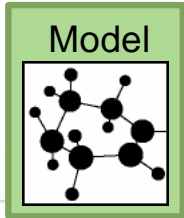


WebSphere Architektur - erweiterbares Lösungsportfolio

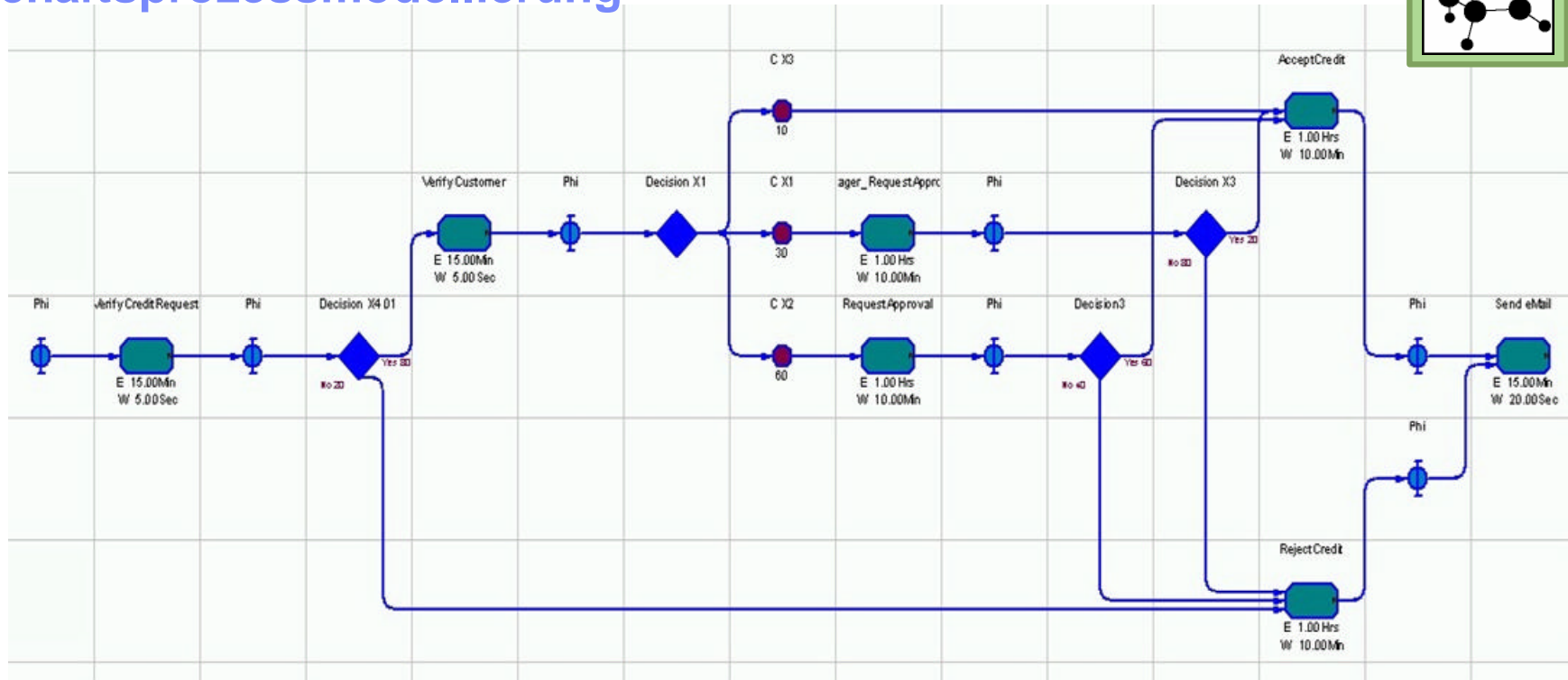


WebSphere Architektur - erweiterbares Lösungsportfolio





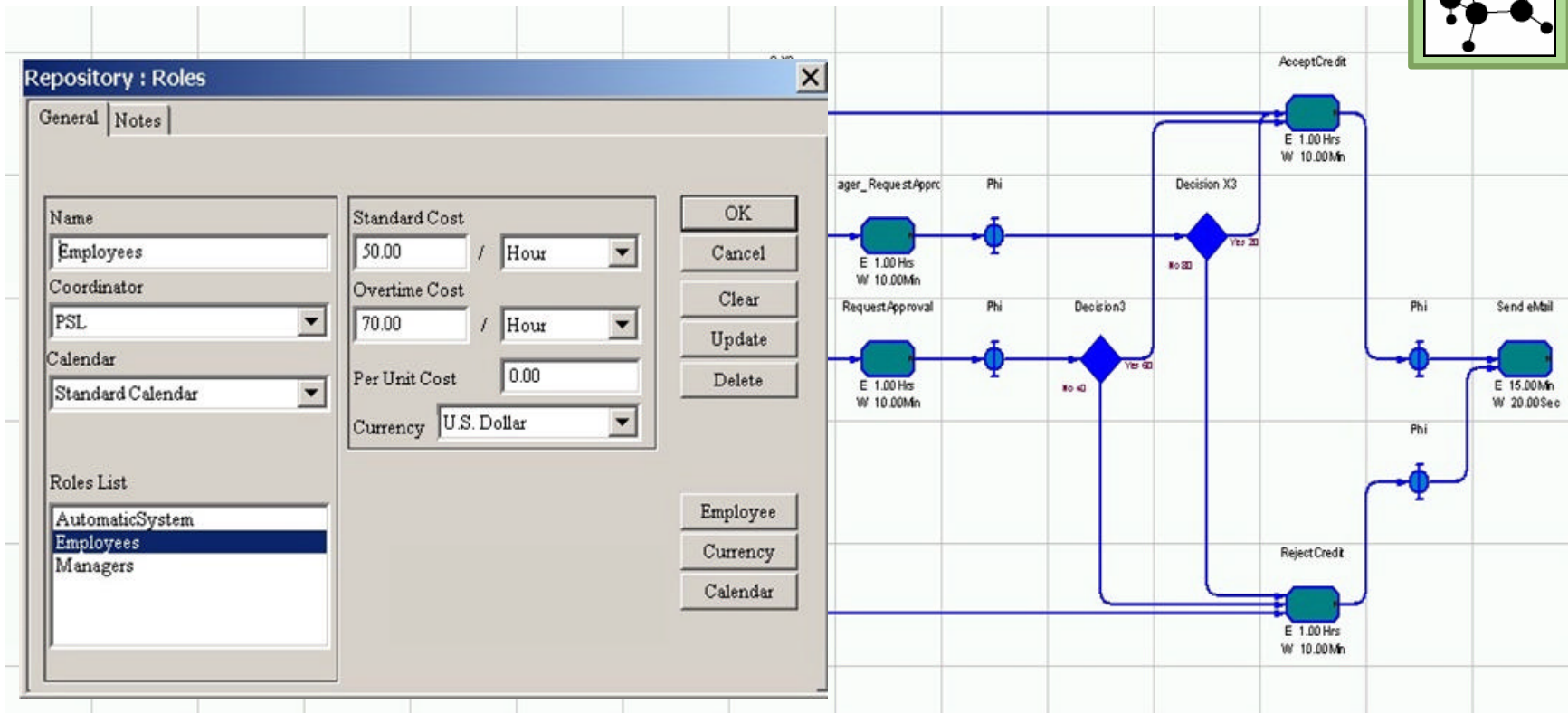
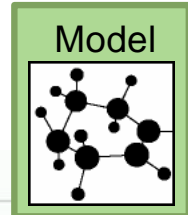
WebSphere Business Integration Workbench – Geschäftsprozessmodellierung



- Model complete business processes using IBM WBI Workbench
- Simplified credit request process:
 - Automatically verify credit request and
 - Automatically verify customer and
 - Manually check if credit can be accepted, done by manager depending on credit request data or
 - Manually check if credit can be accepted, done by employee depending on credit request data or
 - Manually reject credit depending on credit verification or
 - Manually accept credit depending on credit and customer verification and
 - Automatically send eMail to customer to inform about credit request



