IBM Software Group

Business Performance Management Partner Community Call: Domains Review

Marie Wieck
General Manager, Business Integration & Industry Solutions
May 7, 2004

e business on demand.

Agenda

- **Welcome**
- **New since March**
- **Domain Discussions**
  - Process – Eric Wayne
  - Business Rules – Mark Linehan
  - Common Event Infrastructure – Denilson Nastacio
  - Business Systems Management – Mark Masercola
  - Information – Louis Thomason
  - Workplace – Kumar Bhaskaran
- **Q & A**
- **Supporting the Partner Ecosystem – Kevin McAuliffe**

An Emerging Market Need — Business Performance Management

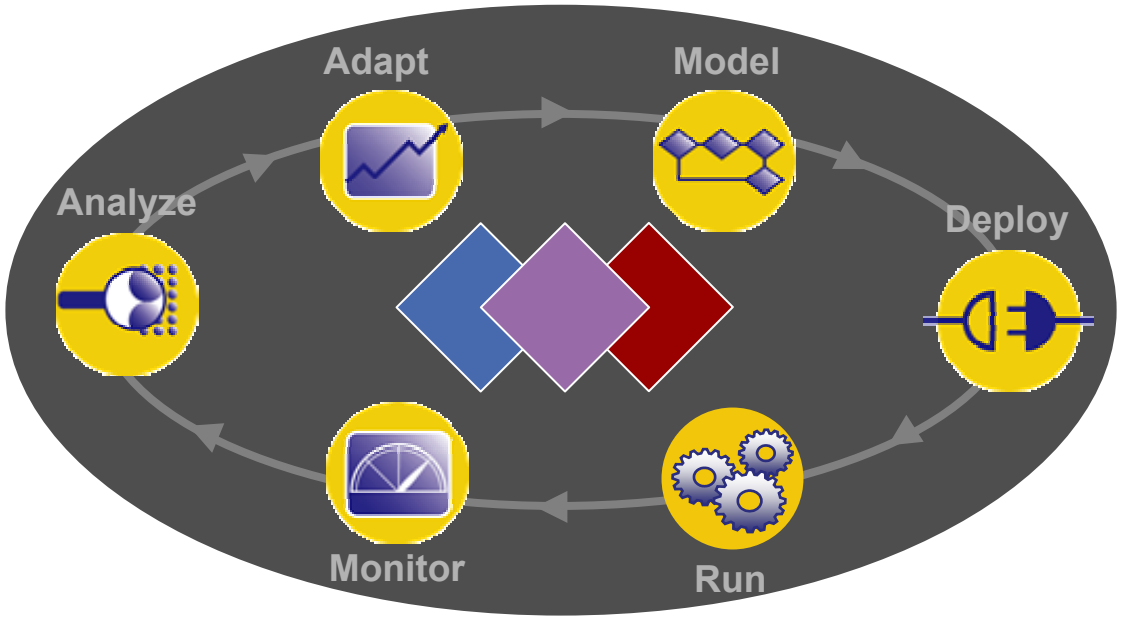
Business process view
allows business leaders to understand in real time the state of key business processes

IT process view
allows visualization of IT environment in business terms and management of service levels to business objectives

Business Performance Management
allows an organization to understand the status of business processes across business and IT, put that understanding in context against goals and trends, and take action quickly to improve execution

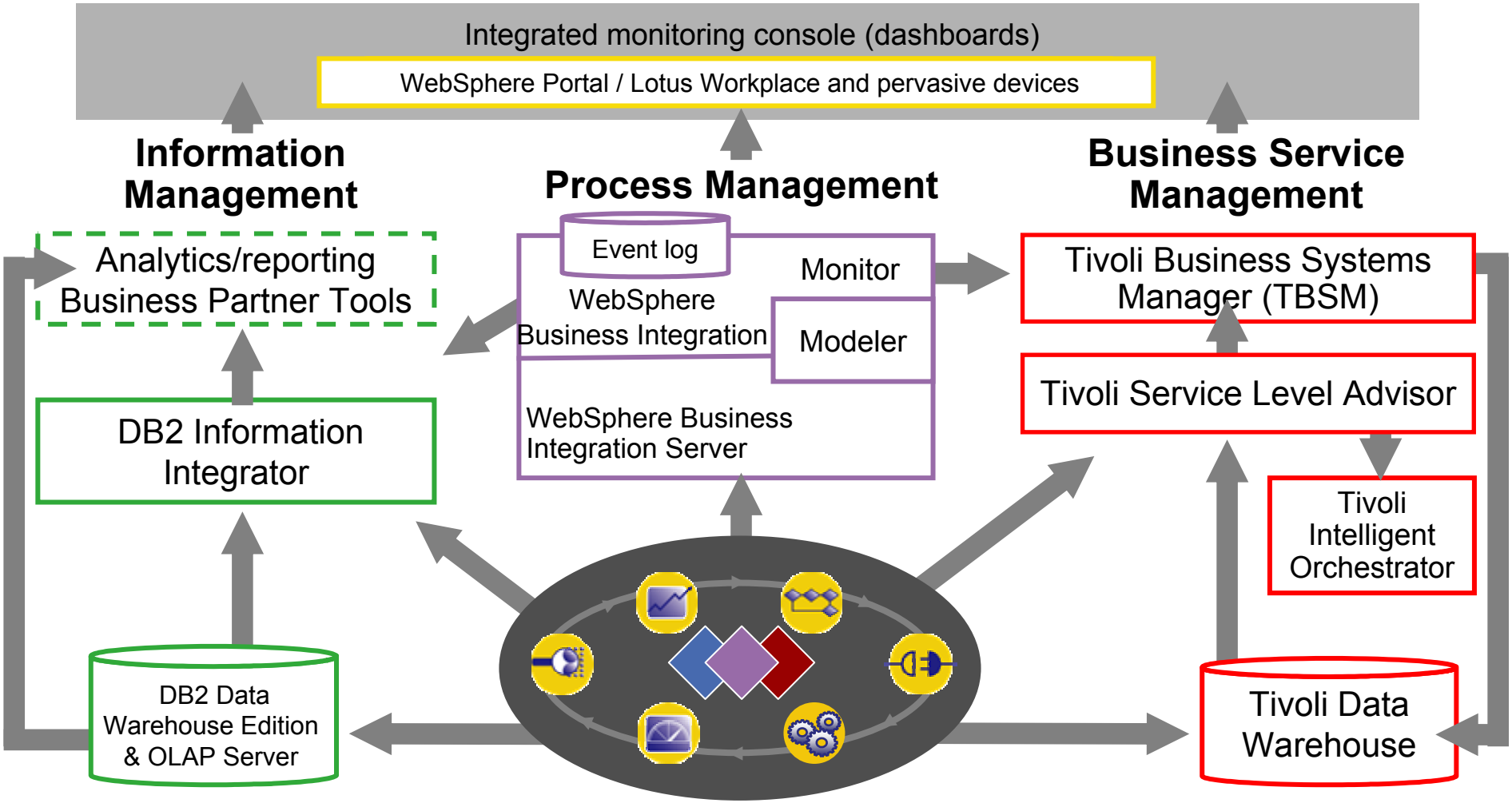
Business Performance Management: Our Process

- **Anticipate/respond to customer needs, competitive threats, and regulatory pressures**
- **Enable companies to see business information and understand and adapt business processes and IT infrastructure**



A set of capabilities to analyze and model processes; monitor business performance in real time; track current performance against goals/historical trends; align information and IT management with business priorities.

IBM supports the path today: core components

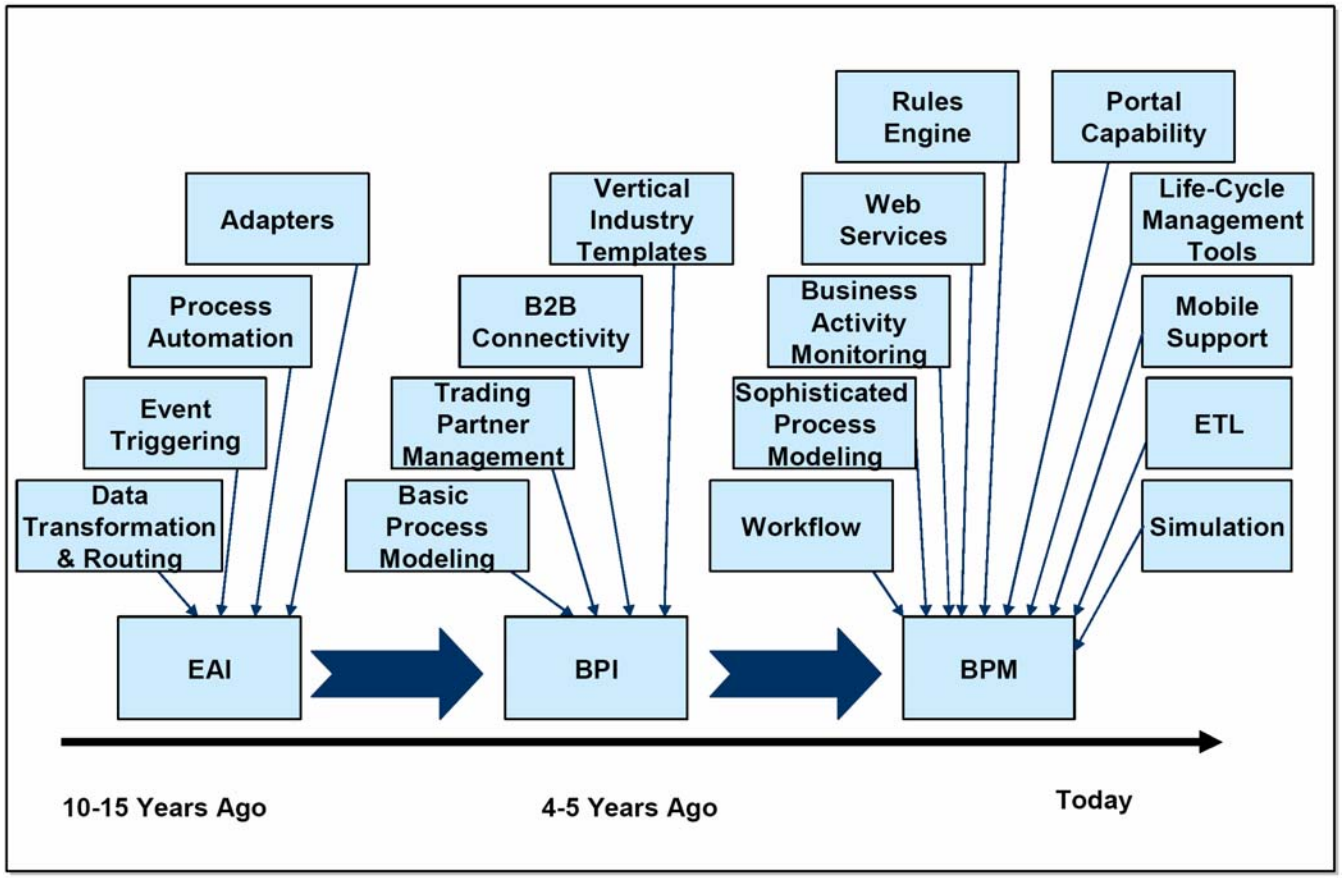


New since March….

- **Business Performance Management Ecosystem**
  - 34 original partners + 33 new partners = 67 total community members
  - New educational materials posted to ibm.com/software/bpm, partner resources
    - 1 Whitepaper, 5 domain presentations, updated Insurance Demo, & CEI SDK
  - Engaging with Systems Integrators
- **Analyst insights: Gartner, Forrester & Meta**
  - Confirmed that Business Performance Management is an important initiative
  - Agreed with the market definition and scope of BPM
    - The BPM market can appear complex
    - Need to focus on customer pain points
    - Must clearly articulate incremental steps
  - Together, IBM and our partners, are driving interest in this emerging market
- **Taking Business Performance Management to our Customers**
  - Strong interest in Business Performance Management from IBM customers
    - For 100% growth in business process modeling in Q1
  - Help customers understand where they should start?

Evolution of Integration Suites

Giga illustration showing their view of the evolution of integration suites



Key:

- EAI – enterprise application integration
- BPI – business process integration
- BPM – business process management
- ETL – extract, transform and load

Source: Giga Research, a wholly owned subsidiary of Forrester Research, Inc., February 2, 2004

Domain Discussions

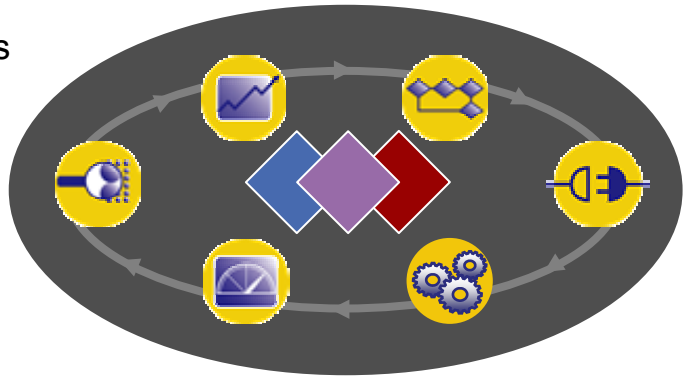
Download at ibm.com/software/bpm click on “Partner Resources”

The Information Domain

Specifies the technical interfaces that partners can exploit to analyze and report real-time business event and performance information.

The Business Rules Domain

Outlines the technical interfaces partners can exploit to integrate business rules for dynamic process control and adaptive performance management.



The Common Event Infrastructure

Specifies a commonly applicable event infrastructure for business and IT event management.

The Workplace Domain

Delivers collaborative workplaces for human users with specific roles to manage business & IT operations based on visualized real-time performance metrics and alerts.

The Process Domain

Delivers tools to model, integrate, and manage business operations.

The Business Systems Domain

Delivers tools to align IT with business operations to assess impact and optimize value

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IBM Business Performance Management:
Business Process Domain

Eric Wayne

e business on demand.

Agenda

What is the Process Domain for Business Performance Management?

How can Process Management tools support the creation of Content to drive business operations?

How can Business Processes provide Context for use across the Business Performance Management Domains?

Business Performance Management Domains

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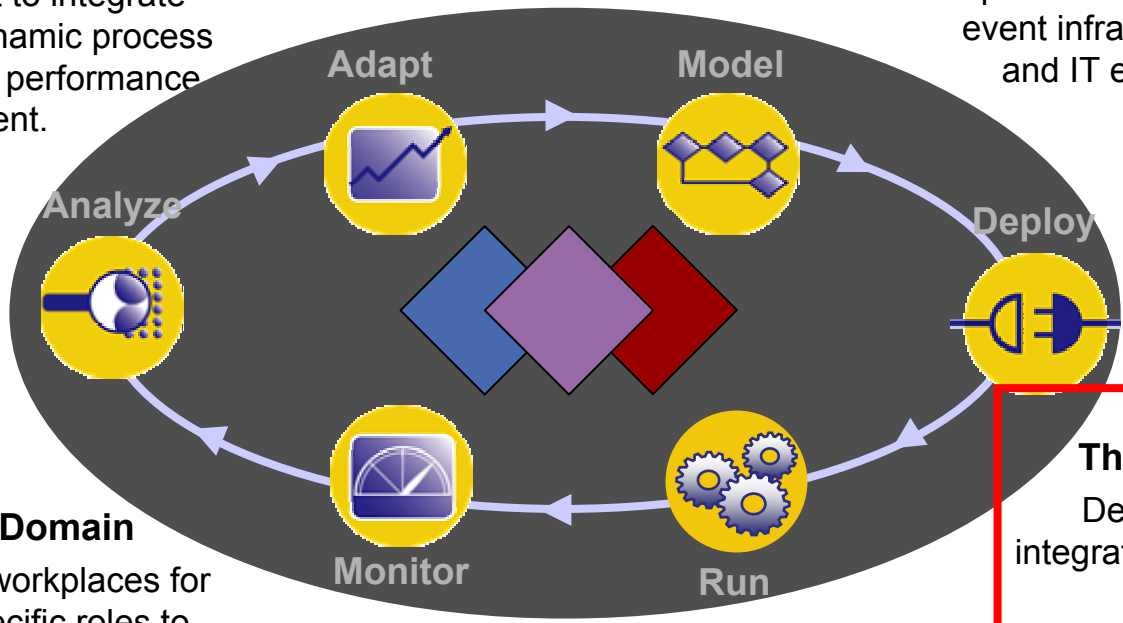

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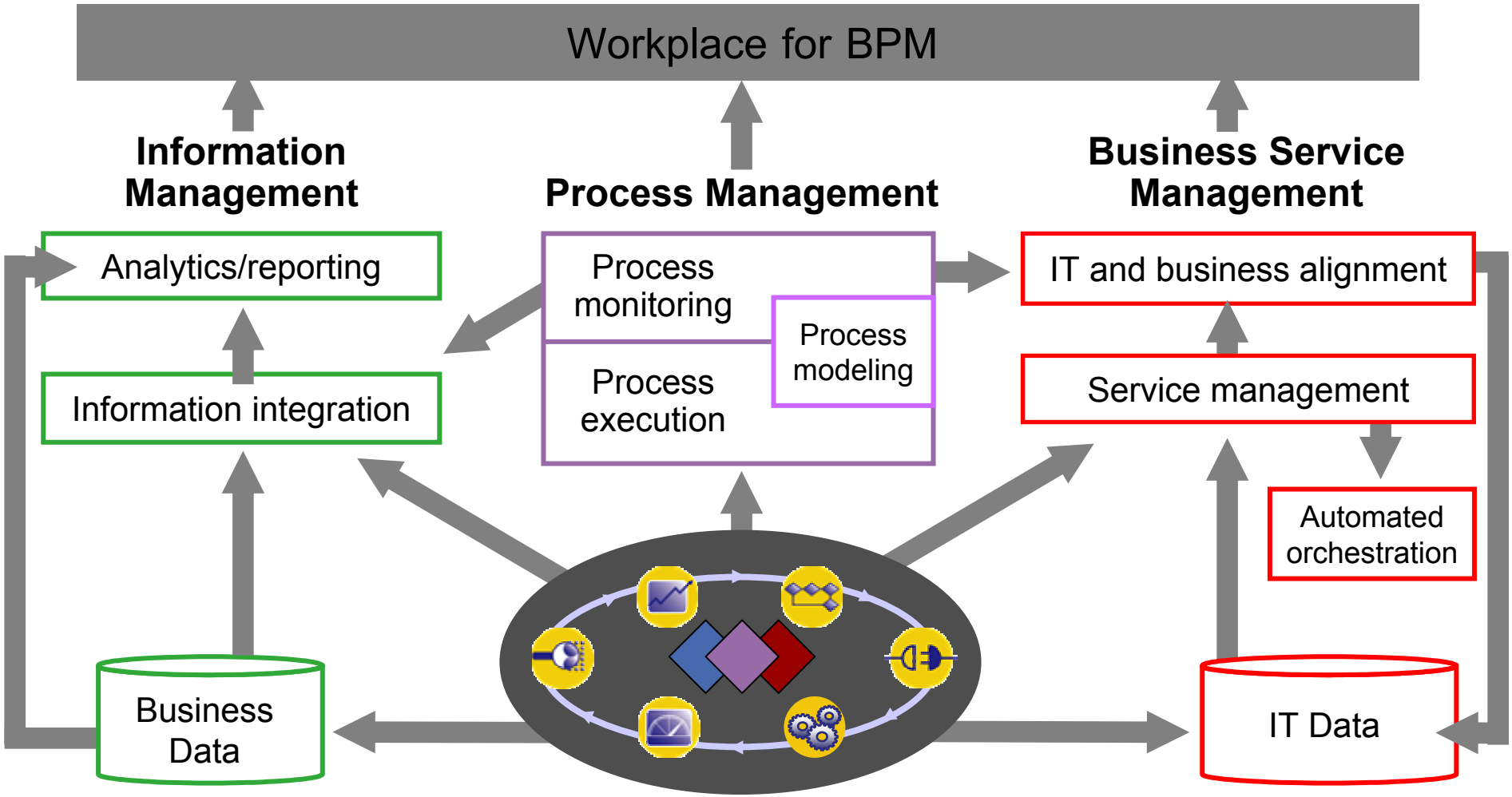
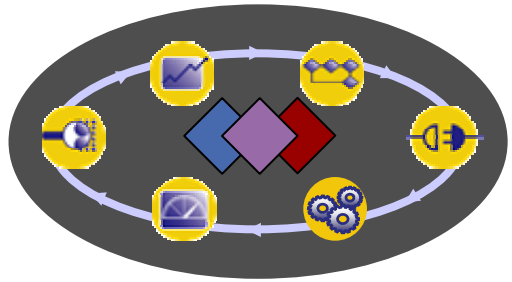
Business Performance Management: Core Capabilities