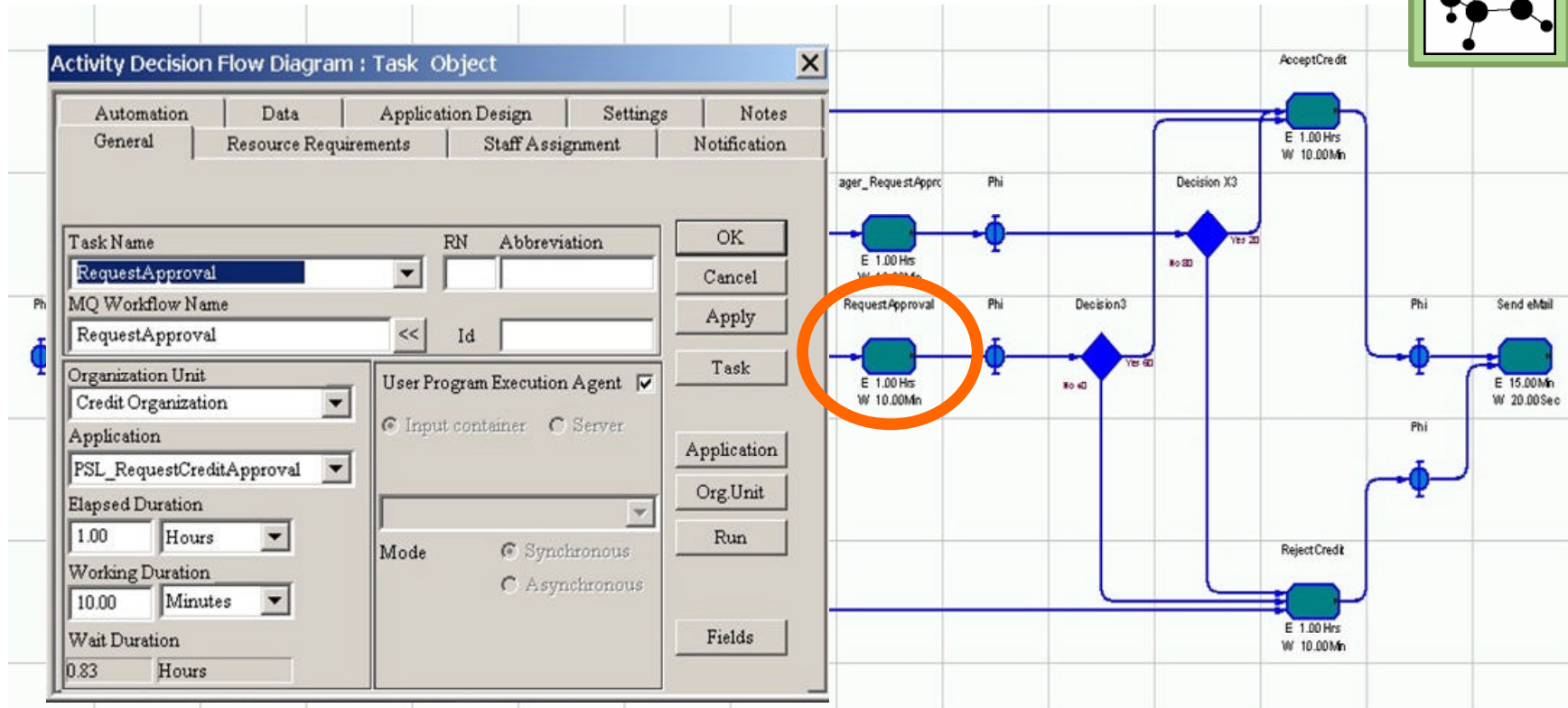
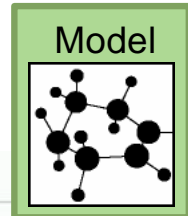
WBI Workbench – Zuweisen von Kosten



- Model complete business processes using IBM WBI Workbench
 - Activity costs are assigned to resources, which are the applications required for process execution as well as people for manual steps
 - Costs for people are assigned to their roles (here: role 'Employee' with assigned costs and coordinator user id 'PSL')
 - During simulation, defined activity working duration and cost information is used to calculate process cost
 - During runtime, real time process execution data (from the WebSphere MQ Workflow audit trail) and cost definitions are used to calculate process and activity costs.



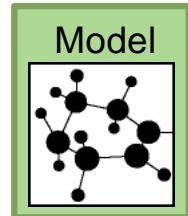
WBI Workbench – Zuweisen von Ausführungs- und Verweilzeiten



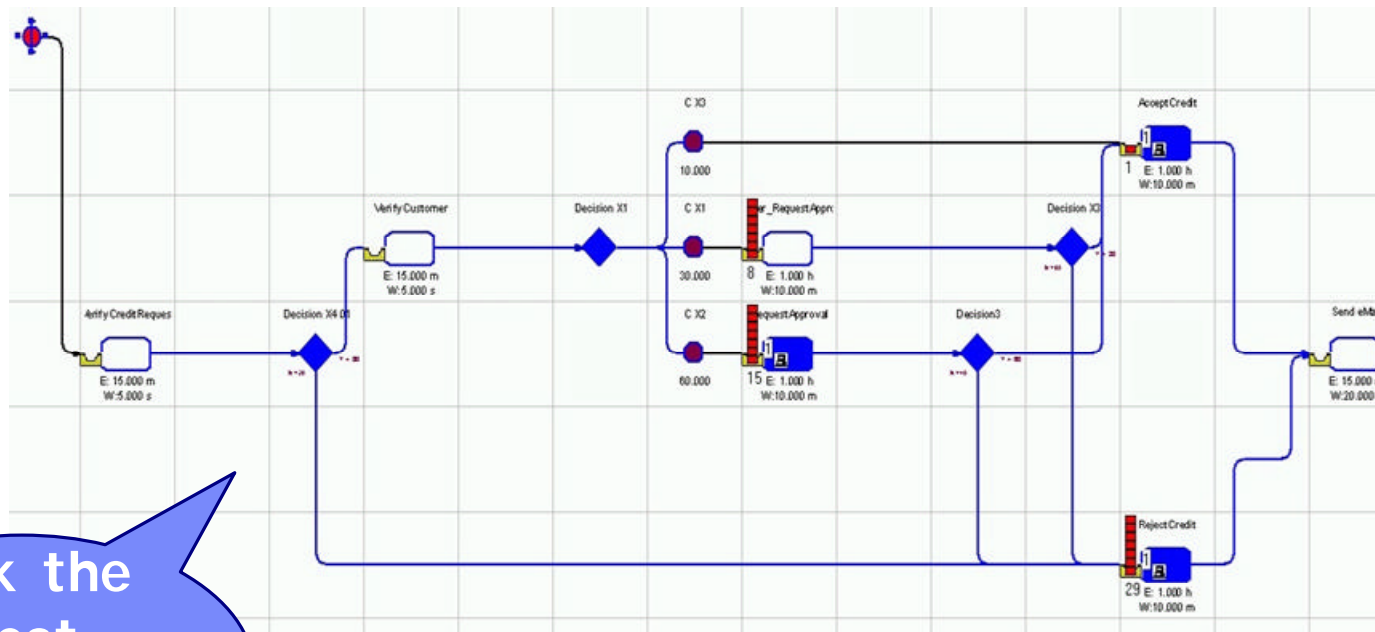
- Model complete business processes using IBM WBI Workbench
 - Activity elapsed and working durations are defined in the activity properties sheet
 - During simulation, defined activity working duration and cost information is used to calculate process cost
 - During runtime, real time process execution data (from the WebSphere MQ Workflow audit trail) and cost definitions are used to calculate process and activity costs.
 - In WebSphere MQ Workflow mode, a number of activity specifications have to be set (there are less specification to be done in basic mode)



WBI Workbench – Simulation

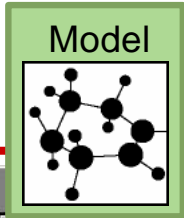


- Simuliert das dynamische Verhalten des Prozesses und erlaubt eine Analyse von Arbeitslast und Engpässen
- Erstellen von Prozess-, Aktivitäts- und Queue Reports während und nach einer beendeten Simulation
- Möglichkeit von schnellen “Was wäre wenn...” Analysen zur Optimierung des Prozessmodells vor der Implementierung



Pick the
best
alternative

!



WBI Workbench – Simulations Ergebnisse

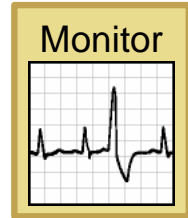
Job	Res.	Act.	Queues	Export	Preference	Job	Start Date	End Date	Cycle Duration(C-h)	Process Duration(W-h)	Working Duration(h)	Total-Blocked(h)	Transfer Duration(h)	External Duration(h)	Total Cost (\$)
194	Job						2002/01/07 10:50:02	2002/01/07 11:11:29	0.35750	0.35750	0.34167	0.01583	0.00000	0.00000	61.66667
195	Job						2002/01/07 11:05:56	2002/01/07 11:26:26	0.34167	0.34167	0.34167	0.00000	0.00000	0.00000	61.66666
196	Job						2002/01/07 11:49:48	2002/01/07 13:10:18	1.34167	0.34167	0.34167	0.00000	0.00000	0.00000	61.66666
197	Job						2002/01/07 11:50:10	2002/01/07 13:20:18	1.50222	0.50222	0.34167	0.16056	0.00000	0.00000	61.66666
198	Job						2002/01/07 11:54:39	2002/01/07 13:05:09	1.17500	0.17500	0.17500	0.00000	0.00000	0.00000	48.33333
199	Job						2002/01/07 13:02:22	2002/01/07 13:40:18	0.63222	0.63222	0.34167	0.29056	0.00000	0.00000	61.66666
200	Job						2002/01/07 13:16:18	2002/01/07 13:30:18	0.13333	0.23333	0.17361	0.05972	0.00000	0.00000	23.33333
201	Aver								2.01667	0.45167	0.29890	0.15277	0.00000	0.00000	53.51667
202														Total	10703.33496

Job	Res.	Act.	Queues	Export	Preference	Job	Start Date	End Date	Cycle Duration(C-h)	Process Duration(W-h)	Working Duration(h)	Total-Blocked(h)	Transfer Duration(h)	External Duration(h)	Total Cost (\$)
194	Job						2002/01/07 11:23:00	2002/01/07 11:42:30	0.32500	0.32500	0.17500	0.15000	0.00000	0.00000	56.66666
195	Job						2002/01/07 11:34:00	2002/01/07 11:54:30	0.34167	0.34167	0.34167	0.00000	0.00000	0.00000	83.33334
196	Job						2002/01/07 11:45:00	2002/01/07 13:05:30	1.34167	0.34167	0.34167	0.00000	0.00000	0.00000	70.00000
197	Job						2002/01/07 11:56:00	2002/01/07 13:16:30	1.34167	0.34167	0.34167	0.00000	0.00000	0.00000	70.00000
198	Job						2002/01/07 13:07:00	2002/01/07 13:27:30	0.34167	0.34167	0.34167	0.00000	0.00000	0.00000	70.00000
199	Job						2002/01/07 13:18:00	2002/01/07 13:37:30	0.32500	0.32500	0.17361	0.15139	0.00000	0.00000	31.66667
200	Job						2002/01/07 13:29:00	2002/01/07 13:47:30	0.18333	0.30833	0.17361	0.13472	0.00000	0.00000	31.66667
201	Aver								1.36208	0.31208	0.29639	0.01569	0.00000	0.00000	67.46665
202														Total	13493.33008

- Compare simulation results using IBM WBI Workbench 1 (simulating 200 processes)
 - Simulation setup 1 comes with normal resource allocations, all processes complete, average cycle duration is about 2h, and average cost per credit request is 53\$.
 - Simulation setup 2 comes with improved resource allocations, all process cycles complete faster on average (1,36h), but average cost per credit request increased to 67\$ because more resources have to be paid.



process duration = working duration + total-blocked
 cycle duration = end-date – start-date



MONITOR: End-to-End Prozessüberwachung

Rollen basierte Dashboards

Monitor

- Alarme
- Business Dashboards
- Echtzeit Reporting

HOLOSOFX BPM Monitor | Notification | Workflow Dashboard | Business Dashboard | Logout | Help

Workflow Dashboard

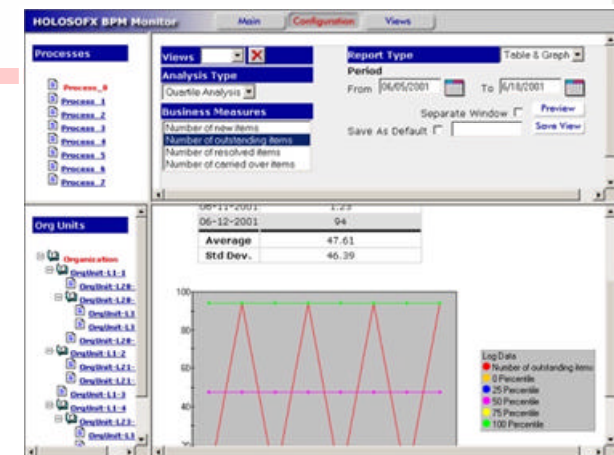
Randomize by % Randomize Views Save as Default

Select Business Measures Set Filter Process: ProcessACSDocument Process Diagram

1-5 of 5 Jump to # Go

Activity Instance	Admin Action	PI Diagram	State	Starting Time	Working Duration	Elapsed Duration	Cost	Is Delayed	Account ID	Customer ID
			Running	2002-06-26 12:04 PM	2.92 h	50.50 h	\$0		1234	DOE
			Running	2002-06-26 02:39 PM	5.5 s	47.92 h	\$0		45435	SMITH
			Running	2002-06-26 02:39 PM	0.26 s	47.91 h	\$0		2147483647	BASRAI
			Running	2002-06-26 02:40 PM	0.24 s	47.89 h	\$0		3454353	WEAVER
			Running	2002-06-26 05:43 PM	0.26 s	44.85 h	\$0		0	MARIA111

- Kontrolle der Prozessabläufe und Reaktion auf Prozess-Anomalien
- Rollenbasierte Benutzeroberflächen (Dashboards) für Prozesse
- Echtzeit Metrik, stop, start und ändern von Prozessen
- Ergänzt Tivoli I/T Process Monitoring und Management



WBI Monitor – Business dashboard



HOLOSOFX BPM Monitor | Notification | Workflow Dashboard | **Business Dashboard**

Business Dashboard | Configuration | Views

Processes

- CreditRequest_InternetDemo_Man
- CreditRequest_InternetDemo_ManHX

Views [Dropdown]

Period From: 10/07/2002 To: 10/18/2002 Daily

Analysis Type: Trend Analysis

Report Type: Table & Graph

Weighting Factor: 0.18

Business Measures

- Number of carried over items
- Average elapsed duration
- Average working duration**
- Average cost

Save View, Save View As, Save View As Default, Delete View

Daily Trend Analysis Report

Process : CreditRequest_InternetDemo_ManHX OrgUnit : []
 From : 10/07/2002 To : 10/18/2002

Log Data

- Average working duration
- Trend

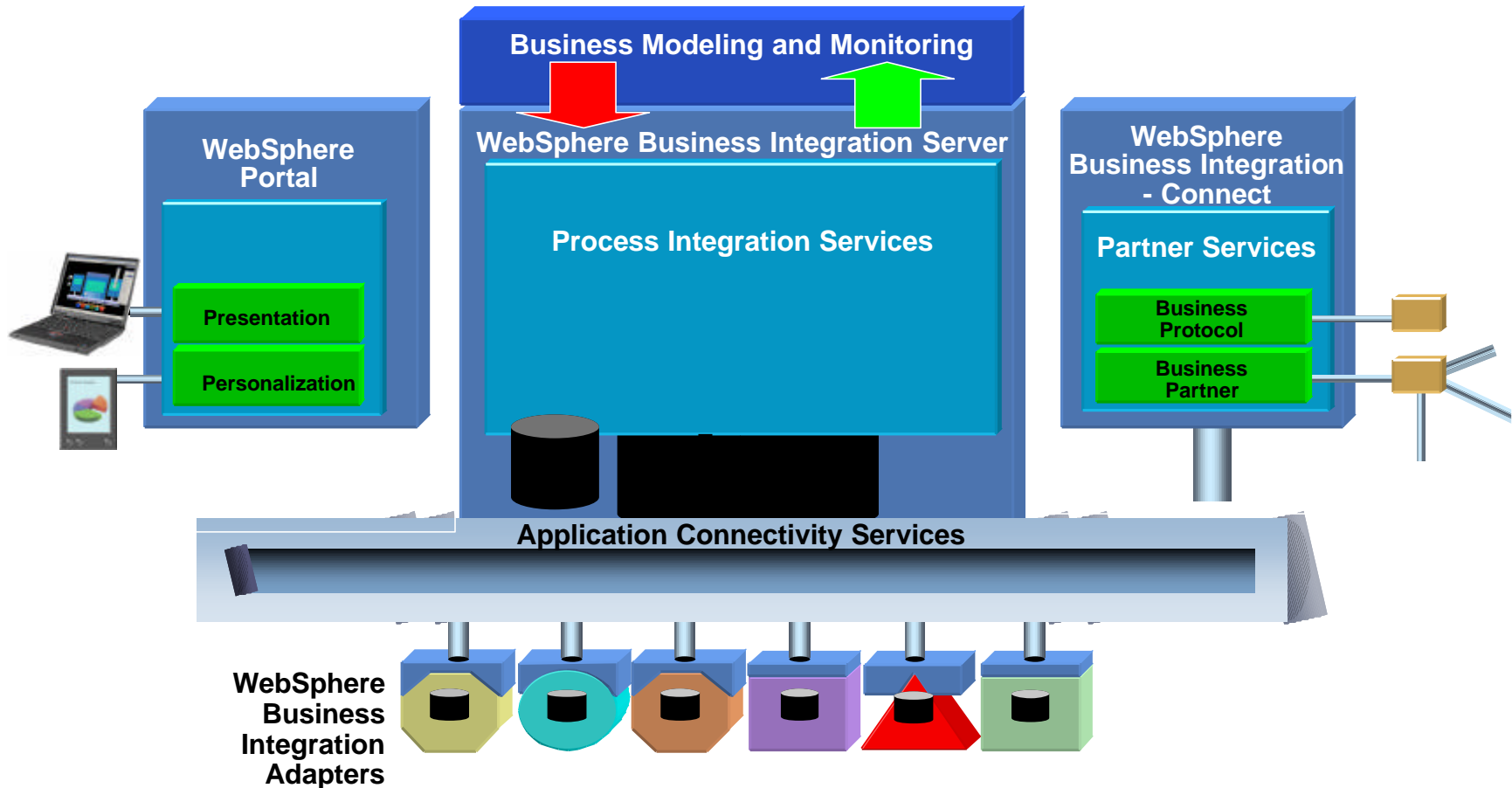
Org Units

- Credit Organization
 - Roland, Peisl (PSL)
 - (ADMIN)
 - (STARTER)

- Use IBM WBI Monitor Business Dashboard to analyse process execution
 - This view shows how average working durations of the process that were completed between Oct 07 and Oct 18 per day have developed, including a trend analysis – the trend shows that average working duration has very well decreased over time.