The Process Domain



Delivers tools to model, integrate, and manage business operations

Enables partners to use integrated modeling tools to:

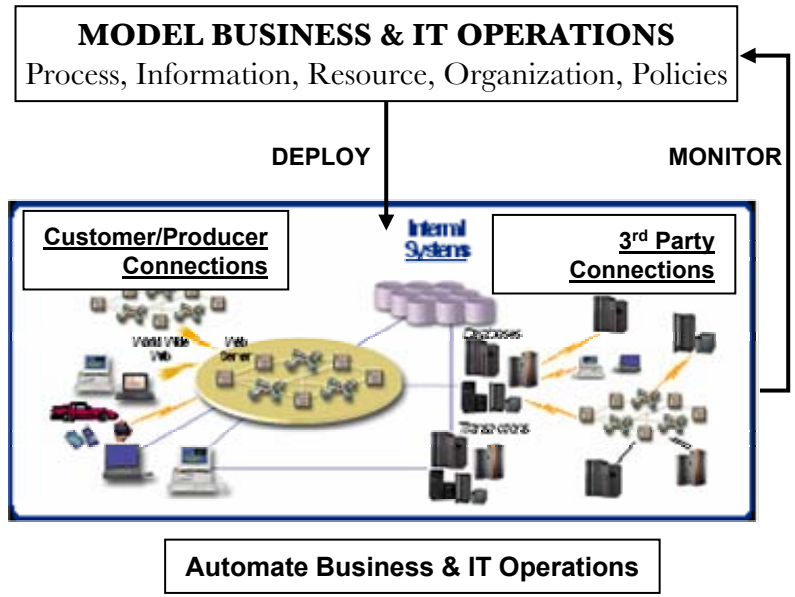
- Design business process quickly and graphically
- Simulate processes to project business benefits
- Integrate people, processes, and information efficiently
- Revise processes to optimize for business advantage

•Available Today

- WebSphere Business Integration Modeler
- WebSphere Business Integration Monitor
- Redbooks and technical documentation

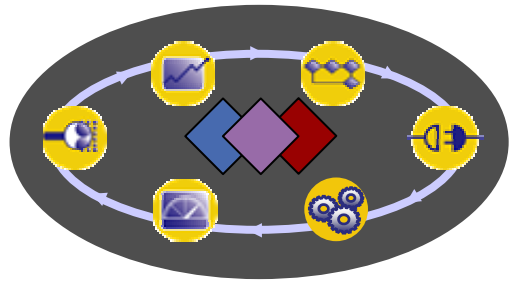
• Commitment to Open Standards

- UML based metamodel
- Eclipse tools base
- User interface with UML/BPMN-derived Notation
- Export to BPEL, WSDL, XSD
- Save in XMI format



Process Domain Capabilities

- ***Imagine that you could***
  - *describe a process*
  - *graphically model it*
  - *simulate the operations*
  - *make iterative changes to optimize results…*
- ***…then rapidly deploy the process by***
  - *drawing relationships between data, people, systems and partners*
  - *identify and mark key business indicators*
  - *customize the solution for specific deployments*
  - *test your process and make sure that it runs as expected…*
- ***…and, once in production,***
  - *watch your processes running in real time*
  - *quickly respond to alerts*
  - *make real-time decisions about process operations*
  - *collect, analyze and compare operational performance against the simulation…*



Process Management Approach

Phase 1: Establish process modeling methodology

Phase 2: Create the As-Is business process

Phase 3: Create the To-Be business process

Phase 4: Define business measures

Phase 5: Communicate and verify business process model

Phase 6: Build the IT process model

Phase 7: Model the user interfaces

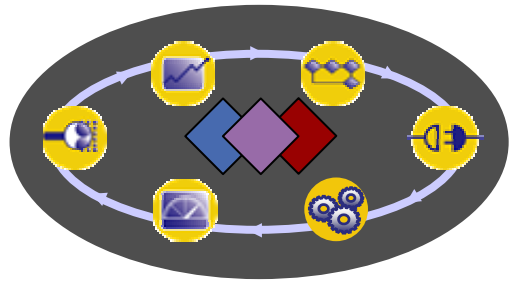
Phase 8: Build the object models

Phase 9: Model partner interfaces

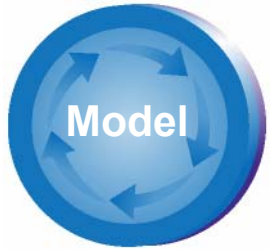
Phase 10: Integrate and connect model

Phase 11: Monitor the process

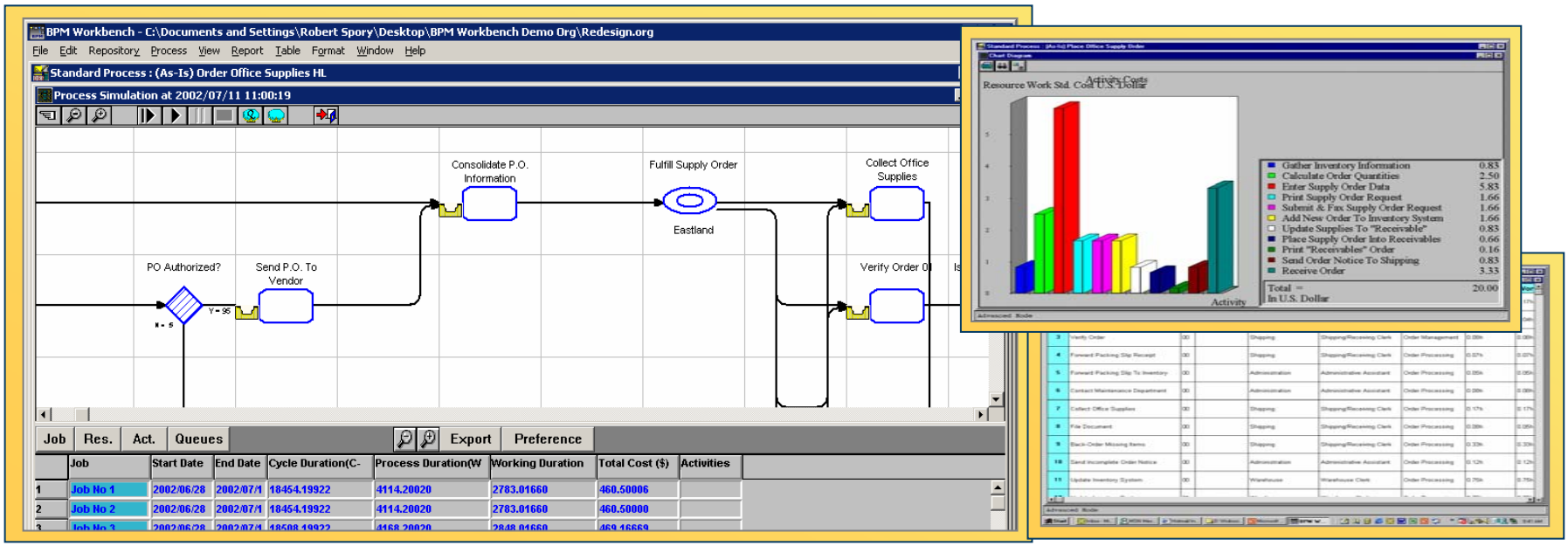
Phase 12: Improve the business process



Model Business Functions and Processes



- Deliver flexible, agile business processes optimized to business aims
- Make best use of existing resources
- Graphically design processes and quickly redesign across people, partners and applications.
- View costs and projected backlogs in each option you consider
- Deliver “What-if” simulation of operations to optimize and project business benefits



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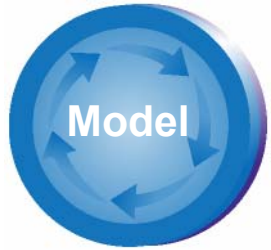
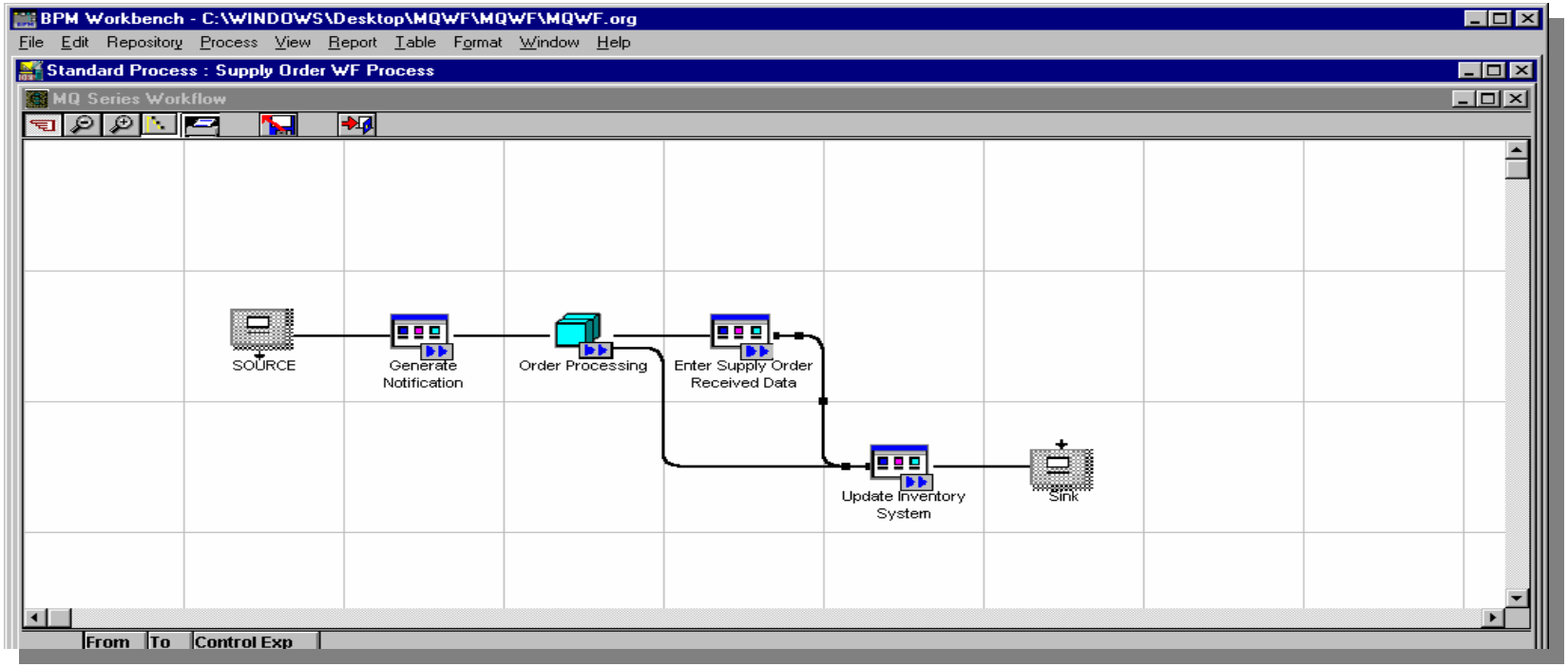
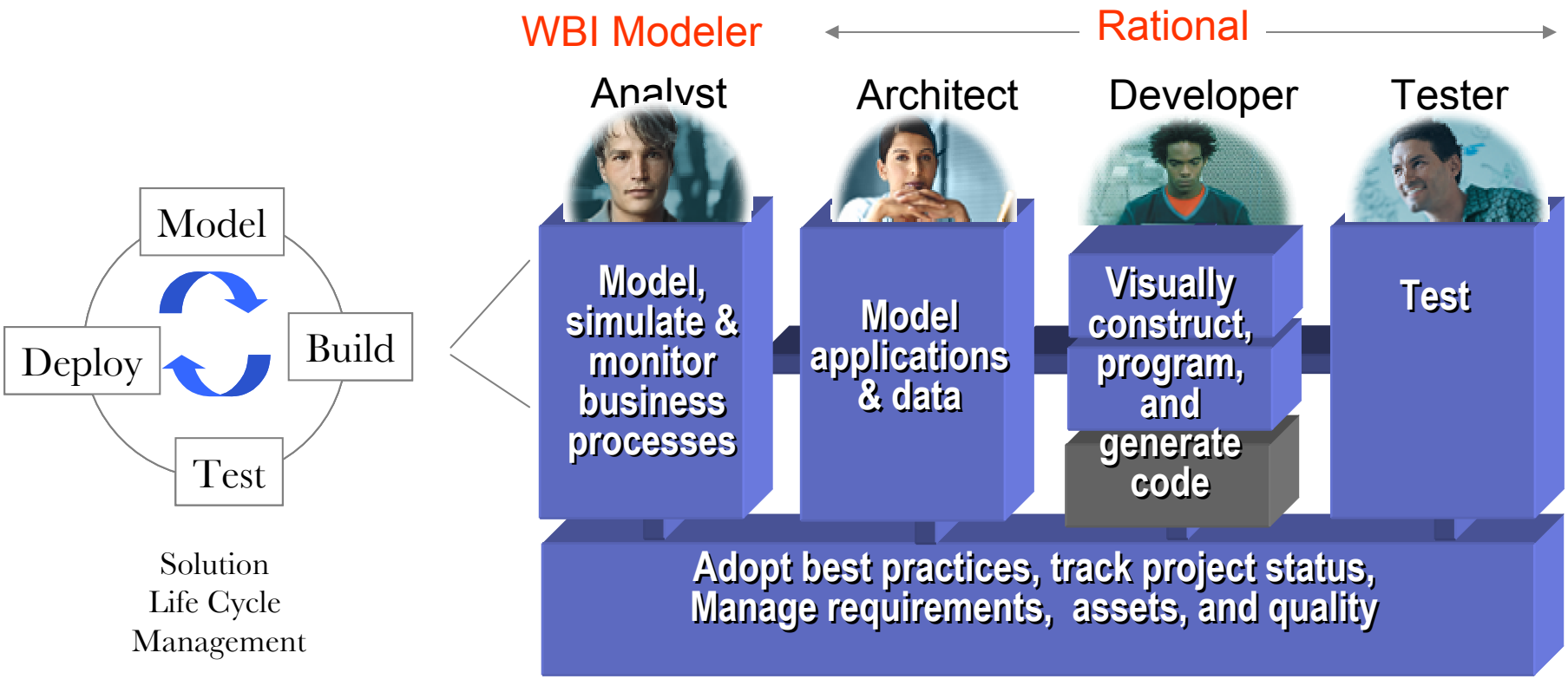


- Shared view of processes and costs – across organizations.
- Generate your projected return on investment.
- Set key business measures which may be monitored in operation.
- Fast start toward deployment— output can be used by IT runtime tools

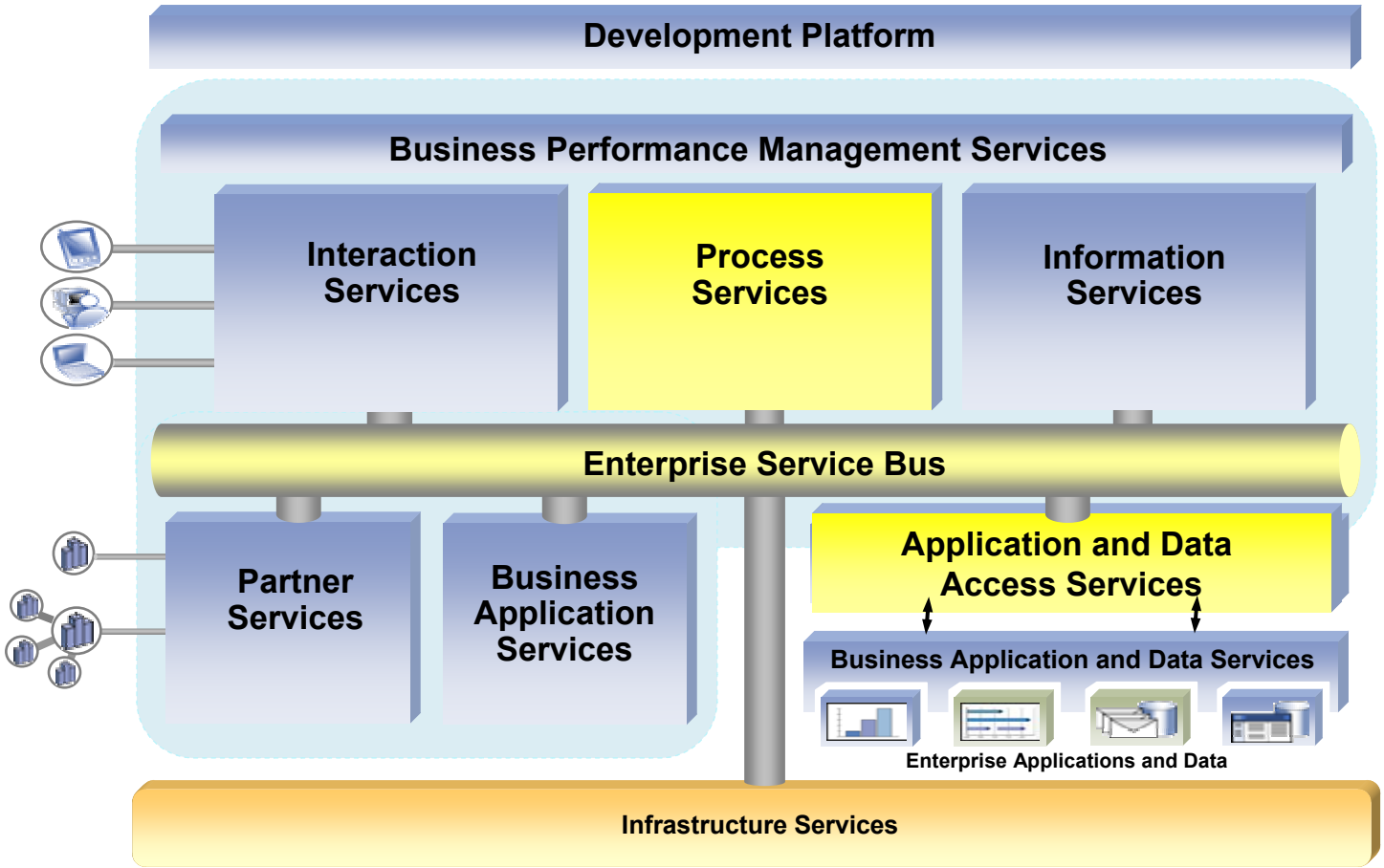


Model Driven Approach over Solution Lifecycle



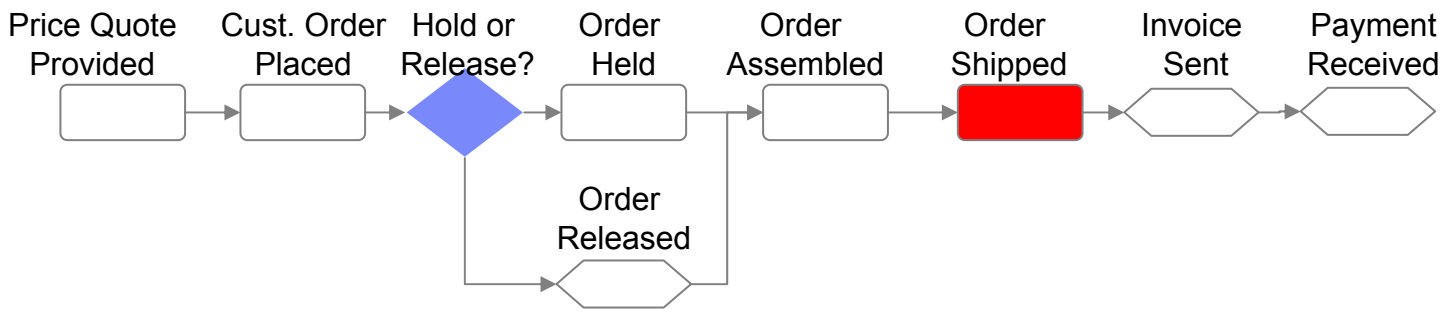
- **Integrated Tools** – Leverage Rational Investment
- **Standards Based** -- Plug-in internal and vendor tools
- **Platform Agnostic** – Practical Reuse of Models
- **Generate As Required** – Support Heterogeneous Environment