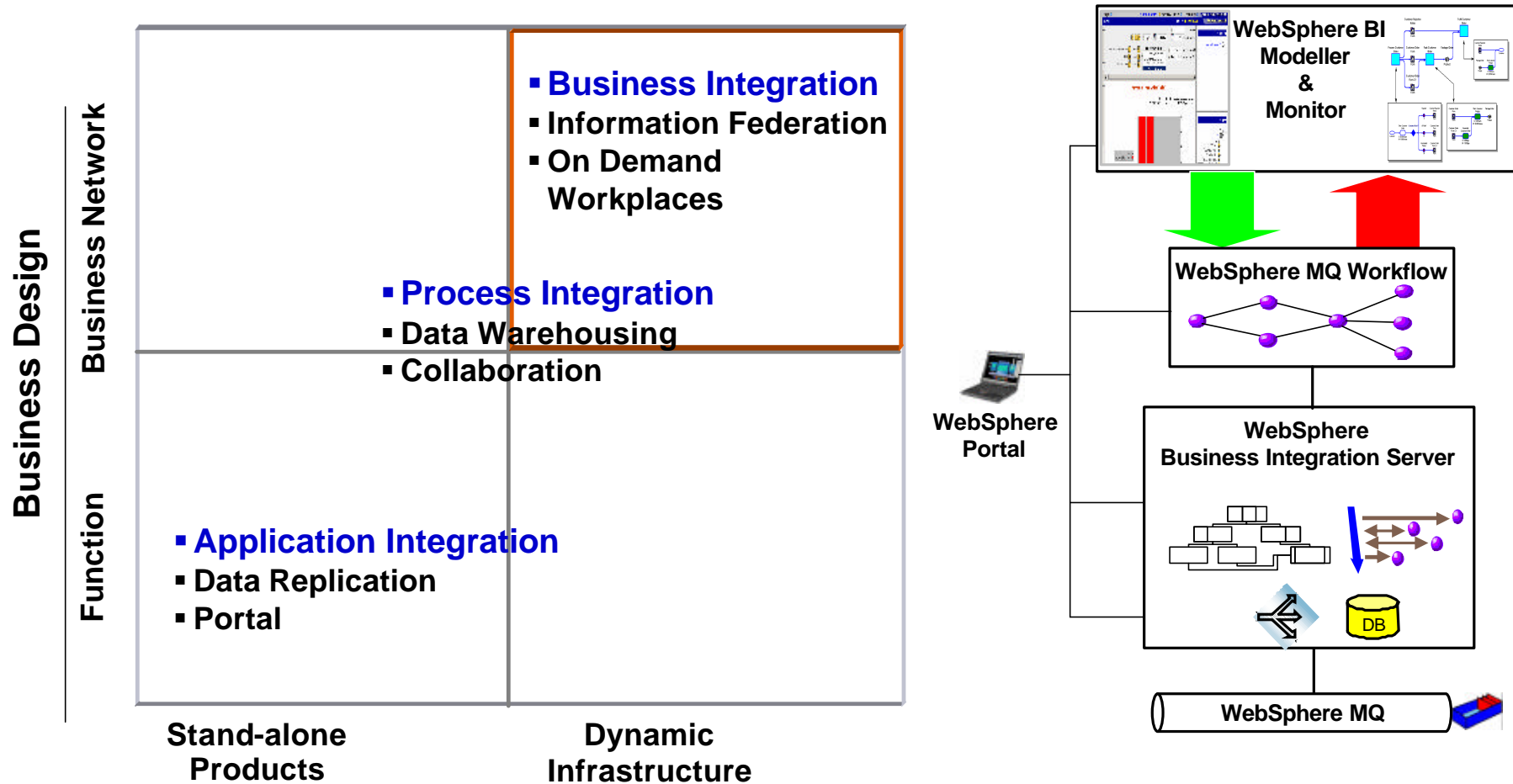


WBI Integration Stack



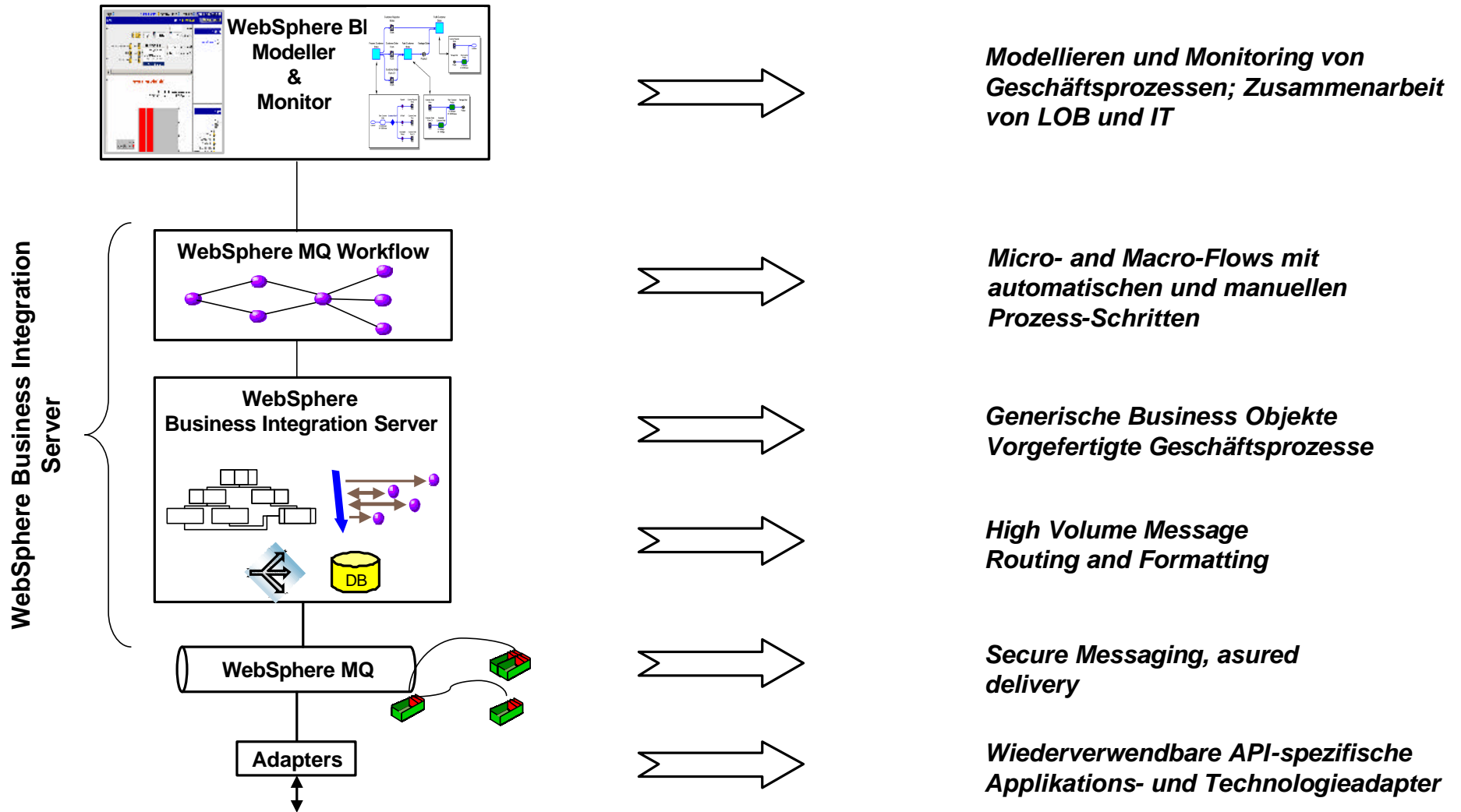
Integration Roadmap

Bestimmen Sie Ihren Standort und Ihren nächsten Schritt, um einen Wettbewerbsvorteil zu erzielen



Technology Transformation

WebSphere BI – Die Lösung für alle Integrationsanforderungen



WebSphere Business Integration Adapter – für Business Integration Server, Application Server und WebSphere MQ

Application Adapters

BroadVision Commerce
Clarify CRM
eMatrix
i2
i2 Active Data Warehouse
Indusconnect
MetaSolv TBS
NightFire Applications
Oracle Applications
PeopleSoft
Portal Infranet
Retek
SAP
Siebel eBusiness Applications
Spirent Applications
Telcordia Applications
Vantive
WebSphere Commerce

Technology Adapters

f Adapter for e-mail
f CORBA
f Lotus Domino
f FIX Protocol
f JMS
f JText
f JDBC
f MQ
f MQ Integrator
f MQ Workflow
f MS Exchange
f SWIFT
f XML

■ Mainframe Adapters

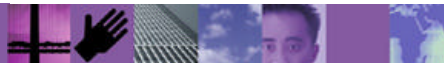
f ADABAS
f CICS
f DB2 Databases
f IMS Transaction Manager
f IMS Database Manager
f VSAM

e-Business Adapters

f Data Handler for XML
f Data Handler for EDI
f JCA Connection to InterChange Server
f iSoft Peer to Peer Agent
f Trading Partner Interchange Trading Networks
f Trading Partner Interchange Solo
f Web Services

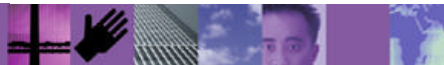
IBM WebSphere Business Integration Adapters support

- Multiple releases of the Application
- Multiple Application Transactions types

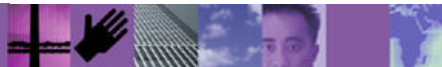
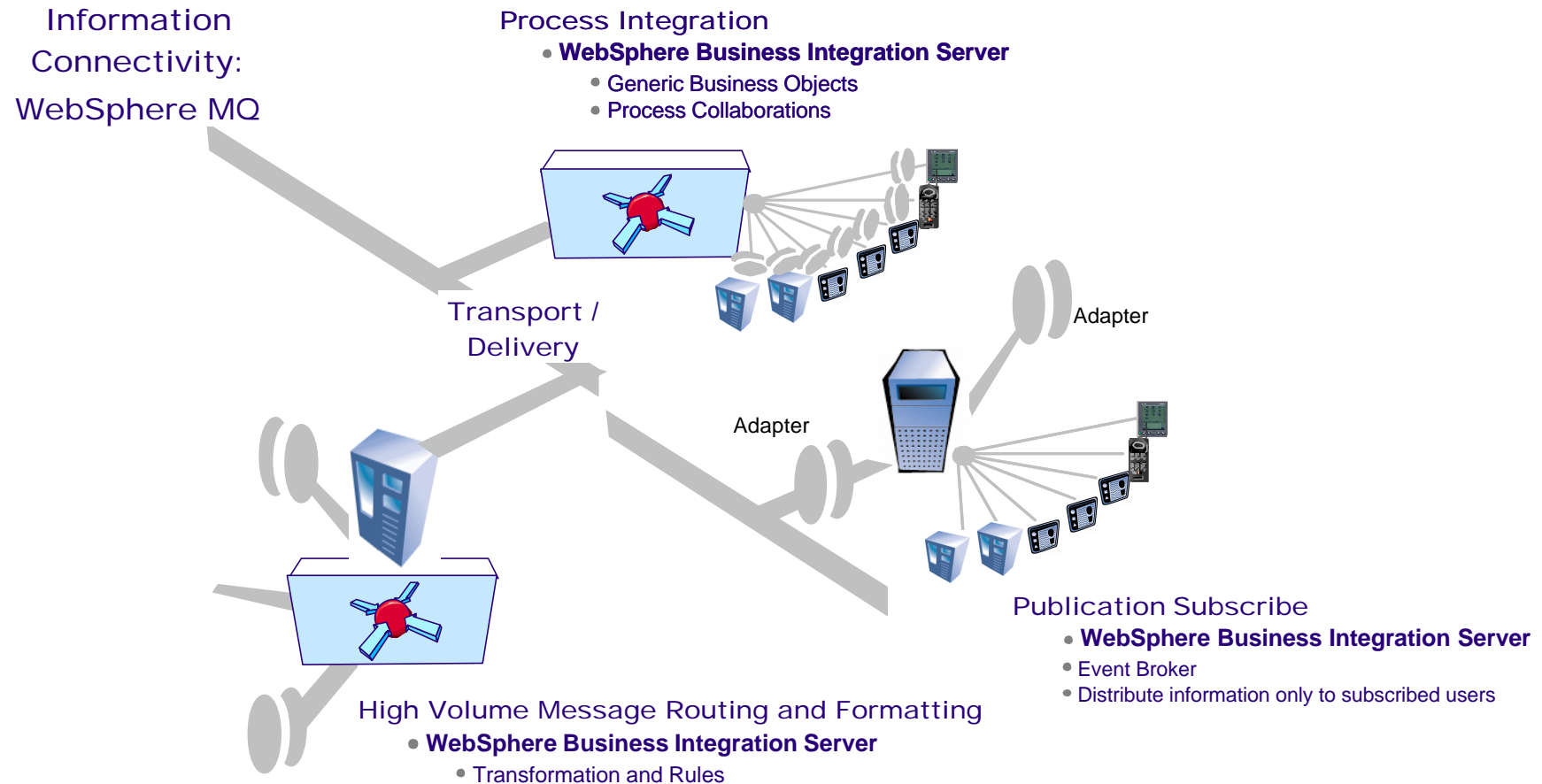


Vorgefertigte Geschäftsprozessmodule für WebSphere Business Integration Server

<p>eSales</p> <p>Customer Manager Item Manager On-Hand Inventory SO Processing Account Status</p>	<p>eProcurement</p> <p>Item Manager Vendor Manager Inventory Level Invoice Generation PO Processing PO Status Account Status</p>	<p>eCustomer Service</p> <p>Customer Manager Item Manager Contact Manager Installed Product Service Contract SO Status Invoice Generation</p>	<p>Demand Planning</p> <p>Item Manager Customer Manager SO Processing Demand History Demand Forecast Customer Orders</p>	<p>Supply Planning</p> <p>Item Manager BOM Manager Customer Orders On-Hand Inventory Purchase Orders Work Orders Transfer Orders Planned Orders</p>	
<p>Sales Processing</p> <p>Customer Manager Item Manager Contact Manager Installed Product SO Processing SO Status Account Status</p>	<p>Service Support</p> <p>Customer Manager Item Manager Contact Manager SO Processing Service Contracts SO Status Invoice Generation</p>	<p>Human Resources</p> <p>Employee Manager Department Manager</p>	<p>Procurement</p> <p>Item Manager Vendor Manager PO Processing PO Status</p>	<p>Inventory Mgmt</p> <p>Item Manager Inventory Manager Inventory Adjustments</p>	<p>Financial Transactions</p> <p>Account Receivable Invoice Generation General Ledger Movement</p>