WebSphere Business Integration Reference Architecture



Monitor Process Dashboard

Process Status



Process Stats

Outstanding Quotes without Orders

Customer	QuoteID	Quote Time
ABC	1234	02-12 16:41
SAFECO	7363	02-12 17:11
SCHMIDT	2627	02-13 18:14

	this	avg.	best
Avg. time from quote to cash		2.9d	2.1d
Avg. time from quote to assembled	4.0d	2.8d	1.0d

Process Alerts

Alert Notifications (also through pager)

1. Customer BRIGHTON order - # 82828 has been on hold for more than 3 days
2. Order Assembly task has exceeded 2 days for order #82922

Monitor End-to-end Business Process Execution

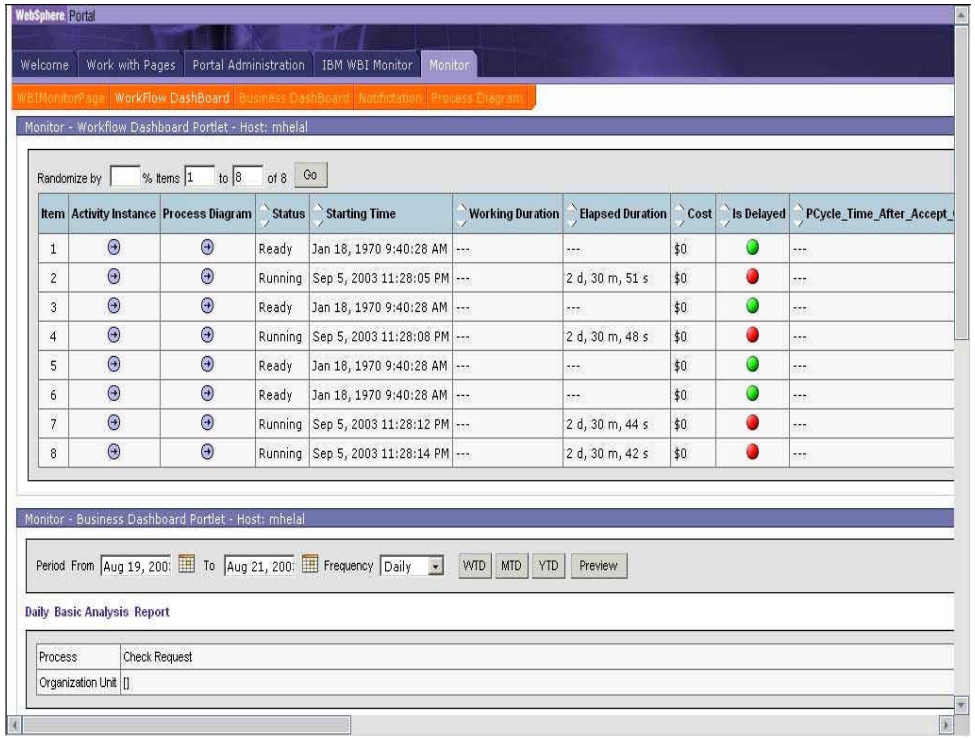
Monitor ***and manage*** **business process status and execution**

Track **process in near real-time across value chain**

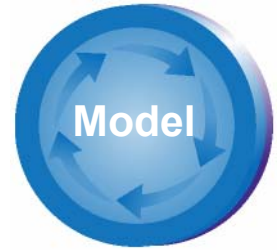
Display **information on custom dashboards**

Alert **the business to react to out-of-line conditions**

Process Dashboards



Example: An Insurance Executive Requires A "Remodeled" Claims Approach



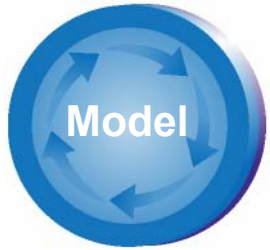
Claims Executive

- High % of premium income is spent in claims; continual focus on efficiency, with customer sat.
- Recent merger requires "merger" of business processes – "leading practice" in the combined operation. Speed to implement important.
- Applications – such as Fraud and Abuse Management must also be continually (and rapidly) updated

Claims IT Team

- End-to-end "best practice" process model critical. Including standard costs to assess returns on investments. Teamwork. Joint ownership.
- "Fast start" to deployment of process critical, within controlled environment.
- Significant portions of the overall claim process within applications. Requires a comprehensive set of tools.

The Team "Remodels" The Claims Approach

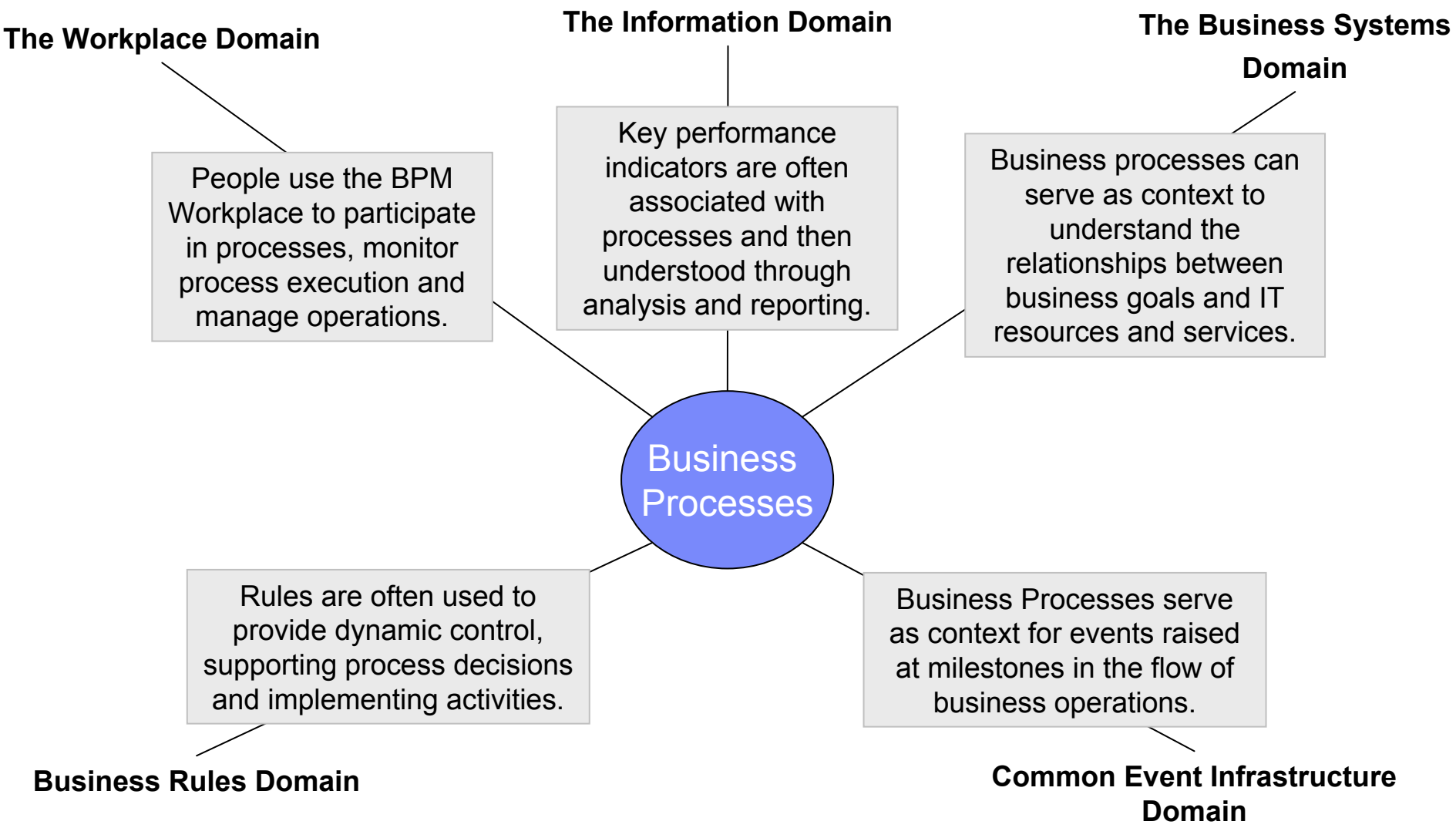


Claims Executive

Business Analysts & Claims IT Team

- Claims executives and the business analysis team define the end-to-end processes, "As is" with the business operations modeler tool.
- "What if" analysis – with core team of experienced practitioners – agree changes. Create "new", "to be" process.
- All claims functions agree with "leading practice"
- Executive board agrees the Return on Investment and project.
- Standard costs and departmental roles agreed as part of modeling approach.
- Services delivered by applications are defined.
- "To be" models of processes exported to be refined in IT runtime tools.

Business Processes Provide Context for Use Across Domains



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IBM Business Performance Management: Business Rules Domain

Mark Linehan

@business on demand software

Agenda

Dynamic Behavior Changes
Service Oriented Architecture
IBM Rules Framework
Types of Business Rules
Using Rules with Business Processes
Selectors
OMG's Approach to Business Rules
Summary

Dynamic Behavior Changes

Developers

Development Shops
- enterprise I/T departments
- ISV's

WebSphere Application
- enterprise
- packaged software
- hosted service

Business or IT Persons

Solution Integrators

End Software Customers

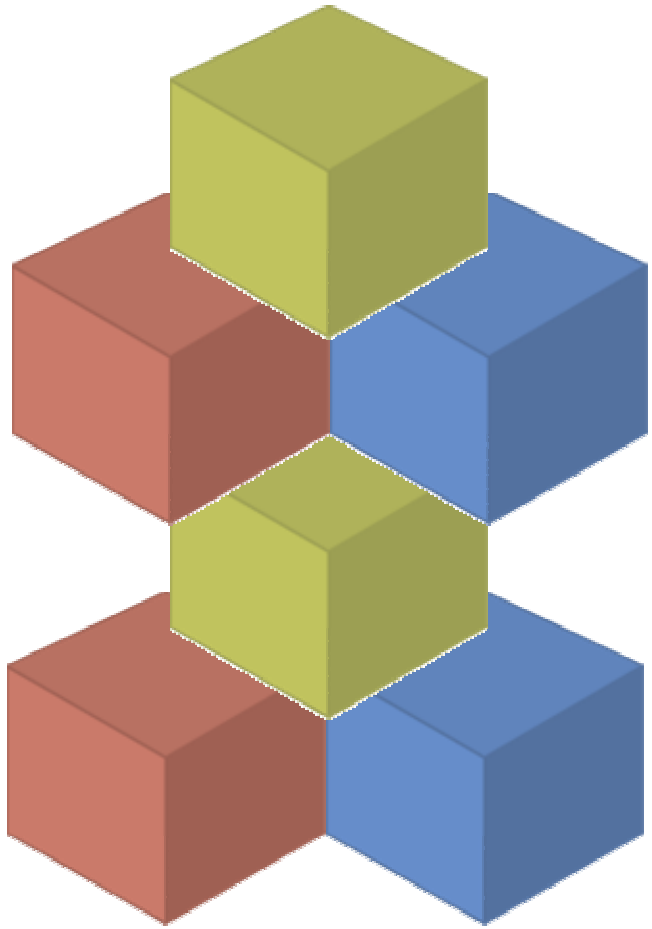
End Users

What is a Service Oriented Architecture?

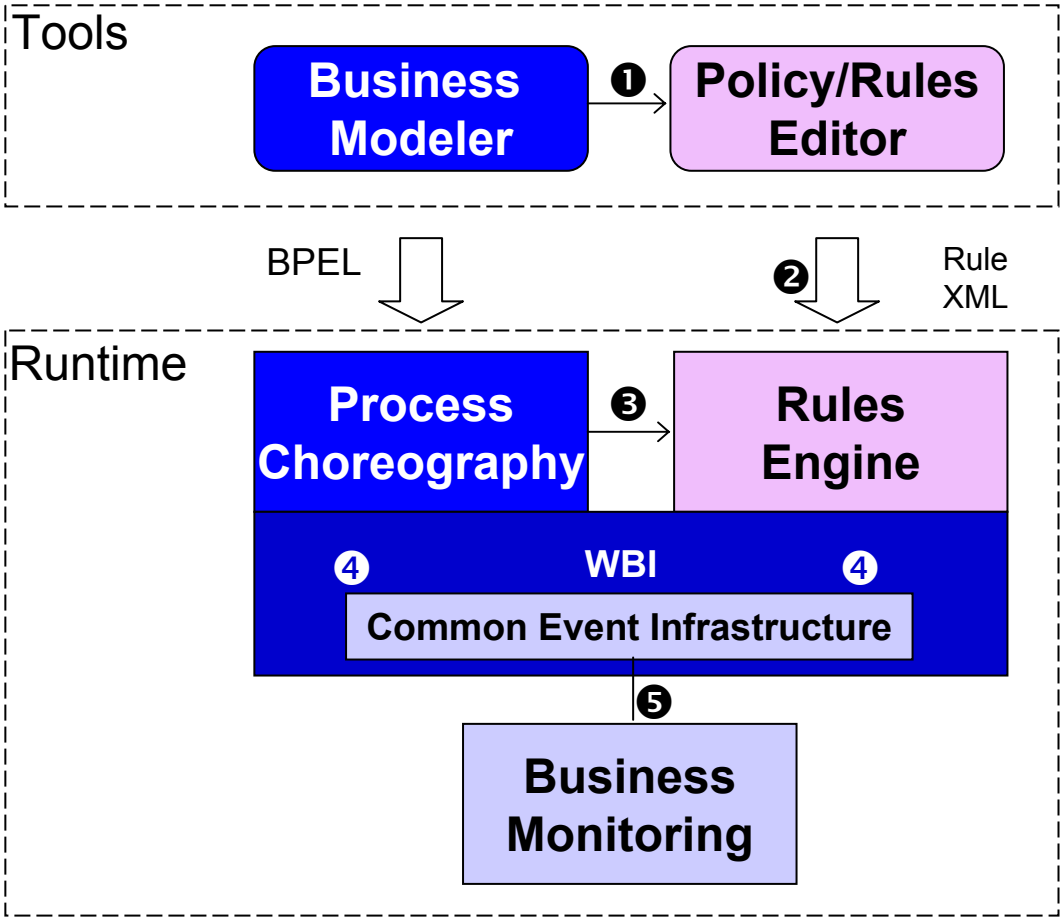
An approach for building distributed systems that deliver application functionality as services to either end-user applications or other services

It defines :

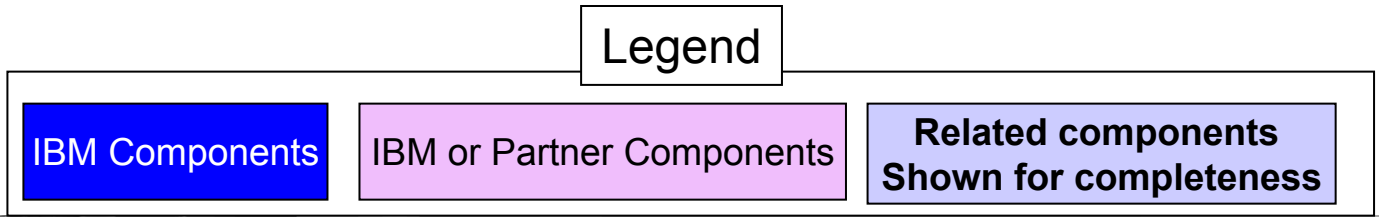
- An architecture that leverages open standards to represent software assets as services.
- Provides a standard way of representing and interacting with software assets
- Individual software assets become building blocks that can be reused in developing other applications
- Shifts focus to application assembly rather than implementation details
- Used externally to integrate with applications outside of the enterprise



IBM Rules Framework



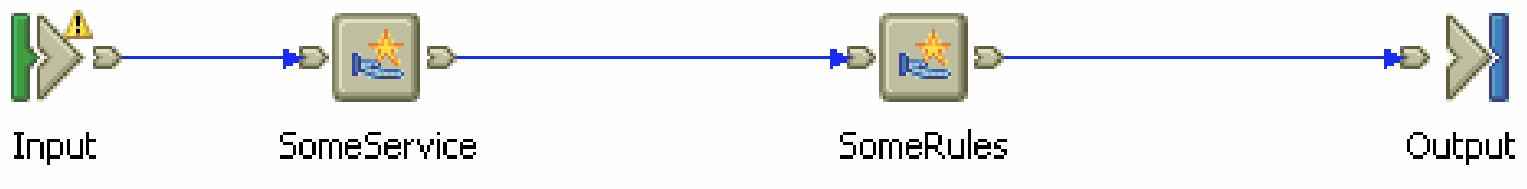
Interfaces	
1	Business Vocabulary
2	IBM Rule XML
3	Web Service / J2EE
4	CEI Event Emitter API
5	CEI Event Consumer API

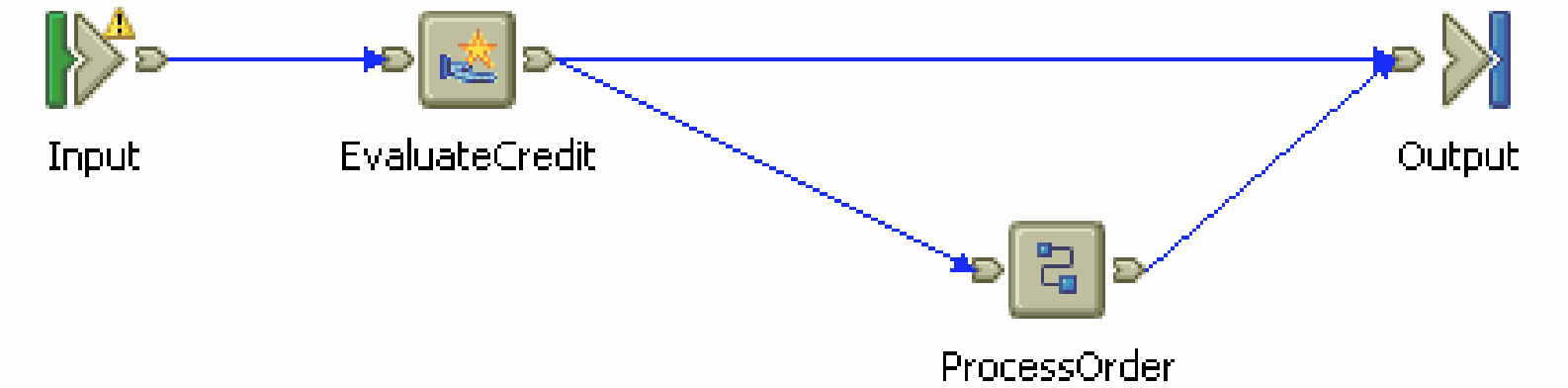


Types of Business Rules

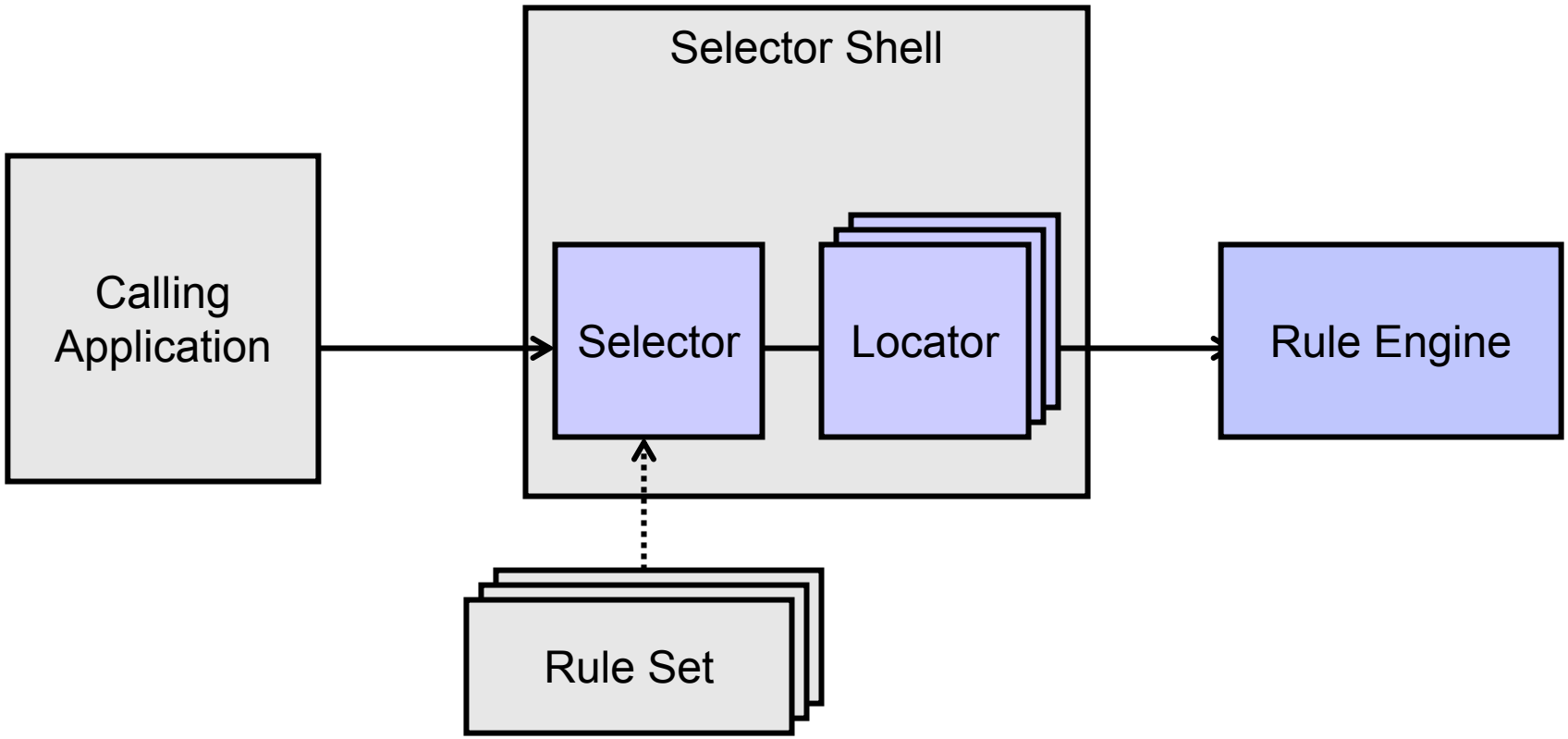
Rule Type	Description
Simple Business Rules	▪ **Declarative rules defined by business users.** ▪ **Simple if-then statements, decision trees, decision tables** ▪ **Maintain no state across invocations.**
Event Correlation Rules	▪ **Recognize relationships across multiple CEI events.** ▪ **Detect IT or business situations from patterns in event sequences.** ▪ **Defined by IT or business analysts.**
Inferencing Rules	▪ **Forward chaining, backward chaining, Prolog-style unification, or other AI rules.** ▪ **Develop “facts” that can drive other rules.** ▪ **Defined by programmers.**

Using Rules with Business Processes

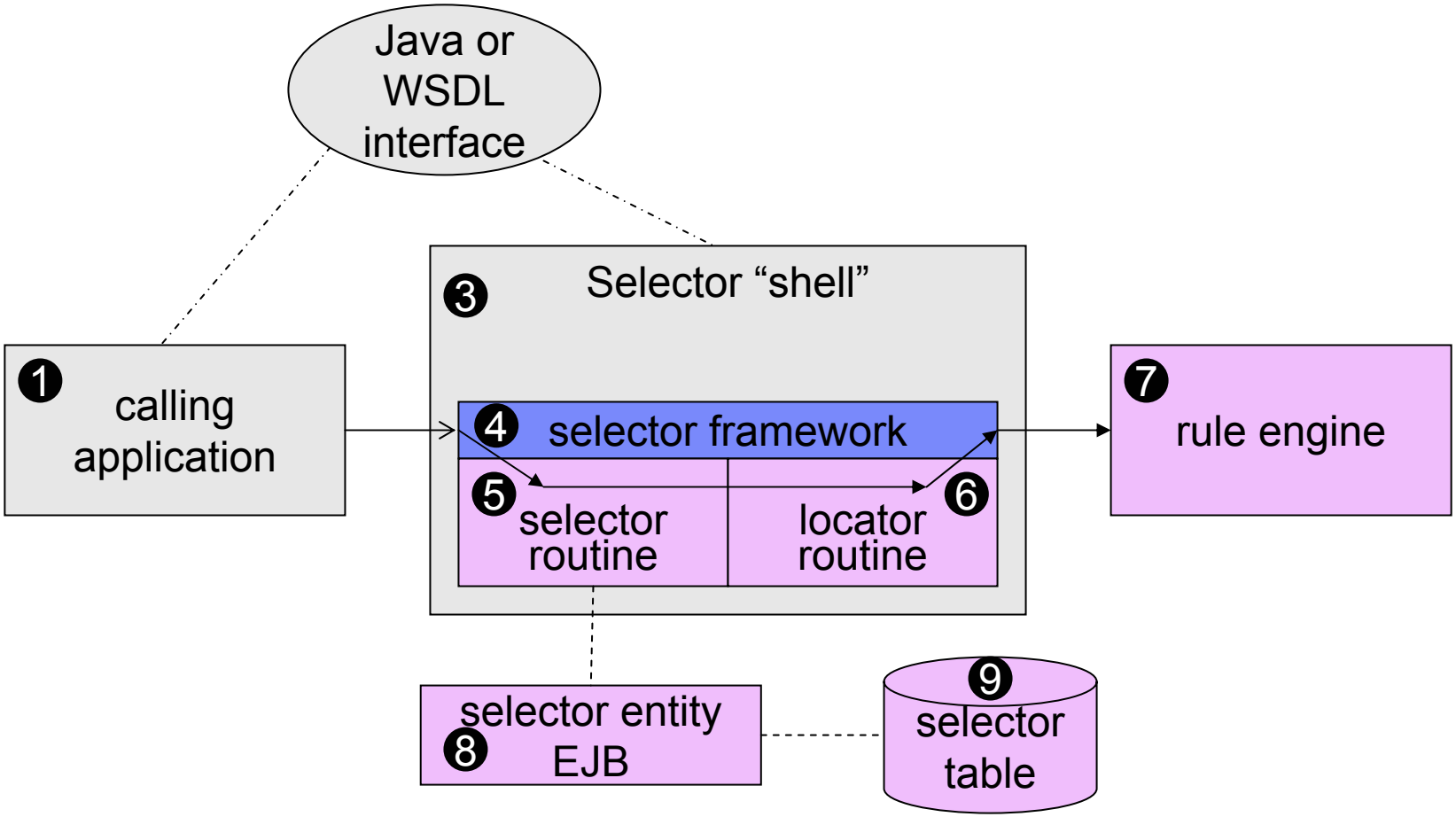




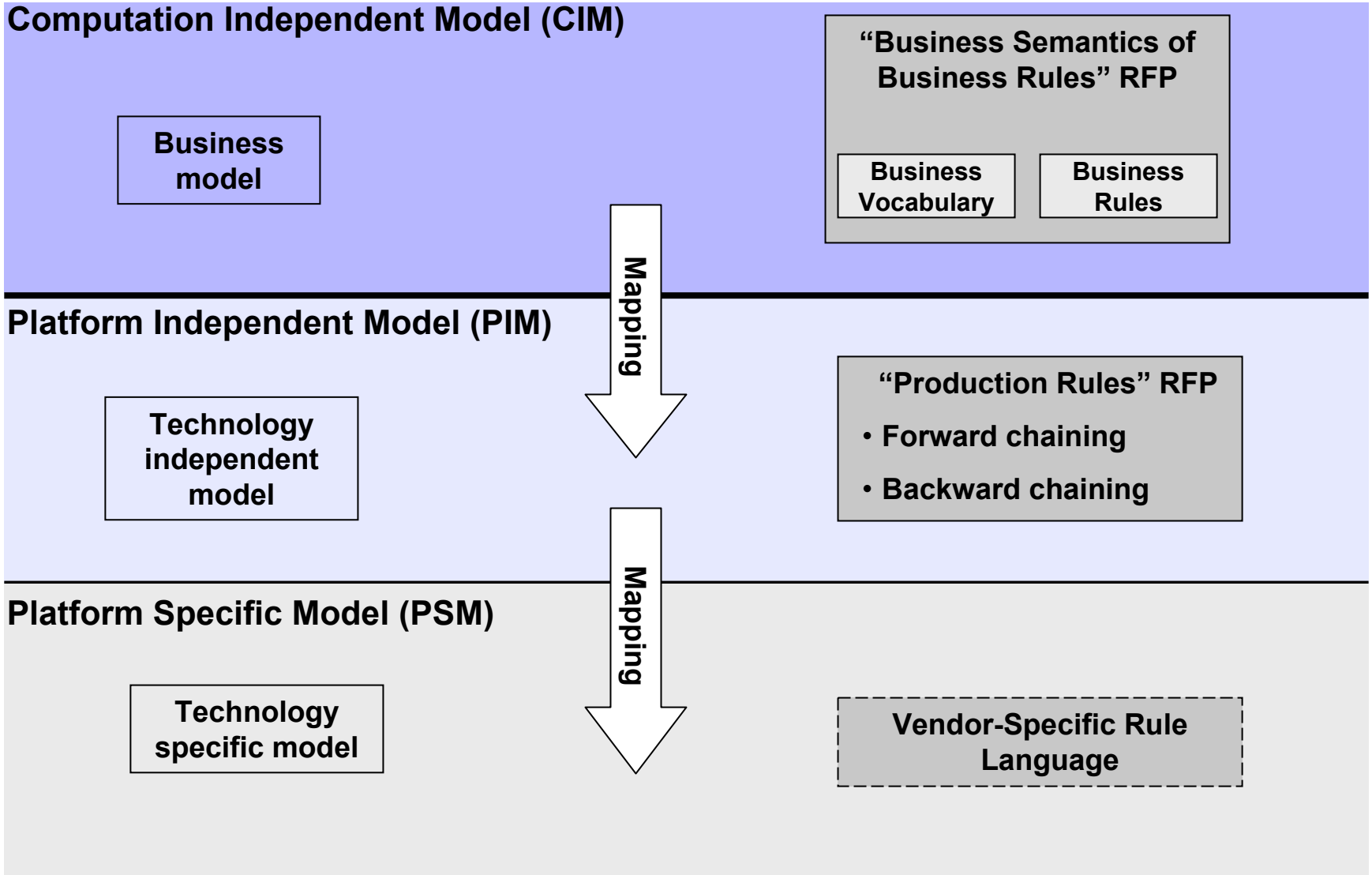
Selector Concept



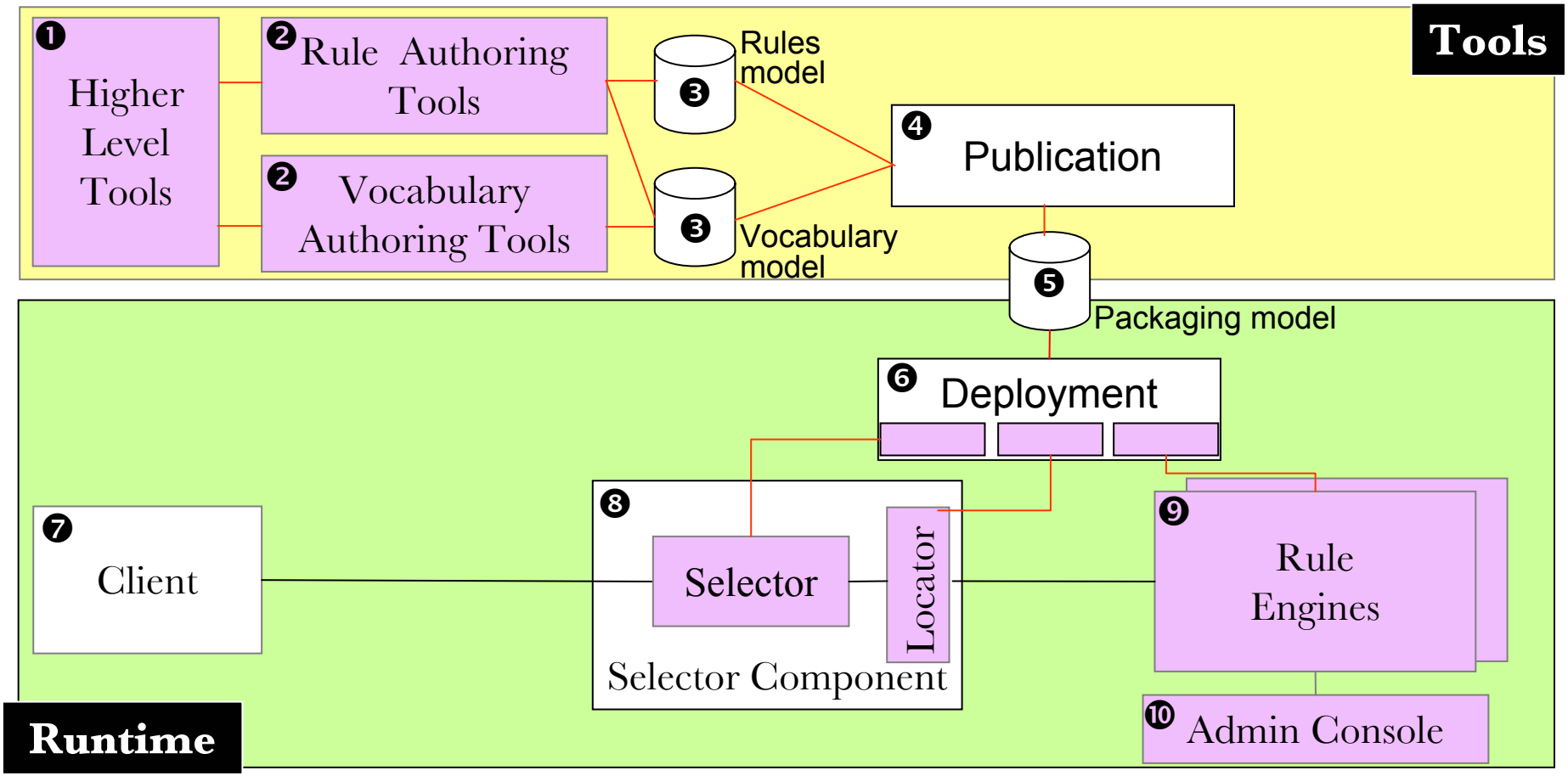
Selector Infrastructure



OMG's Approach to Business Rules



Summary



Legend

- Principal Control/Data Flow
- Build Time Flow (Generation)
- ❶ - ❿ Functional Components
- IBM or Partner Plug Ins

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IBM Business Performance Management: Common Event Infrastructure Domain

Denilson Nastacio

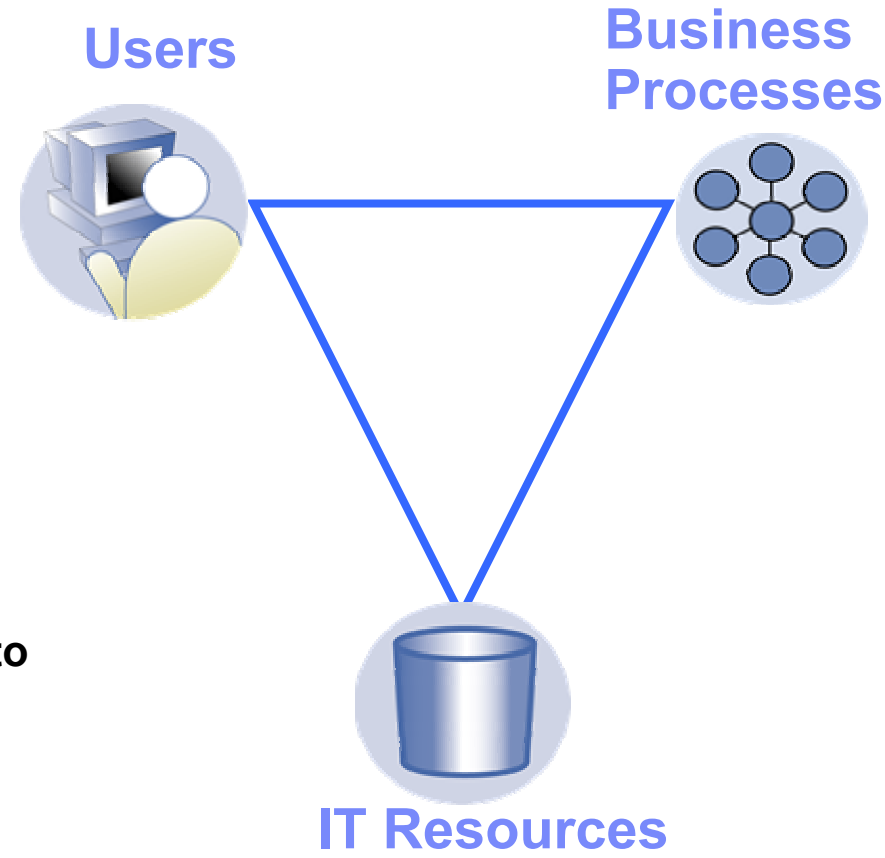
Agenda

- **Market Overview**
- CEI & SWG Component Strategy
- Highlights
- Exploiters
- System Design & Programming Interfaces
- IT & Business Integration

Problem Statement

Business systems today have too many different formats for the information they collect about events.
Customers cannot effectively visualize or correlate events from disparate components in a cohesive way.

Solution:
Provide a unified event management format for the creation, transmission, and distribution of a wide range of business, system and network events.
Enable customers to consume and correlate IT and business events to achieve successful business services management.
Deliver improved scalability and availability to facilitate the automation of business processes.