WebSphere Business Integration Architektur Beispiel

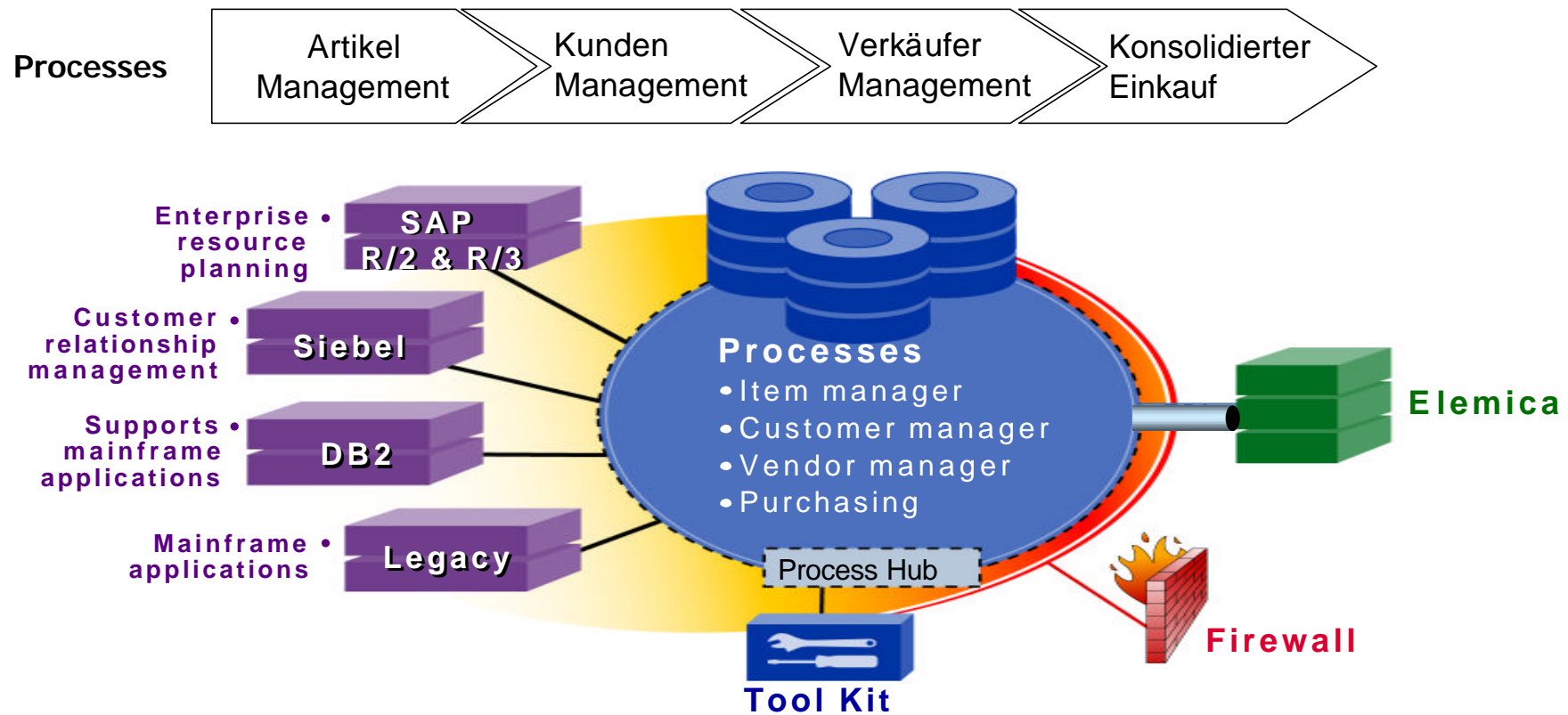


Referenz: Prozessverbesserungen bei Dow Chemical



Integration on demand:

Integrationszeit für neue Prozesse reduziert von 600 auf 60 Stunden
Produkteinführungszeit von 30 auf 10 Tage gesenkt



Referenz: Straight through Processing bei Credit Lyonnais

“We seek to optimize the timeframe for introducing new services, dramatically reduce application maintenance and deployment costs and, in addition, to extend communication with our trading partners. This initiative is critical, not only to the growth of our business, but for the future of our customers.”

- Dominique loos, Director of Operations, Credit Lyonnais

Die Herausforderung

Optimierung der Trade Flow Management Prozesse und Konsolidierung der Pre-Trade Prozesse durch Automatisierung:

- Verbesserung der Datenqualität
- Eliminierung von manuellen Prozessen der Front-Back-Office Kommunikation
- Eliminierung von Trade-Ausfällen

Die Lösung

IBM WebSphere Business Integration Lösung für die Integration von Informationssystemen externer Geschäftspartner, Brokern und Börsensystemen mit internen Front- und Back-End-Systemen. Durch “Straight Through Processing” automatisiert die Lösung Prozessabläufe und erhöht die Daten Integrität.



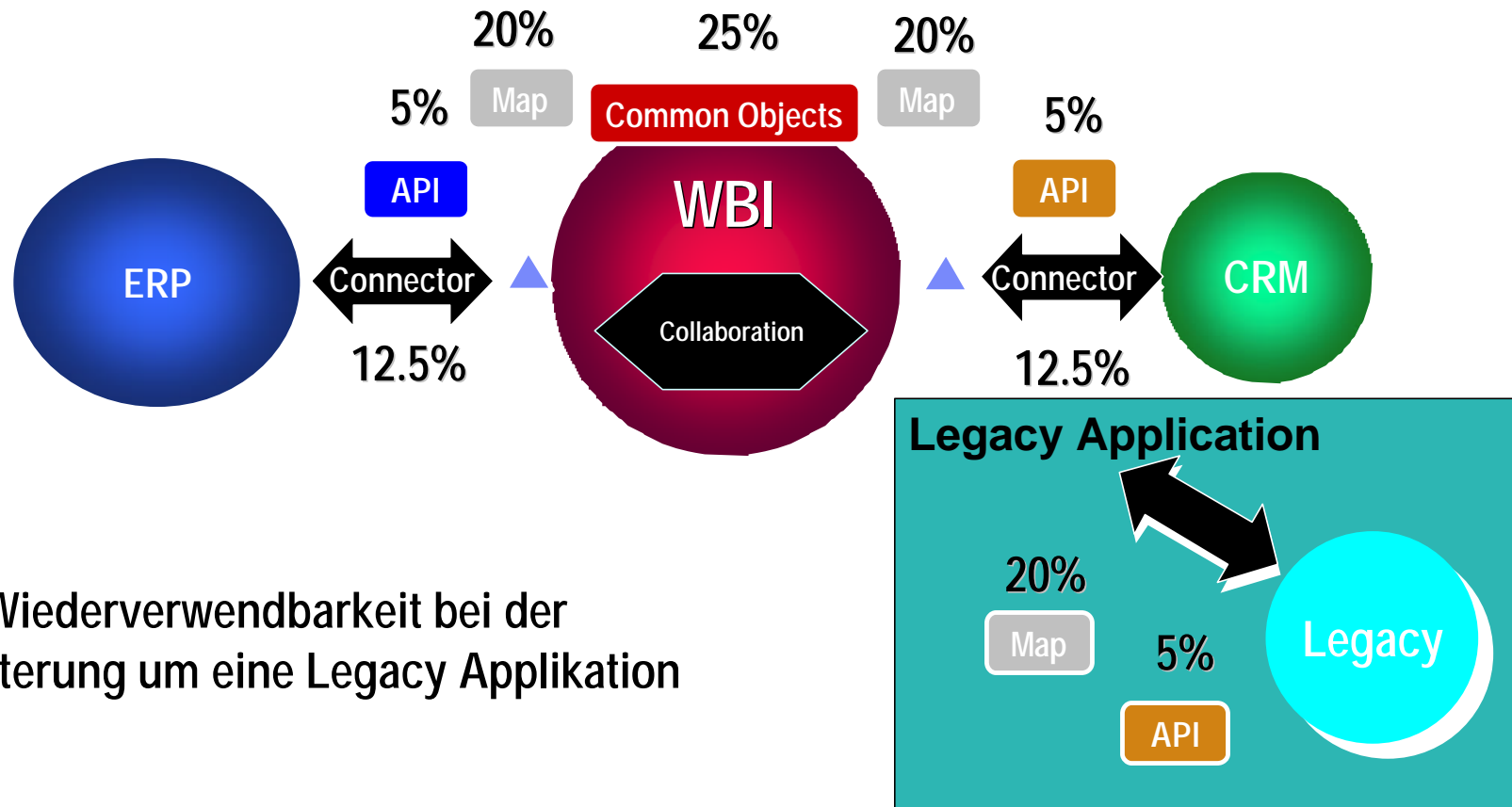
Vorteile durch neue Technologie:

- 95% Automatisierung
- 20% TCO Reduktion in der IT während des 1. Jahres
- 40% Reduzierung des notwendigen Backoffice Personals
- Steigerung der Verarbeitungsgeschwindigkeit