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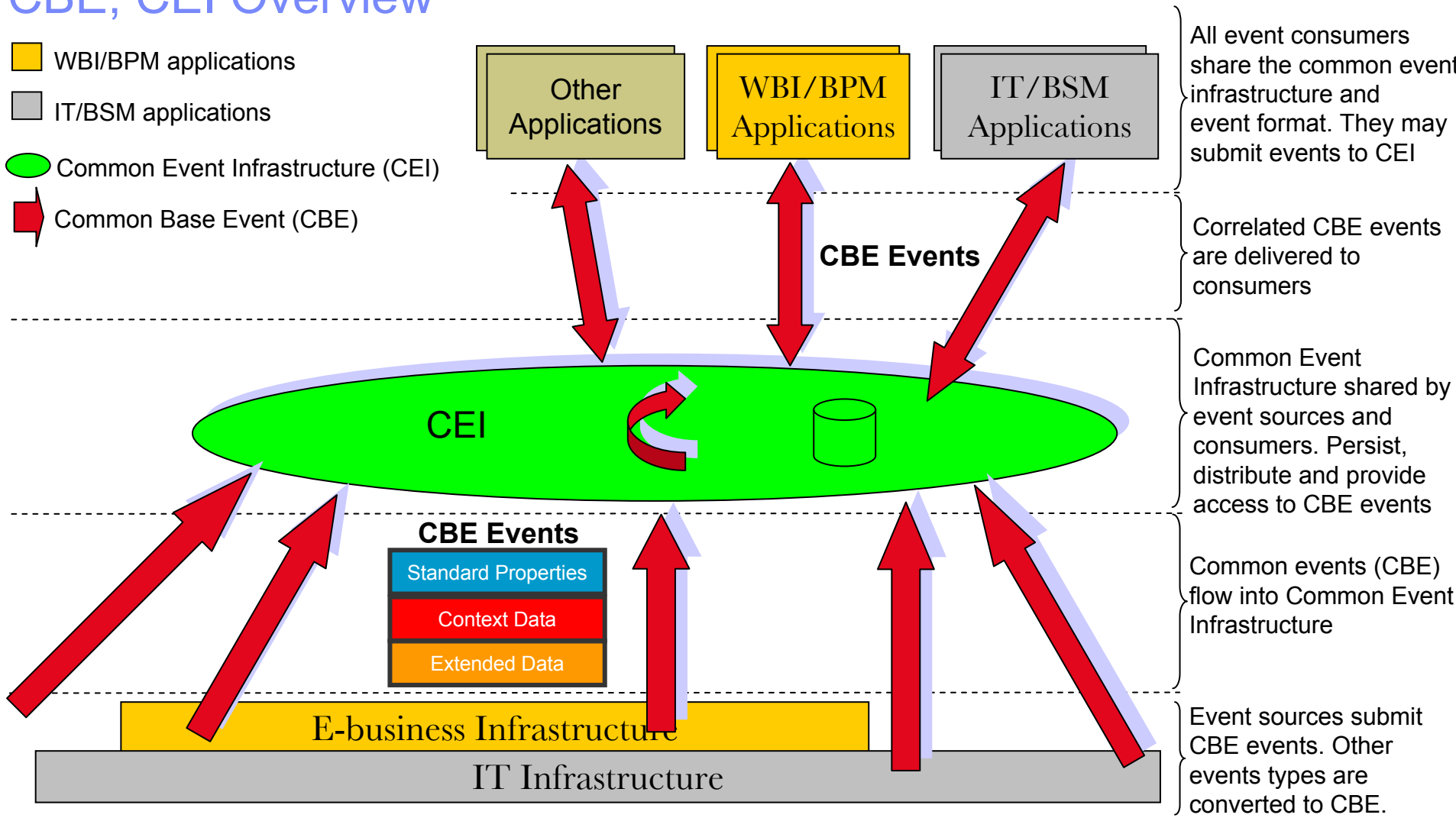
CBE, CEI Overview



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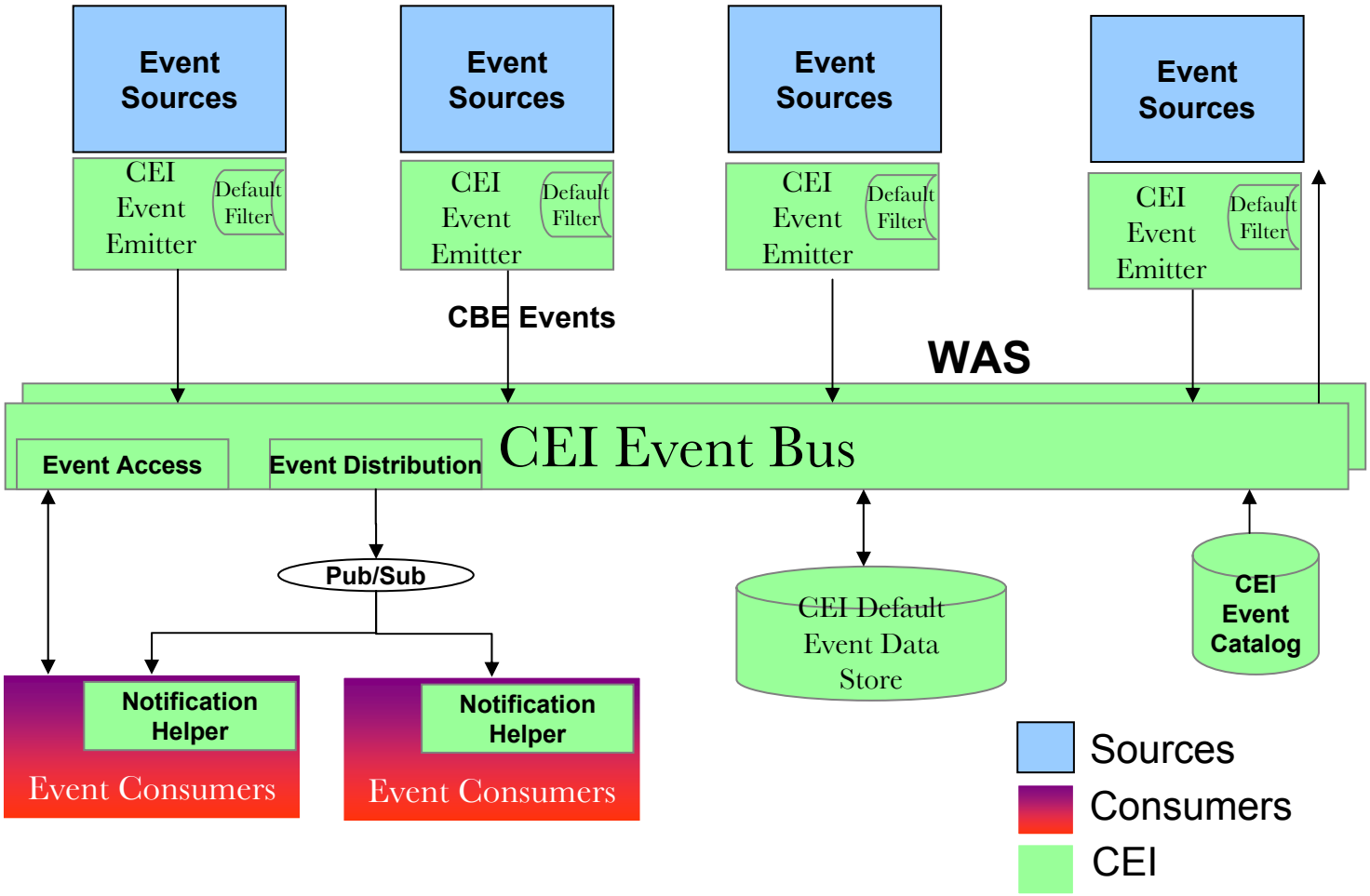
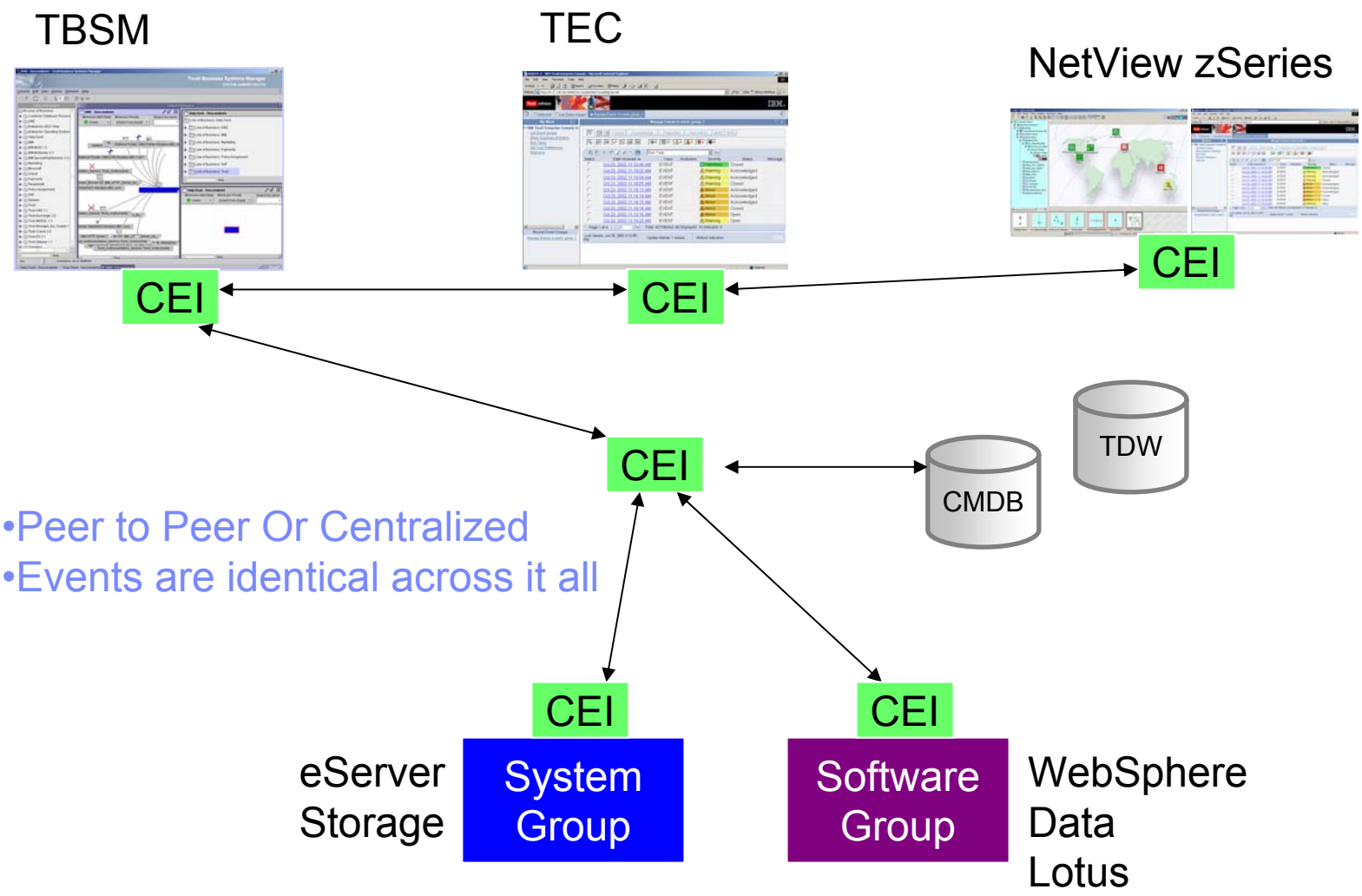
CEI Overview



Enhance Integration with CEI



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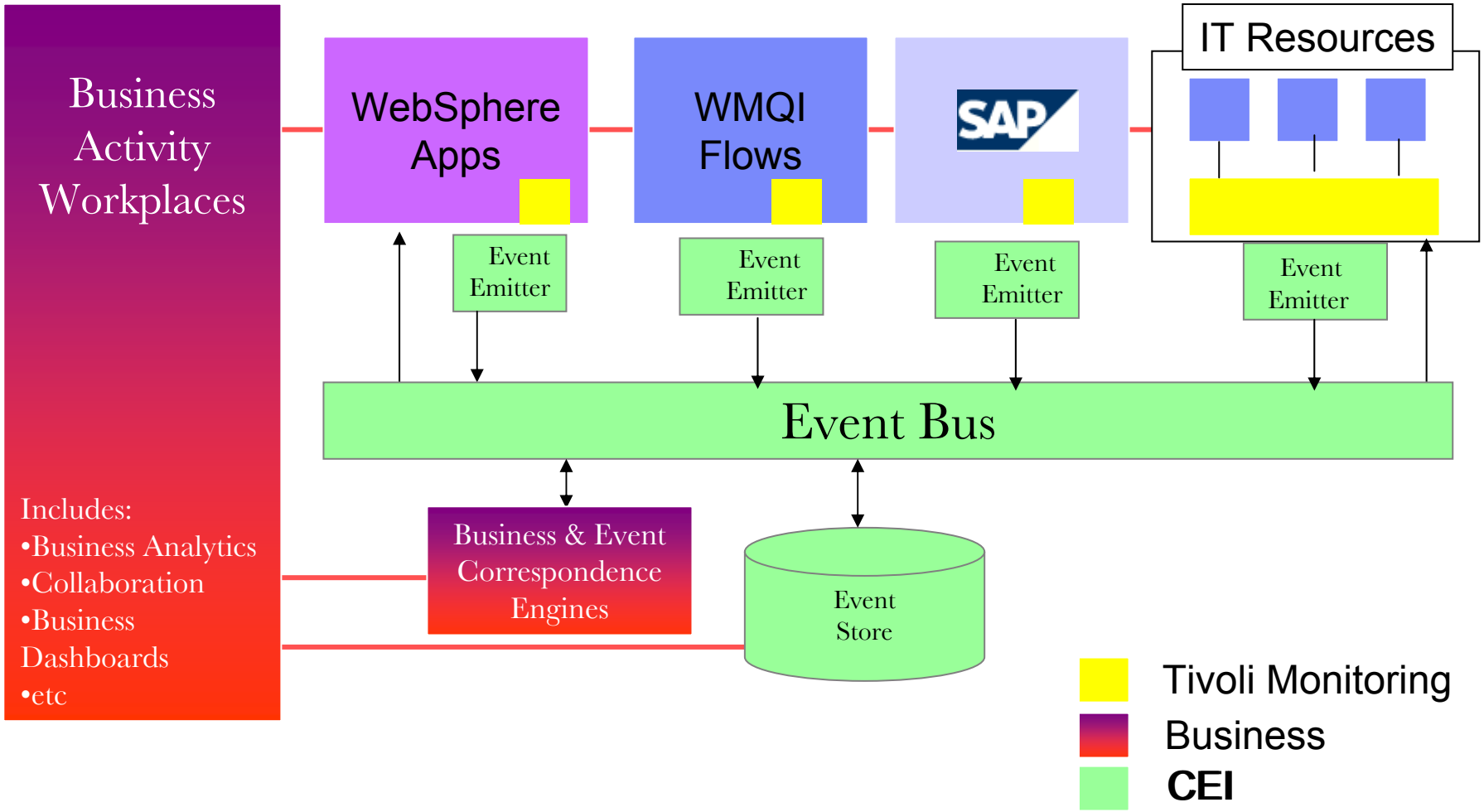
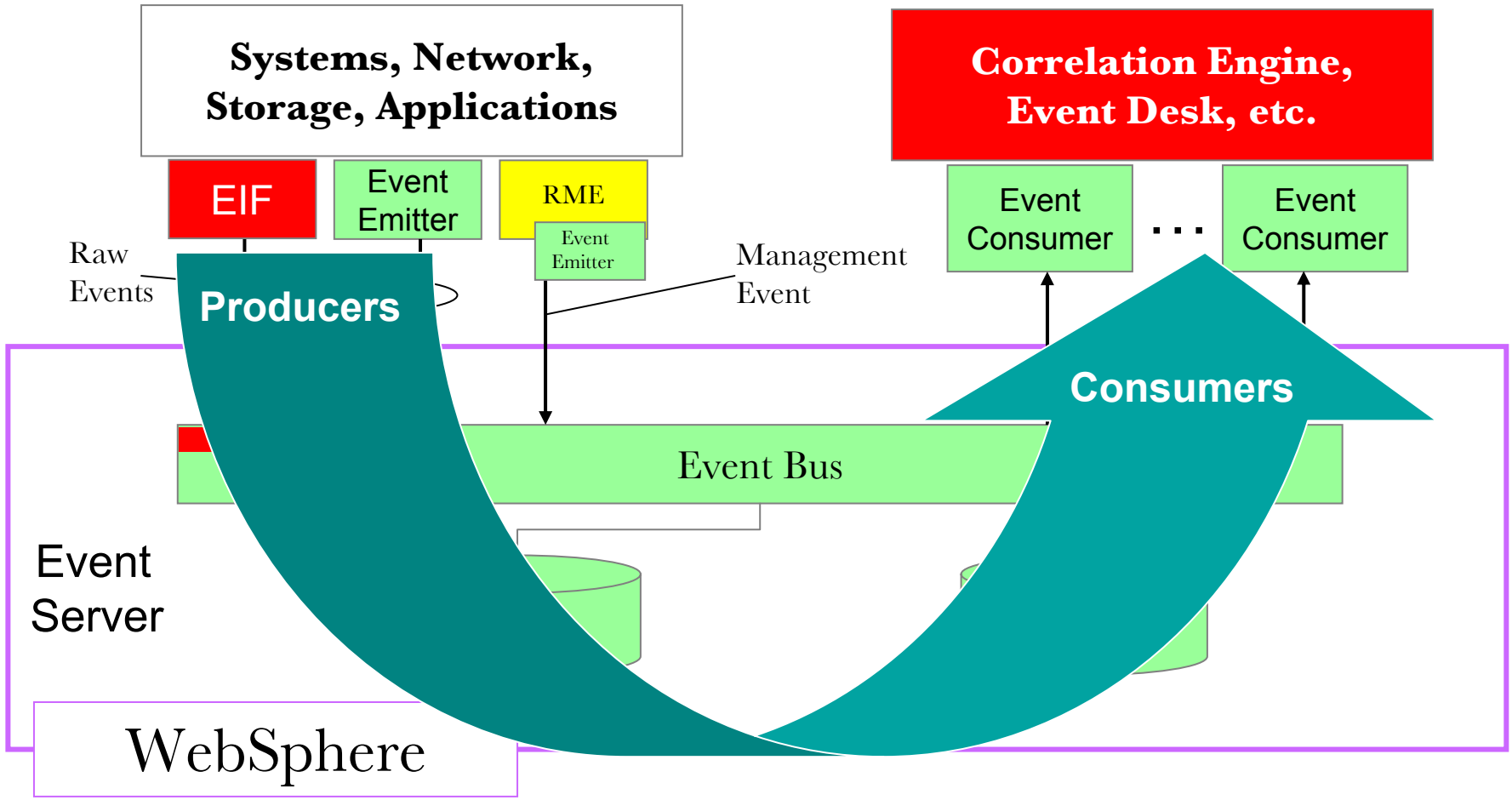
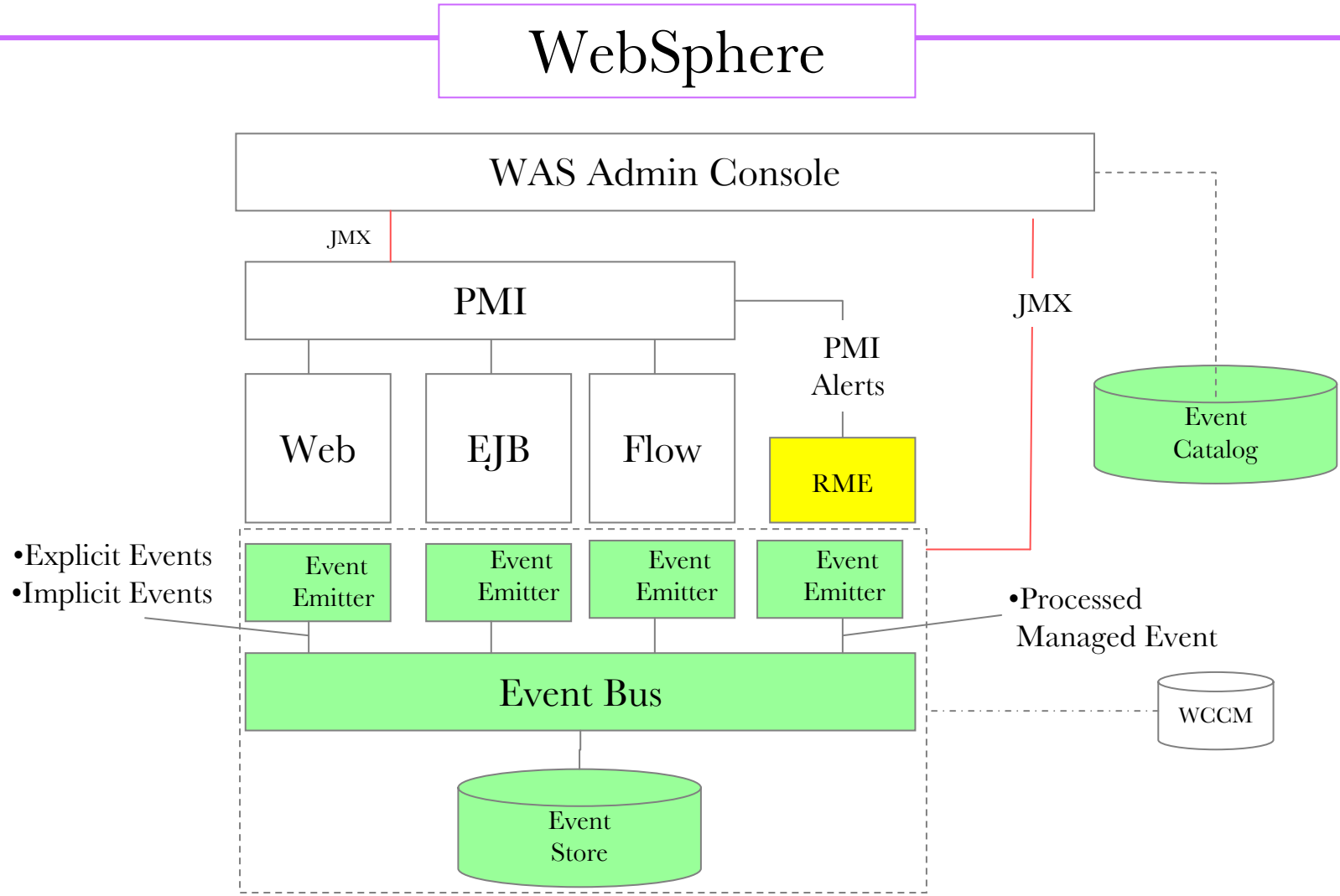
CEI in WBI/BPM Topology



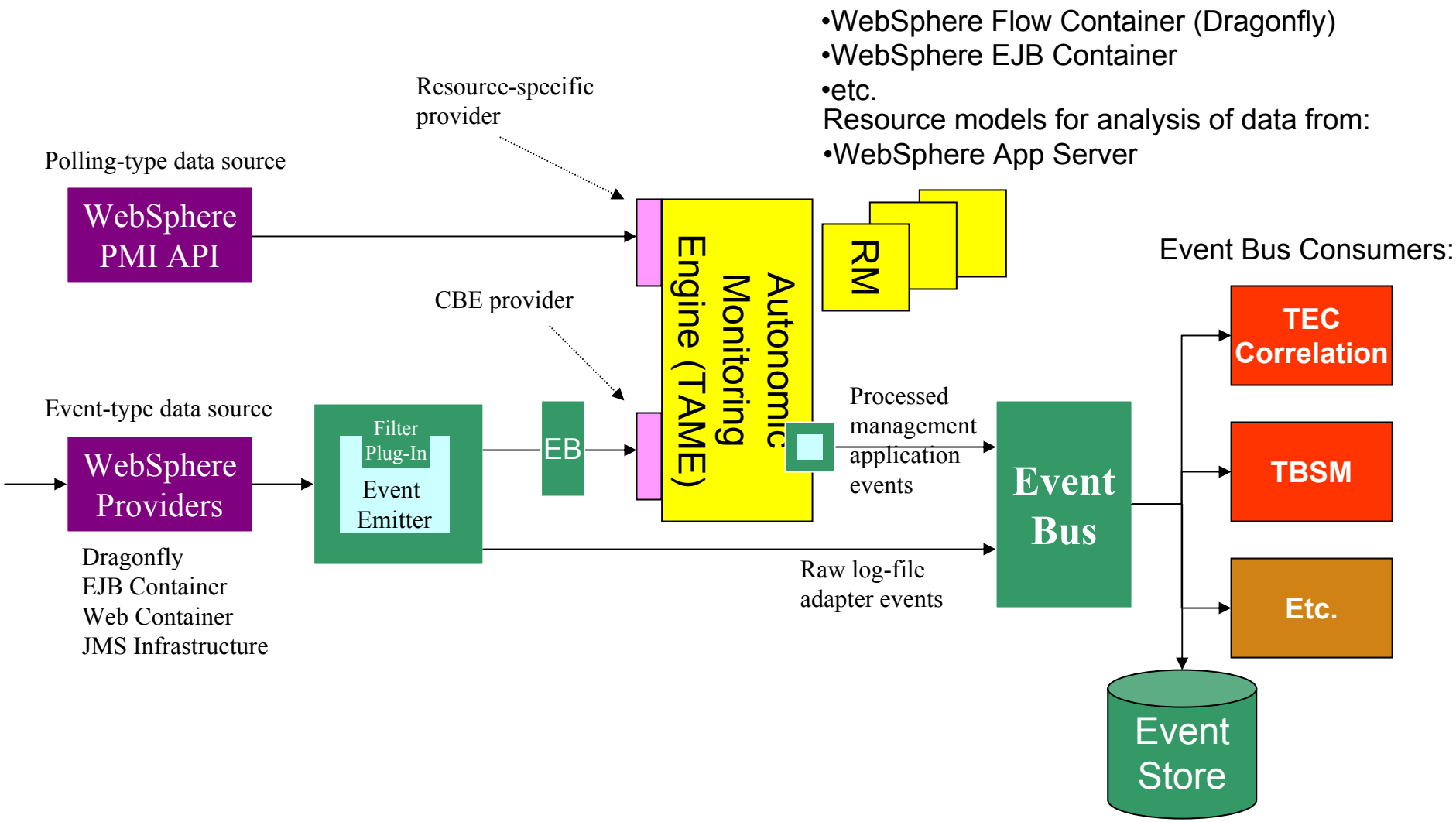
CEI in TEC Topology



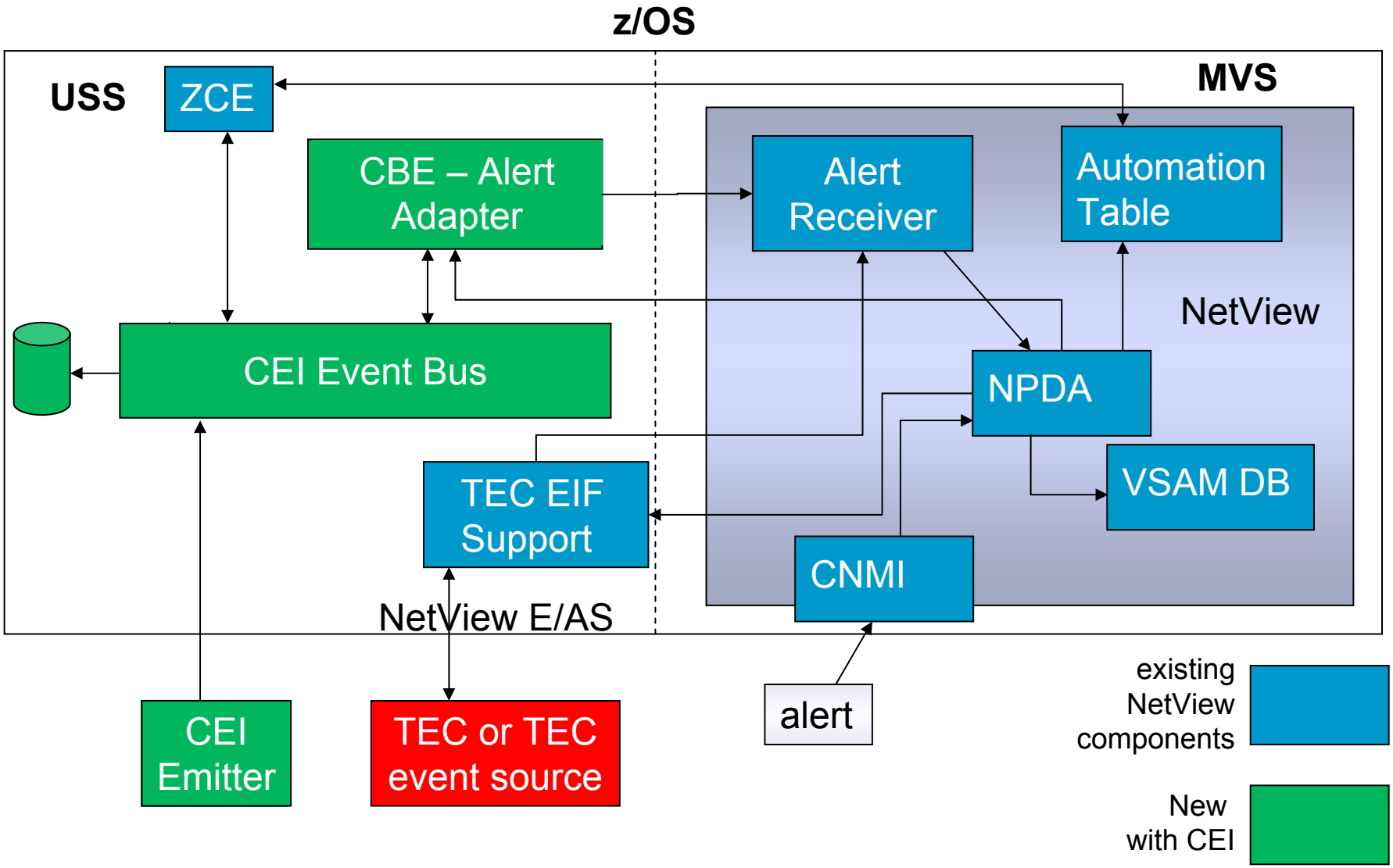
CEI in WebSphere Topology



CEI in Monitoring Topology



CEI in NetView Topology



Agenda

- Market Overview
- CEI & SWG Component Strategy
- Highlights
- Exploiters
- **System Design & Programming Interfaces**
- IT & Business Integration

CEI: Overview

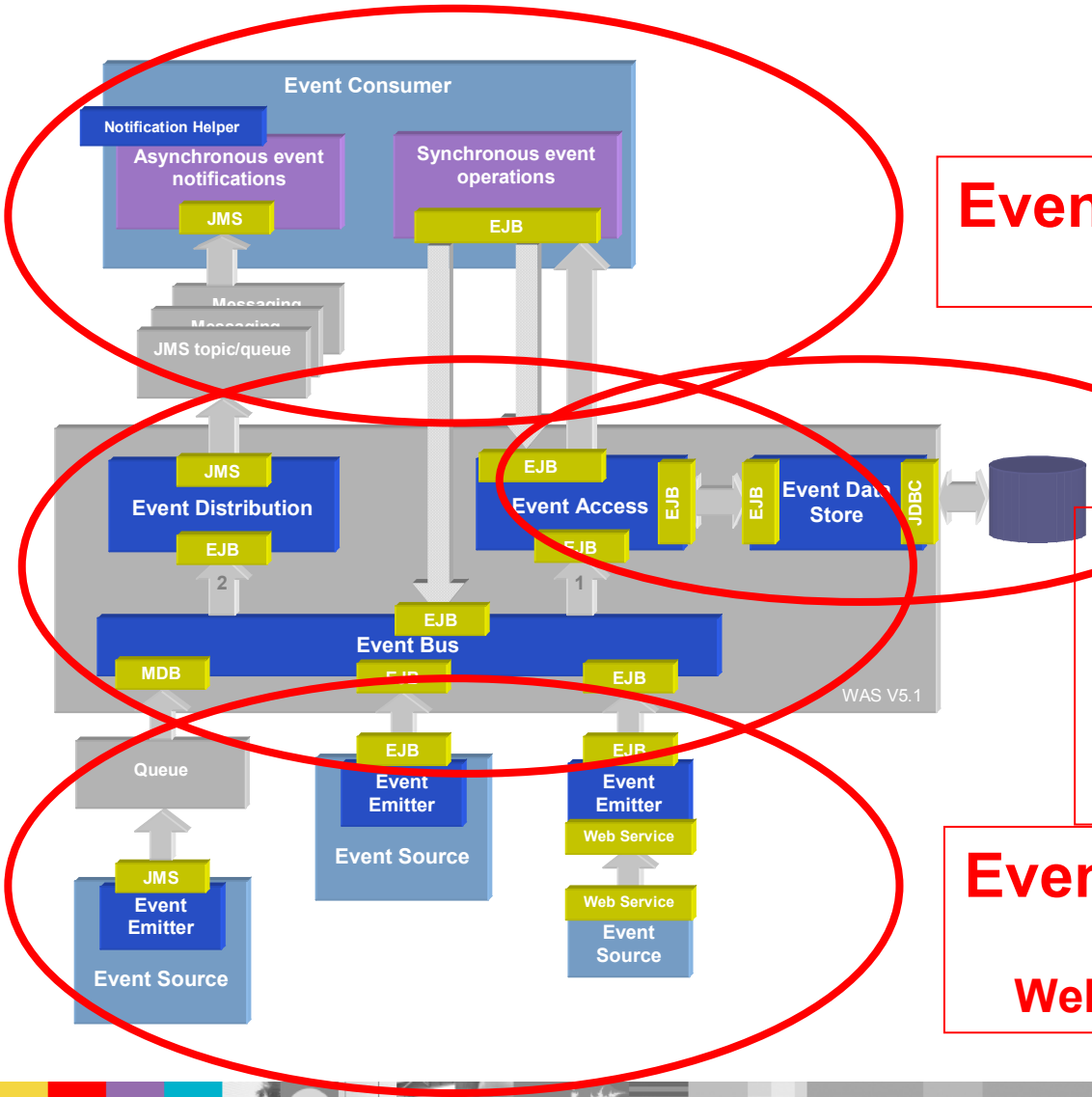
Interfaces

Event Reception

Event Subscription

Event Query / Update

Event Submission



Event Consumers
Using JMS

Event Data Store
RDBMS

Event Bus
Built on WebSphere messaging technology

Event Generation
J2SE, J2EE, Web Services, C/C++

Agenda

- Market Overview
- CEI & SWG Component Strategy
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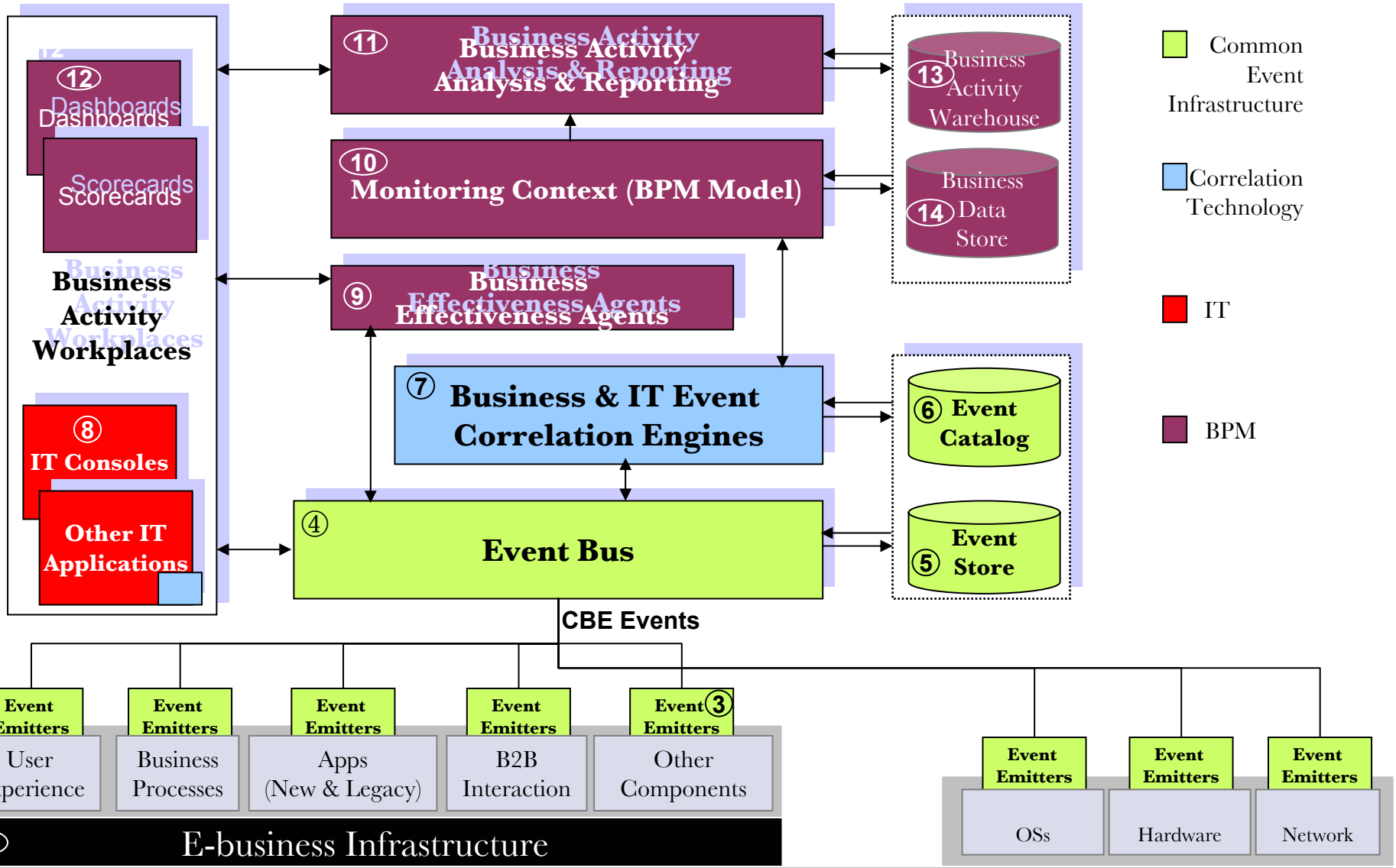
- System Design & Programming Interfaces
- **IT & Business Integration**

CEI & IT/Business Functional Architecture



IBM Software Group

IBM Business Performance Management:
Business Systems Framework Domain Overview

Mark Masercola

@business on demand software

Creating an Open Framework for BPM

The Information Framework

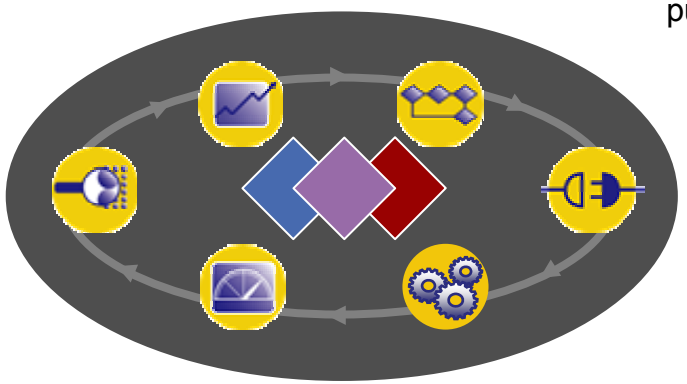
Specifies the technical interfaces that partners can exploit to analyze and process business information. Describes the direction for analytics. Example: download white paper. Now.

The Business Rules Framework

Outlines the technical interfaces partners can exploit to add value. Puts forth a vision and direction for business rules. Example: download white paper and trial IBM software. Now.