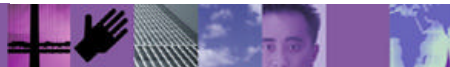


TCO Optimierung durch flexible wiederverwendbare Architektur

Prozentualer Anteil für Design, Codierung und Test der Integrations Komponenten



75% Wiederverwendbarkeit bei der Erweiterung um eine Legacy Applikation





IBM Software Group

BIVA Business Integration Value Assessment

WebSphere software

Peter Bitnar
Sales Leader Central Region
WebSphere Business Integration

tel. 089-4504-2746
email: peter.bitnar@de.ibm.com

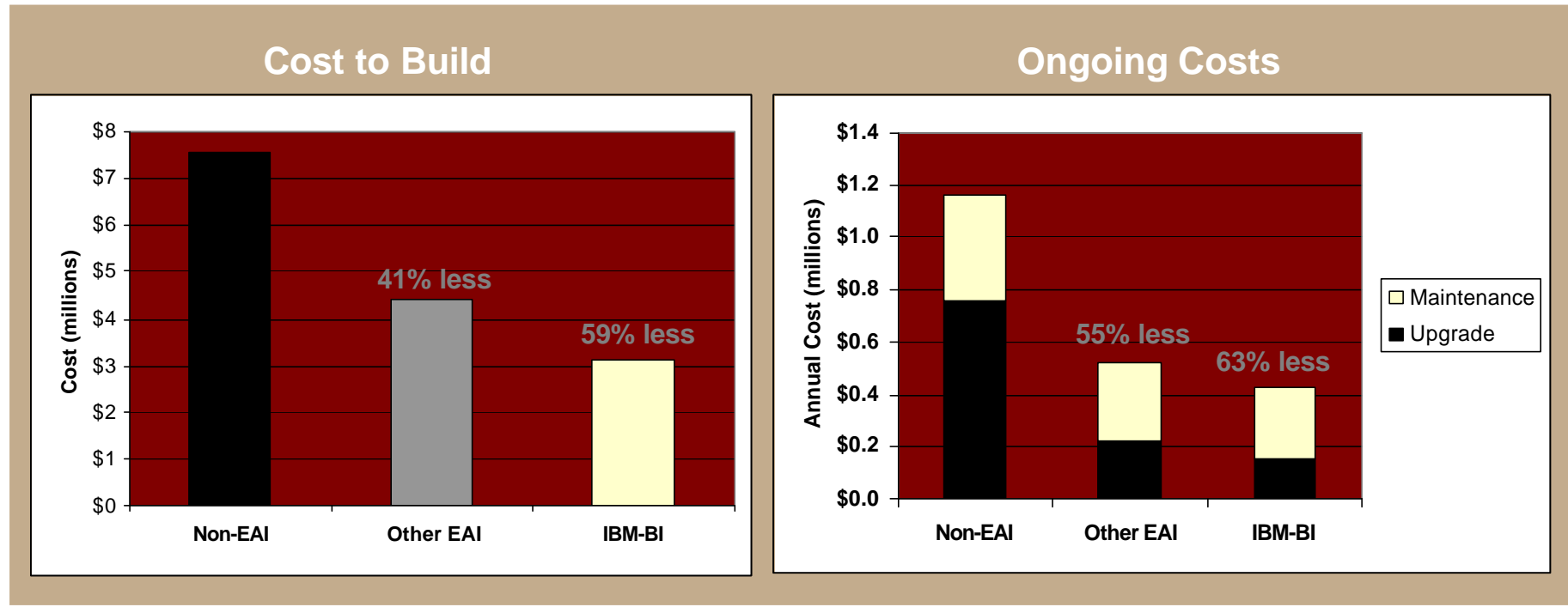


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BIVA: Business Integration Value Assessment – Individuelle Bestimmung von TCO und ROI

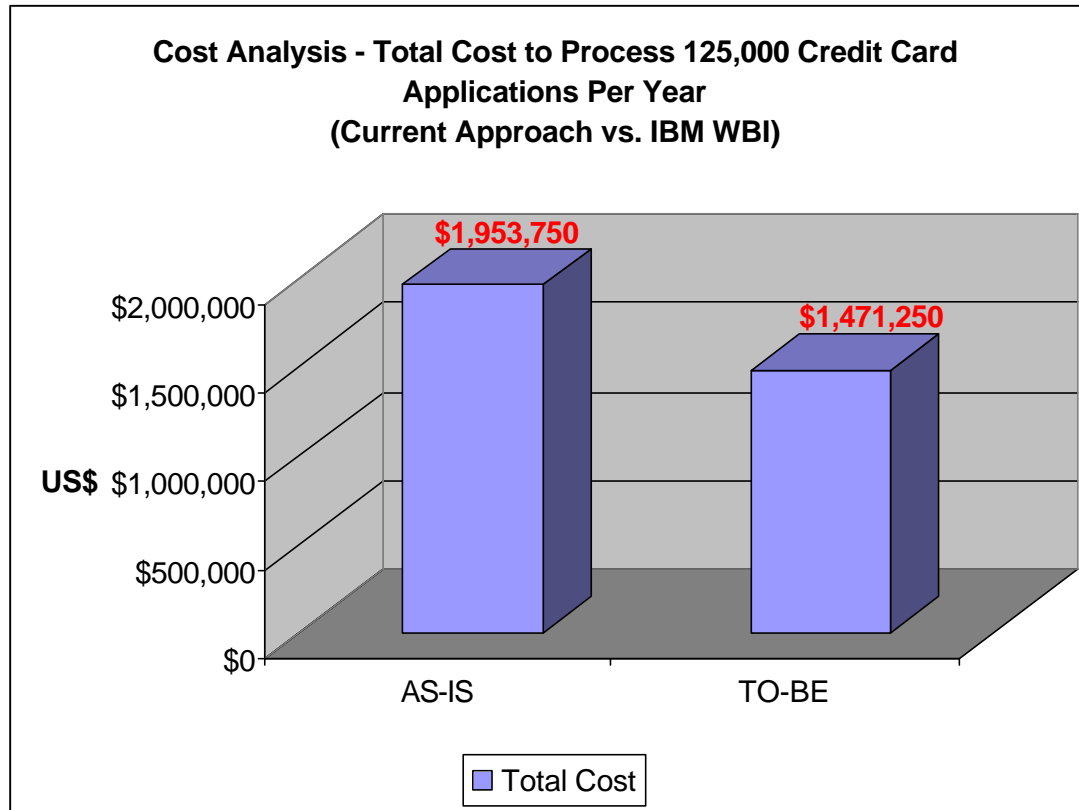


Key Assumptions:

- 75 interface points @ 30% reuse
- Simple/moderate/complex interface ratio = 20/50/30
- Simple/moderate/complex interface developer hrs required using IBM-BI = 100/225/350
- Analysis based on 6 packaged applications and 2 legacy systems
- 2 package upgrades per year

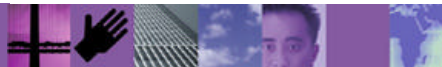


BIVA...Bestimmung des ROIs aufgrund von Prozessoptimierung



- Business Process Modelling
- Business Process Re-design
- Measure business gain per process Change
- Determine ROI

AS-IS Process Costs	\$162,820	\$162,820	\$162,820	\$162,820	\$1,953,840	\$1,953,840	\$1,953,840
TO-BE Process Costs	\$122,572	\$122,572	\$122,572	\$122,572	\$1,470,864	\$1,470,864	\$1,470,864
Difference	\$40,248	\$40,248	\$40,248	\$40,248	\$482,976	\$482,976	\$482,976
Cumulative Difference	\$40,248	\$80,496	\$120,744	\$241,488	\$482,976	\$965,952	\$1,448,928





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WebSphere Business Integration

Ausblick

WebSphere software

Peter Bitnar
Sales Leader Central Region
WebSphere Business Integration

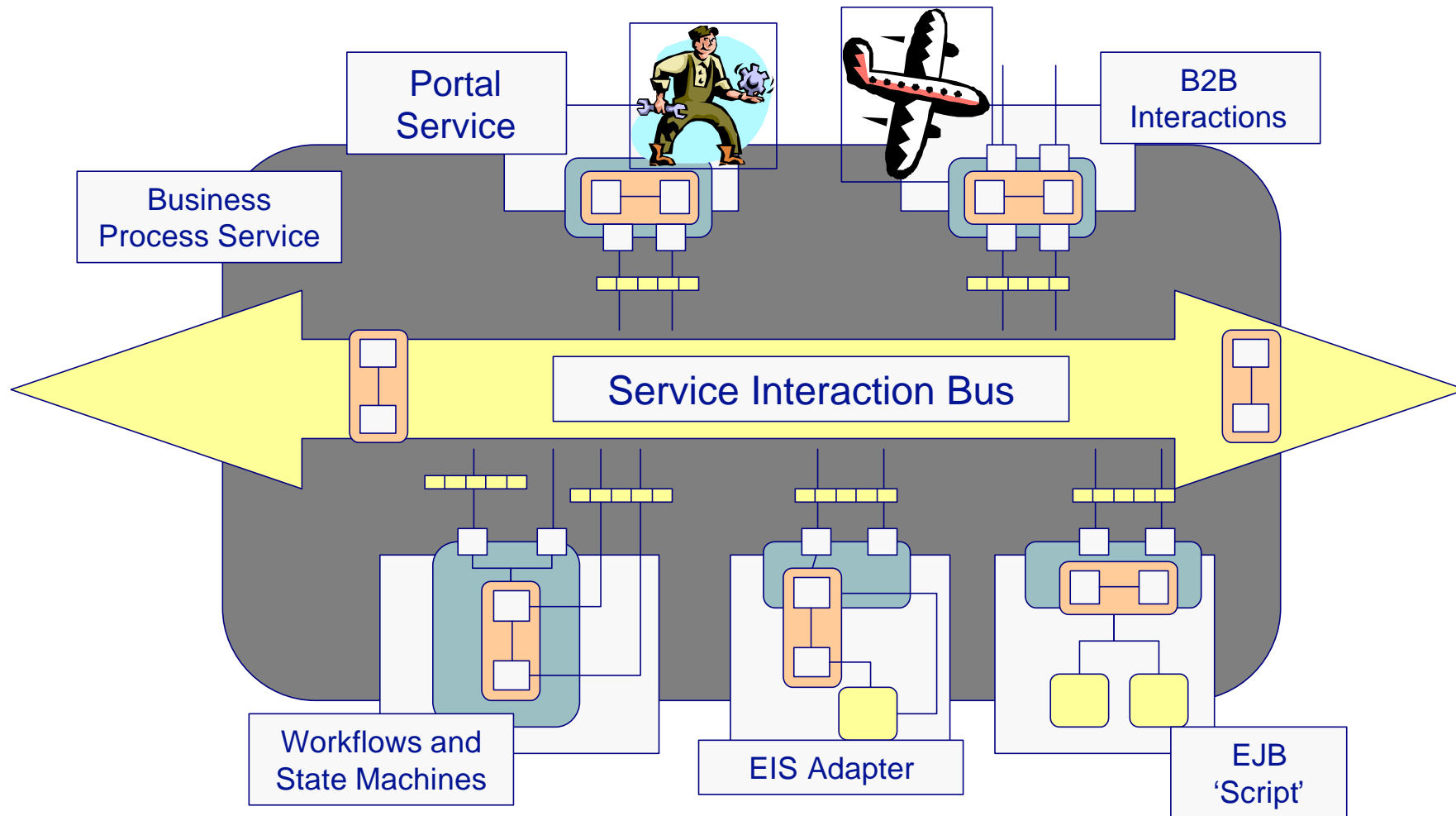
tel. 089-4504-2746
email: peter.bitnar@de.ibm.com



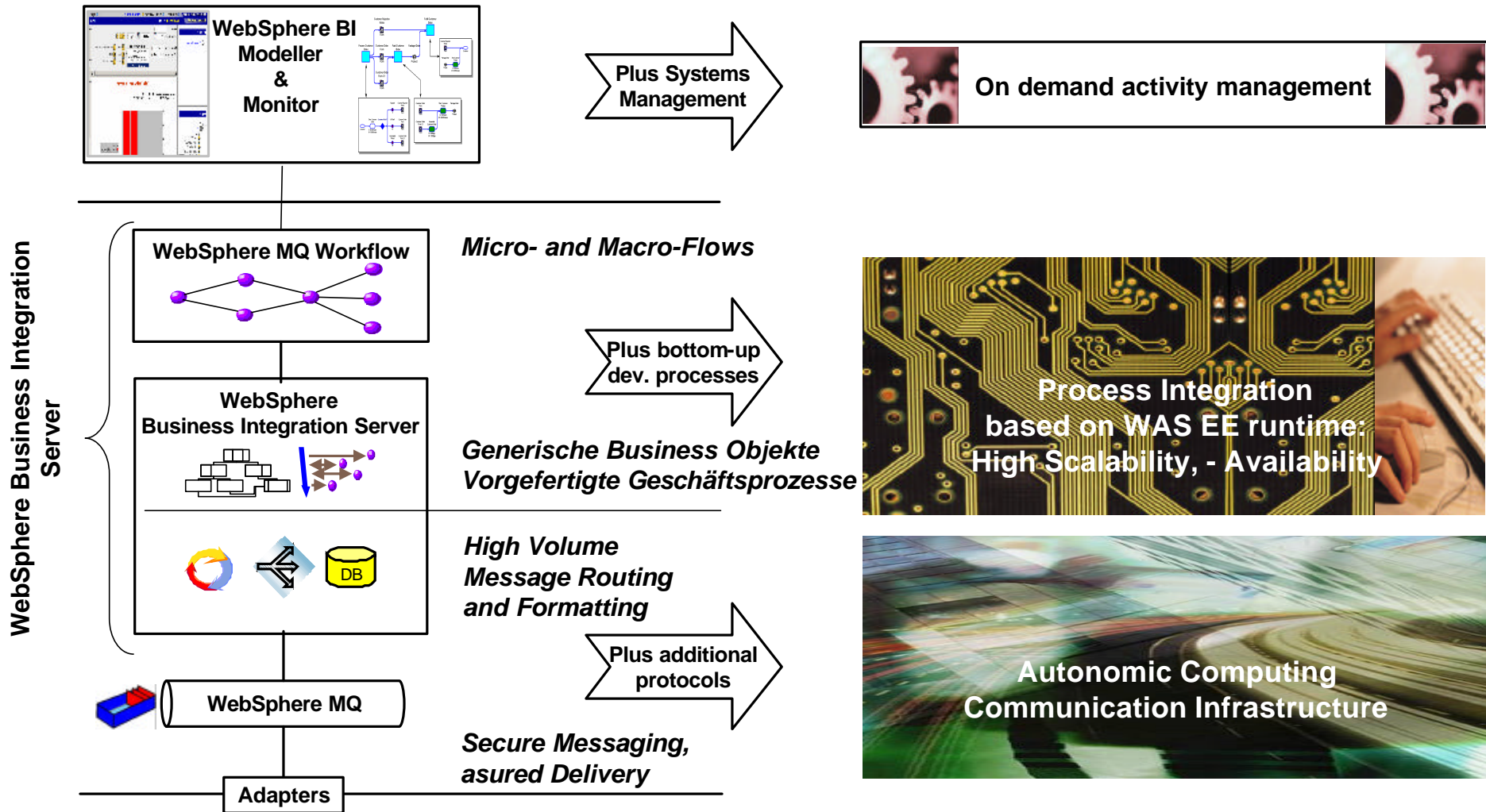
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Service Orientierte Architekturen basieren auf einem Service Brokering Bus mit Funktionalitäten zur Definition von Services



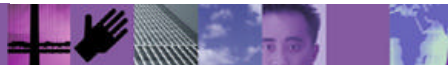
WebSphere BI Roadmap - Konvergenz der Runtime Komponenten



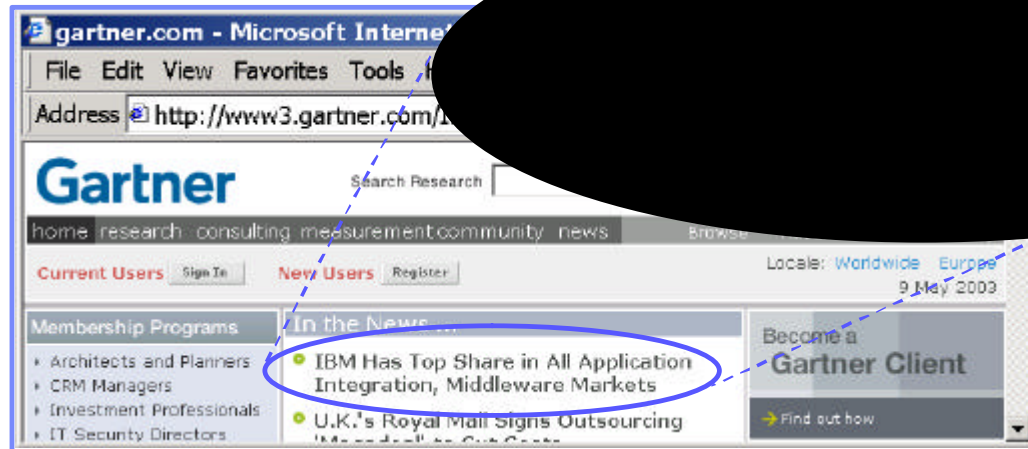
WebSphere BI Roadmap - Konvergenz der Buildtime Komponenten

- **Bisher heterogene Entwicklungsumgebungen werden unter Eclipse integriert (siehe www.eclipse.org) :**
 - WebSphere Business Integration Server – Routing / Formatting
 - WebSphere Business Integration Server – Process Integration
 - WBI Modeller
 - Rational Suite
 - WebSphere Studio

- **Eclipse ist eine Entwicklungsplattform, die auf offenen Standards basiert, bisher unterstützen 150 Hersteller diese Open Source Plattform**



IBM Middleware Marktführerschaft



Worldwide IBM Market Share Position Based on New License Revenue

Gartner Dataquest, May 2003

	2000	2001	2002
Application Servers	2	2	1
Integration Broker Suites	1	1	1
Portals	N/A	3	1
Message-Oriented Middleware	1	1	1
Application Platform Suites Composite Market	2	2	1
Transaction Processing Monitors	1	1	1
Total Market	1	1	1





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Fordern Sie uns: Verlangen Sie Ihr individuelles BIVA !

Vielen Dank für Ihre Aufmerksamkeit

WebSphere software

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