The Common Event Infrastructure

Delivers a set of tools to specify and publish any type of business and IT event. Specifies the overall BPM event infrastructure. Example: download IBM software. End of March.



The Workplace Framework

Delivers collaborative workplaces for partners to leverage, to securely integrate people, processes, applications, and information via a single point of access.

The Process Framework

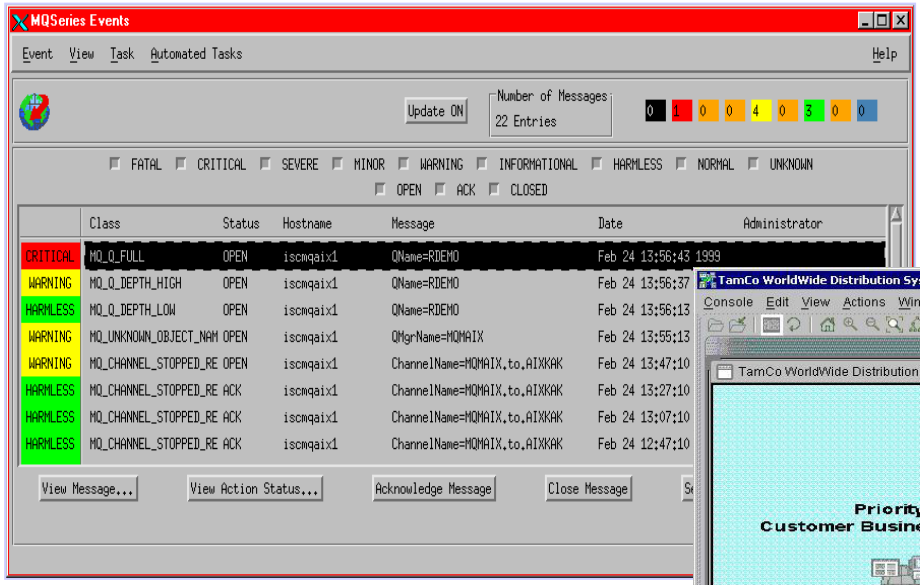
Delivers tools to model and manage business processes. Examples: download IBM software, WBI modeling tools. Now.

The Business Systems Framework

Delivers tools to align IT with business processes to optimize value. Examples: download whitepaper. End of March.

Objective of the Business Systems Framework

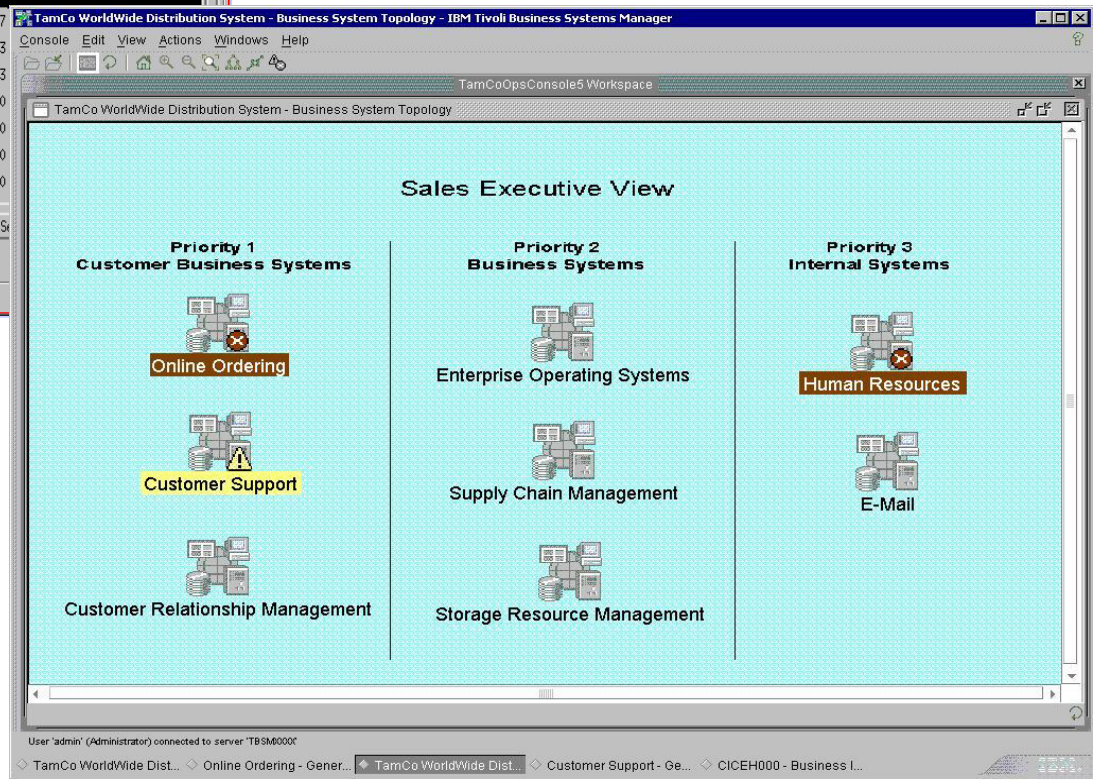
Translate IT infrastructure status into meaningful business alerts



- Manage the infrastructure in terms of business systems
- Prioritize IT projects based on their impact to business success

Event-based management

Business-based management



IBM Business Performance Management:
Business Systems Framework Domain Overview

Role of the Business Systems Framework Domain

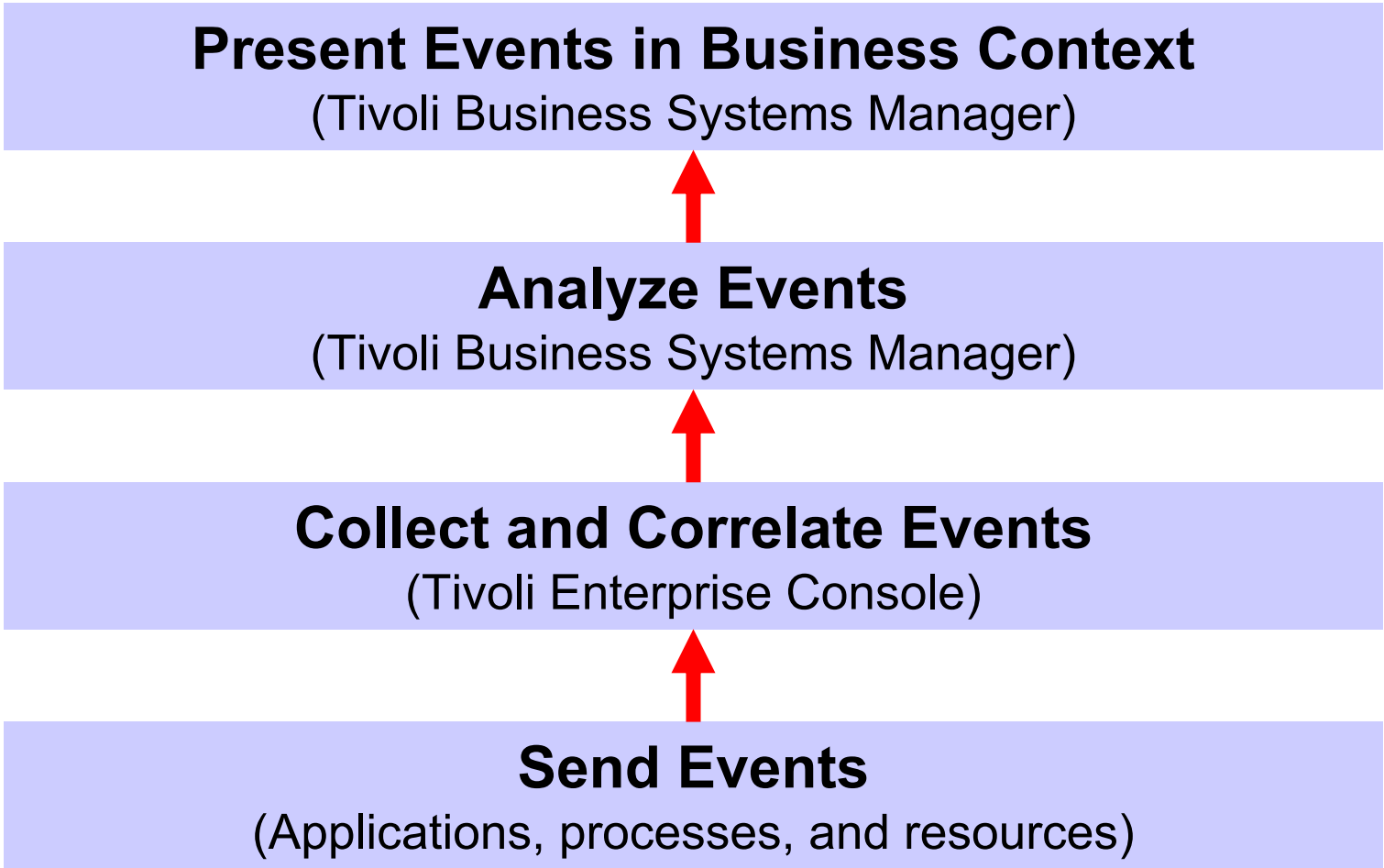
Architecture of the Business Systems Framework Domain

Integrating into the Business Systems Framework Domain

Additional Resources and Information

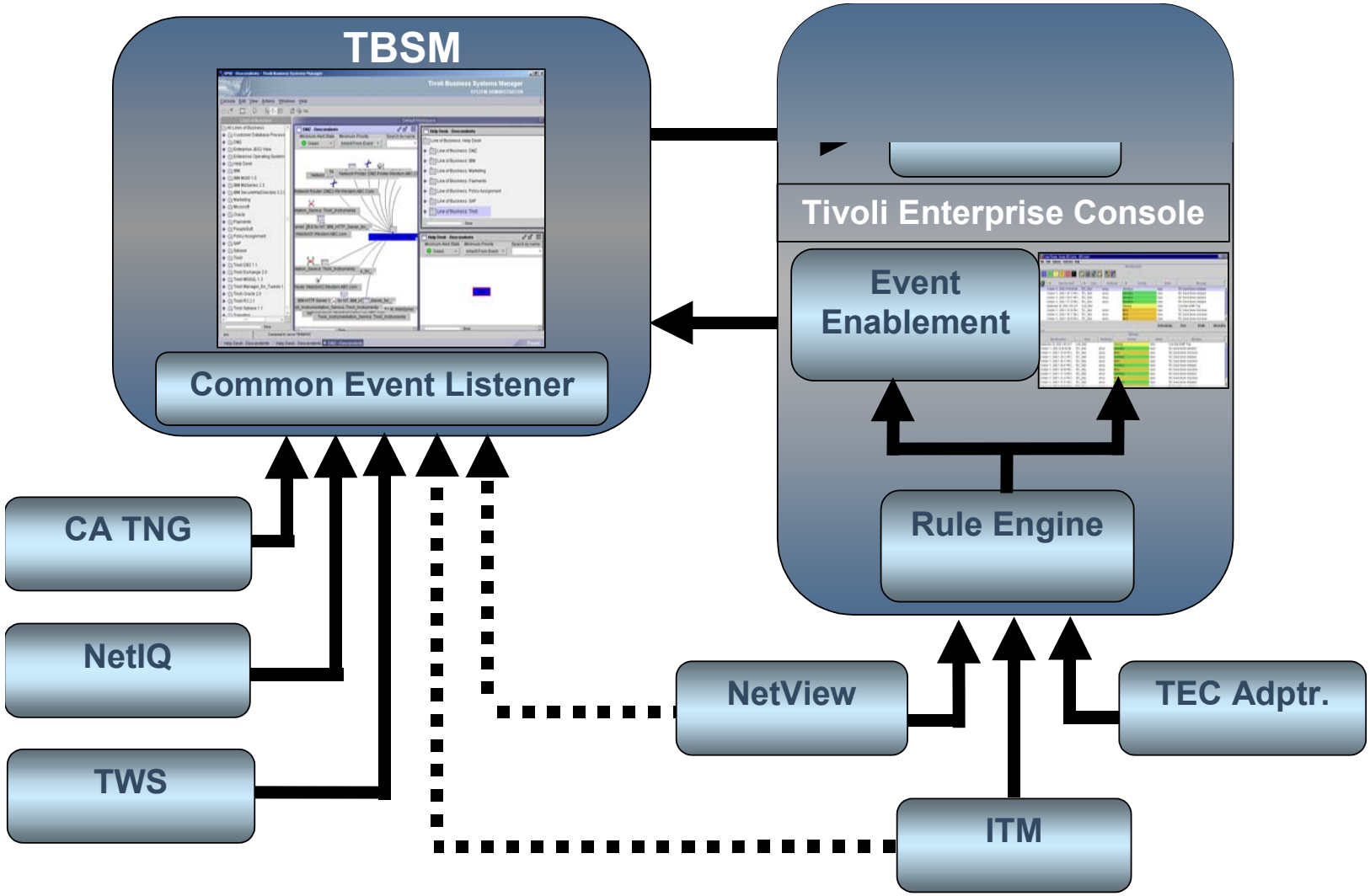
Business Systems Framework Architecture

Turning IT Information into Business System Information



Sample architecture of Business Systems Framework

Applications send info to TEC through adapters. TBSM presents status.



IBM Business Performance Management:
Business Systems Framework Domain Overview

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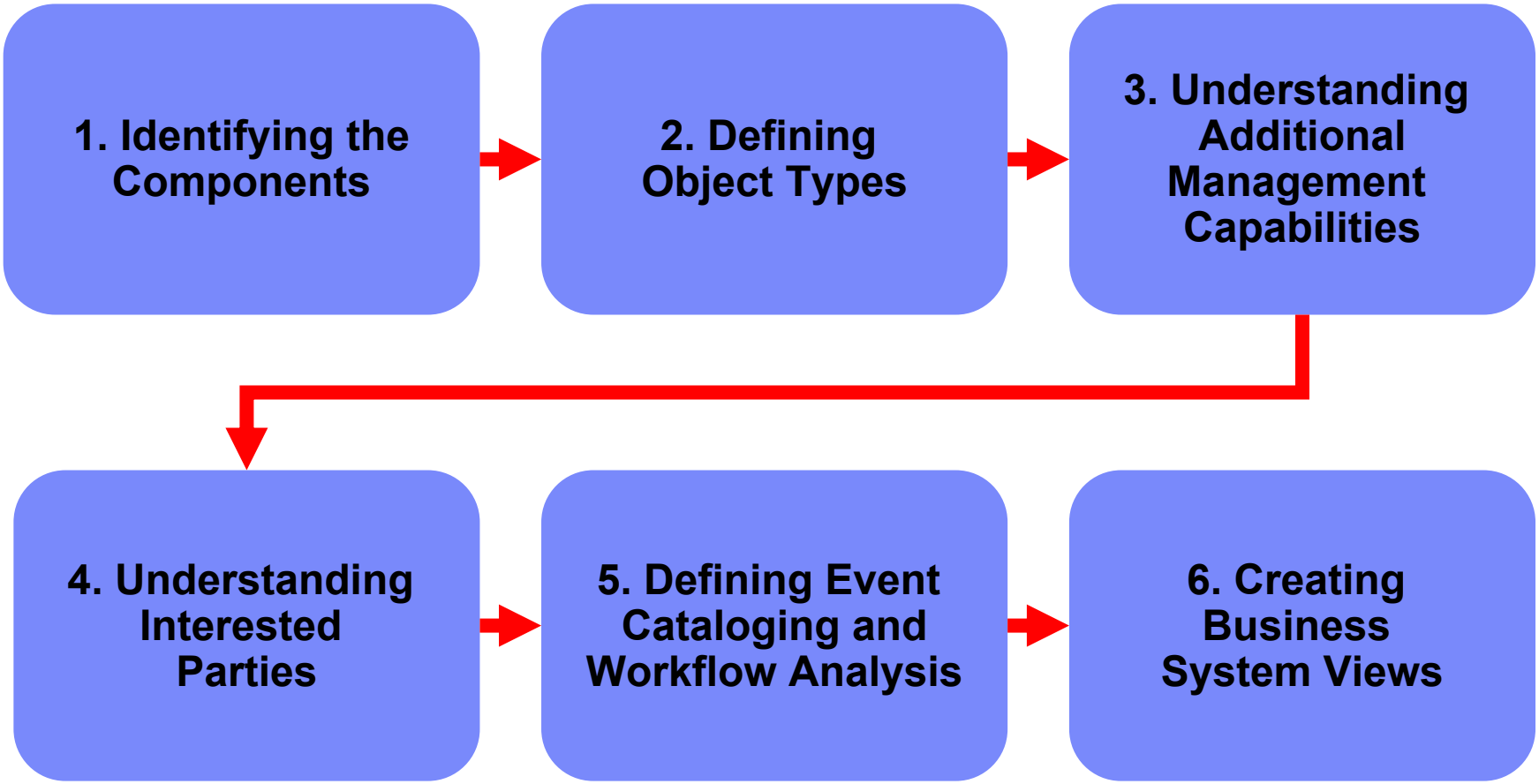
Integrating Applications into the Business Systems Framework

A step by step process to integrating your application



1. Identifying the Components

Select the resources to be included in the Business Service Context

- **Compile candidate systems, resources or components**
  - ***Applications, processes, resources***
- **Determine available status information**
  - ***Is the resources up or down?***
  - ***How is the resource performing?***
  - ***Are we on track to meet service level agreements?***
- **Assess ability to communicate status**
  - ***Can I send an event when the resource goes down?***
  - ***Can I send an event when the resource comes up?***
- **Change resource as needed to communicate**
  - ***Do I have an API or exit to enable me to communicate status?***

2. Defining Object Types

Incorporating resources as objects in TBSM object model

- **Create an object type for new resource types**
  - ***Software name, version number, and icon***
- **Extend TBSM object model with new Object Type**
  - ***Leverage TBSM tool set to define and integrate Object Type***

3. Understanding Additional Management Capabilities

Define the scope of resource control within TBSM

- **Create resource package for each new class**
  - ***Includes definition of events and actions for resource***
- **Define events that can be forwarded**
  - ***What information can be sent about the resource status?***
- **Define actions and commands for the resource**
  - ***What actions should users be able to take on resource?***
- **Instrument resource as necessary**
  - ***If no events are actions are pre-defined, resource instrumentation may be necessary to provide access to data***

4. Understanding Interested Parties

Ensuring that the needs of all users are met

- **Compile list interested parties**
  - ***Operators, Administrators, Business Unit Executives***
- **Determine information required by each party**
  - ***Business system status, access to in-depth commands***
- **Assess ability to meet user requirements**
  - ***Can operators take action to resolve problems?***
  - ***Can Business Unit Executives understand status at a glance?***
- **Instrument resource as necessary**
  - ***Address gaps in capability through instrumentation as needed***

5. Defining Event Cataloguing and Workflow Analysis

Communicating resource status and how it will be used

- **Define rules for resource identification**
  - ***Can I identify resources of this type by name, IP subnet, other?***
- **Create TEC adapter for resource**
  - ***Convert resource events into TEC events***
- **Create TEC rules for resource events**
  - ***Which events should be forwarded to TBSM?***
- **Ensure availability of "clearing events"**
  - ***Prevent old events from collecting in TBSM***
- **Outline Workflow based on User Role**
  - ***What should be done when the event is received?***

6. Creating Business System Views

Select the resources to be included in the Business Service Context

- **Automate business system creation**
  - ***Leverage object name, object type, or location where possible***
- **Drag and Drop resources into Business Systems**
  - ***Pull individual resources from "All Resource" view of TBSM***

IBM Business Performance Management:
Business Systems Framework Domain Overview

Role of the Business Systems Framework Domain

Architecture of the Business Systems Framework Domain

Integrating into the Business Systems Framework Domain

Additional Resources and Information

Additional Resources and Information

IBM Tivoli Business Systems Manager – Administrator's Guide, Version 2.1.1	http://publib.boulder.ibm.com/tividd/td/BSM/GC32-0799-01/en_US/HTML/bsmatfrm.htm
IBM Tivoli Enterprise Console – Rules Developer's Guide	http://publib.boulder.ibm.com/tividd/td/tec/SC32-1234-00/en_US/HTML/ecodmsttfrm.htm
Tivoli Event Integration Facility – Reference, Version 3.9	http://publib.boulder.ibm.com/tividd/td/tec/SC32-1241-00/en_US/HTML/ecoemsttfrm.htm
IBM Tivoli Enterprise Console – Rule Set Reference	http://publib.boulder.ibm.com/tividd/td/tec/SC32-1282-00/en_US/HTML/ecosmsttfrm.htm
Ready for IBM Tivoli Software Checklist, IBM Tivoli Enterprise Console	Available through PartnerWorld for Software

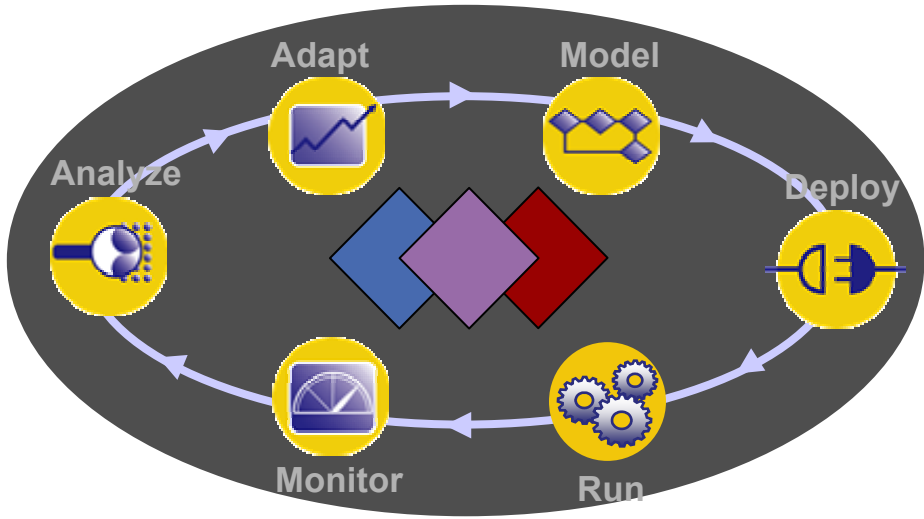
IBM Software Group

IBM Business Performance Management: Information Domain

Louis Thomason

Process Analysis and the Information Domain

- **Companies seek to optimize business processes**
- **Business goals determine the relevant metrics**
- **Analysis of these metrics provides business insight**
- **Information Domain enables the analysis**



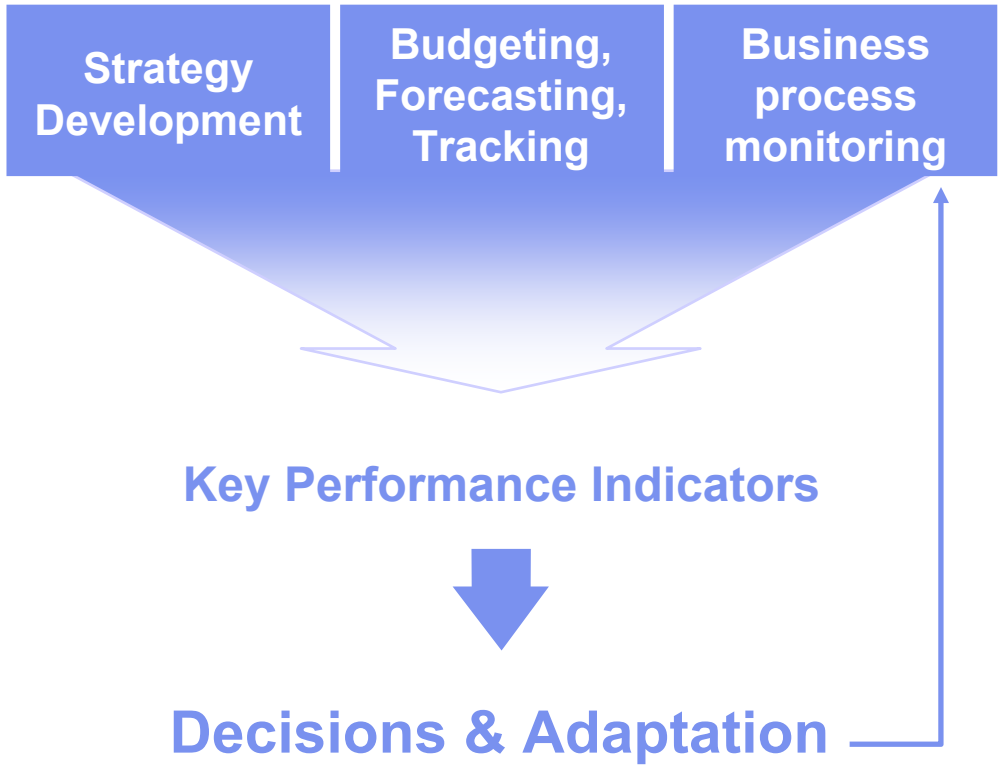
Analyze The Process

- **Enables information based insight to business process**
- **Integrates Information Across**
  - real-time events,
  - historical data, and
  - business transaction data
  - External sources

  diagnose business process performance problems.
- **Enables evaluation of alternatives:**
  - Process improvement
  - Strategies linked to process
- **Enables Real Time Alerts (New Events)**
  - Automated actions
  - Human notification

Leverages Business Intelligence Capabilities

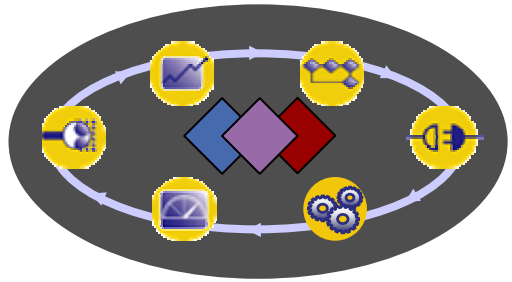
- Methodologies
  - Balanced Scorecard
  - Value-Based Management
  - Activity-Based Costing
- Focus Measures
  - Financials,
  - Customers,
  - Suppliers,
  - Markets,
  - Channels,
  - Products,
  - Profit,
  - etc….



The Information Domain

Specifies the technical capabilities and interfaces partners can exploit

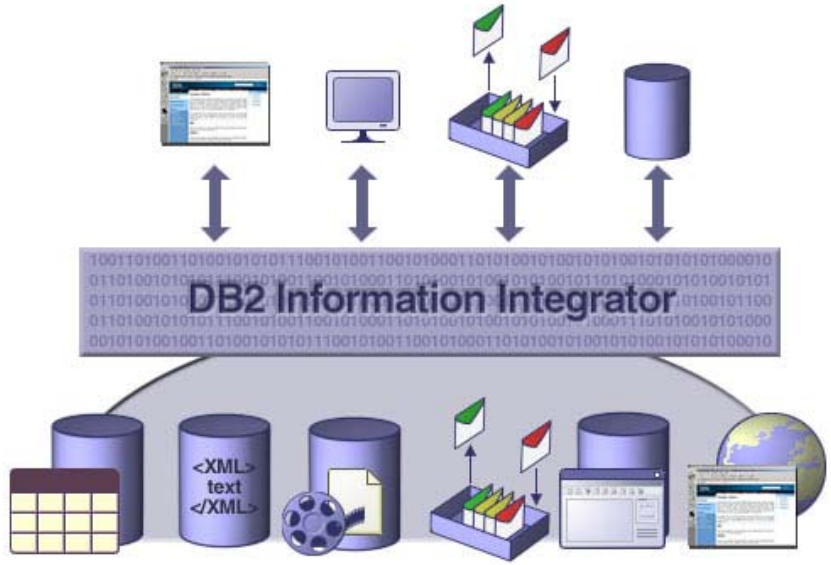
to enable analysis of the business process



- **Enables partners to provide user customizable real-time analytics and reporting on business performance**

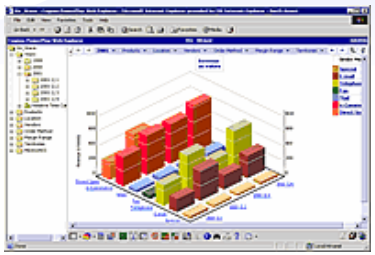
- **Frame work of information integration and business intelligence capabilities to assess business performance and prioritize actions.**

- **Leveraging**
  - **Web Services Access to information supports quick assembly**
  - **Based on Open Standards**
    - SQL, XML, JDBC, ODBC
    - Metadata standards, etc.



Performance Management Dashboards

Business Performance Analysis Tools



Analytic workers

Process Monitor

Process Managers

Information Portals

Managers & Employees

Business Service Management Tools

IT Operations

Moving Business Information data closest to the user

Visualization and Reporting

- **Leverages Integrated Information**
  - Process
  - Event
  - Historical Transaction
- **Supports a range of functions:**
  - Basic reporting
  - Advanced visualization (3D, animation, etc.)
  - Statistical analysis
  - Advanced analysis multi-dimensional analysis (OLAP)
  - Data mining
- **Leverages underlying information services capability**
  - Hierarchical metadata
  - Integrated scoring
  - Query optimization and management
  - Aggregations
- **Enabled in portal framework**

Information Domain

- **Stored Information Managers**
  - Stores unique information supporting BPM
    - Process state data
    - Events
    - Historical process and transaction data
      - Warehouses
      - Data Marts
      - Operational Data Stores
    - Content Managers
- **Information Integration Services**
  - Focuses control of performance, availability, and integrity
  - Insulates analysis from heterogeneity of information
    - Format
    - Location
  - Allows changes to underlying sources without impact to analysis and reporting

Information Integration: Complementary Capabilities

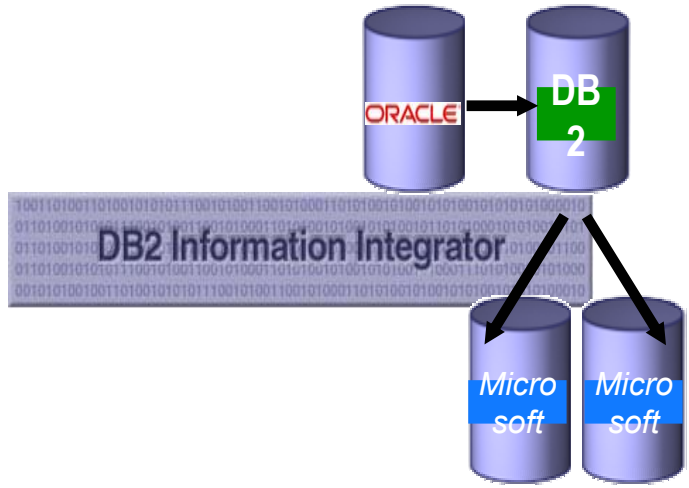
- **Consolidate historical and event data for local access**
  - Improve access performance or availability
  - Currency requirements: point-in-time consistency (close of day, etc.)
  - Complex transformation required to achieve consistent data
  - ETL and Replication capabilities
- **Integrated access to historical and event sources**
  - Tradeoffs to achieve overall lower cost implementation
  - Currency requirements: current data
  - Restrictions on source data movement:
    - Data security
    - Licensing restrictions
    - etc.
  - Federation

ETL Capability

- **Traditional**
  - Batch process executing within a defined time window
  - Moving large volumes of data
  - Extensive transformations
  - Data quality services
- **Real-time transformation**
  - Invocation in real-time on behalf of federated queries and transactional information flows
- **Key capabilities:**
  - Transformations: change, summarize, convert or combine information
  - Metadata:
    - discover the structure and semantics of data sources
    - capture the meaning and description of information sources,
    - actively managing and highlighting the impact of changes, and
    - exchanging this metadata with other tools
    - tools relate information among sources and targets
  - Standardize and match content of sources for highest quality results

Replication Capability

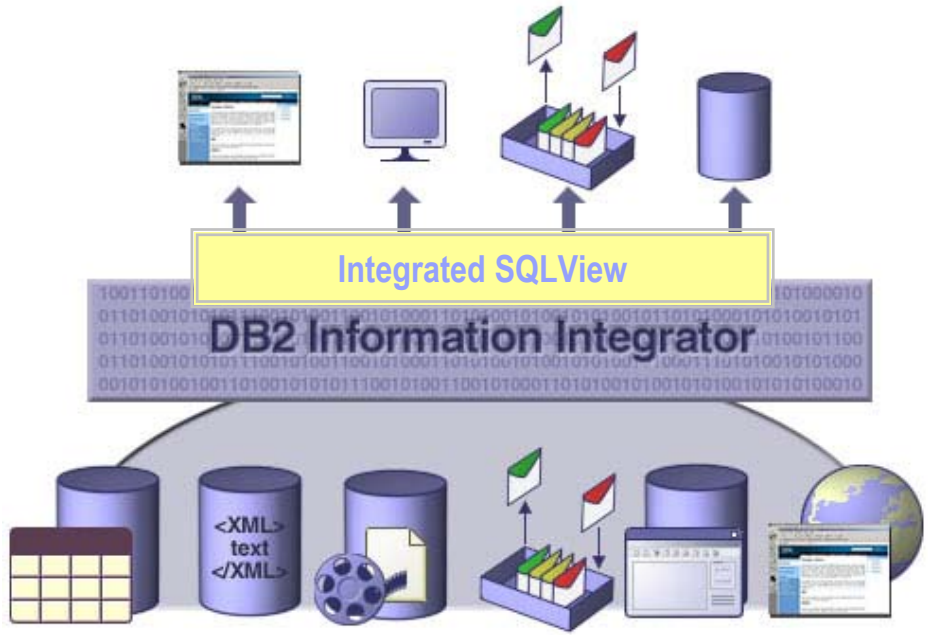
- Distribute data databases
  - Heterogeneous
- Flexible topologies
  - Distribution: One to many
  - Consolidation: Many to one
- Match movement modes to usage requirements
  - Table-at-a-time
  - Transaction-at a time
- Managed latency
  - Scheduled, interval-based, continuous
- In-line transformations
  - SQL or stored procedure based



Federation Capability

Query integrated sources as if they were a single source

- Define integrated view across event and historical sources
  - Wide range of data and content sources
  - Extensible to virtually any data source
- Query as if a single source
  - Standard SQL query and expressions
  - Leverage query optimization and caching
- Relational updates

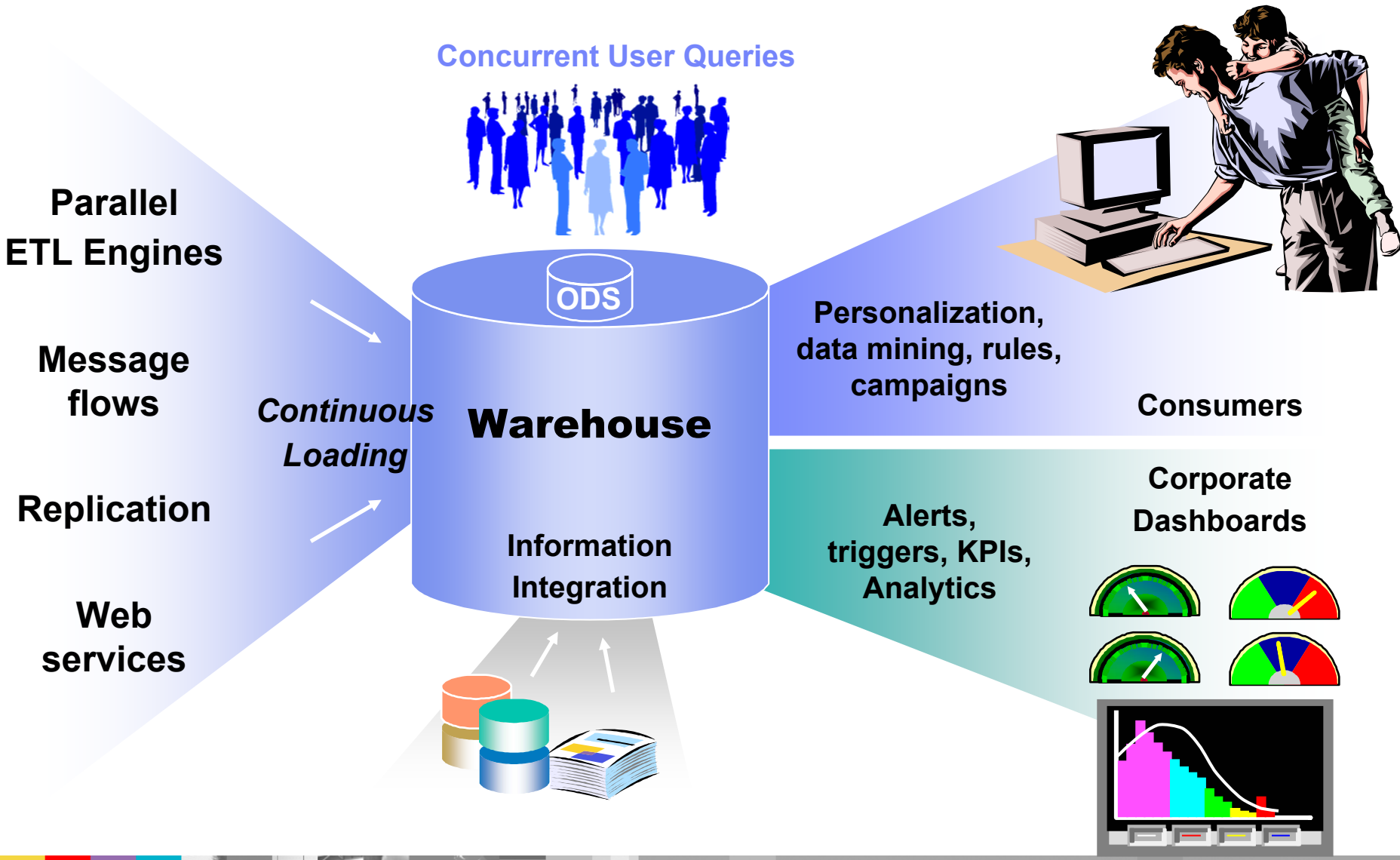


DB2, Oracle, SQL Server, Sybase, Teradata, OLE DB, ODBC, Excel, XML, message queues, Web services, flat files, document repositories, content repositories, LDAP directories, WWW, email databases, and more.

Consolidation and Federation

- **Combinations allow best available solution**
  - Provide Context
    - Compared to what?
    - What happened last year? Last week?
    - Forecast versus actual?
    - Is this abnormal? Common?
    - When should we escalate?
  - Analysis [filtering]
    - Summaries and aggregates
    - Mining for patterns, predictions
- **Capabilities from one strengthen other**
  - Data Profiling,
  - Transformation,
  - Data Quality,
  - Metadata Management
  - Query performance optimization

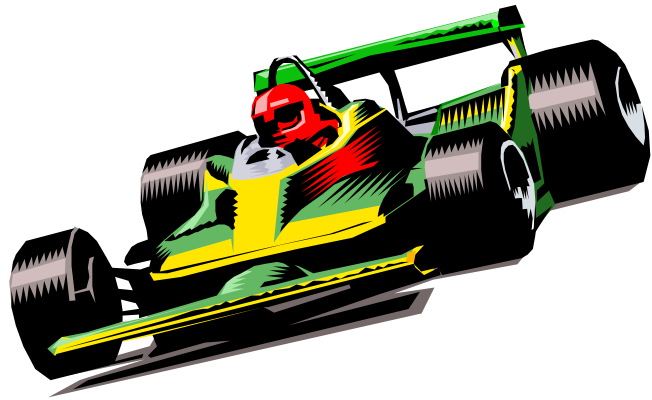
Real Time Warehouse



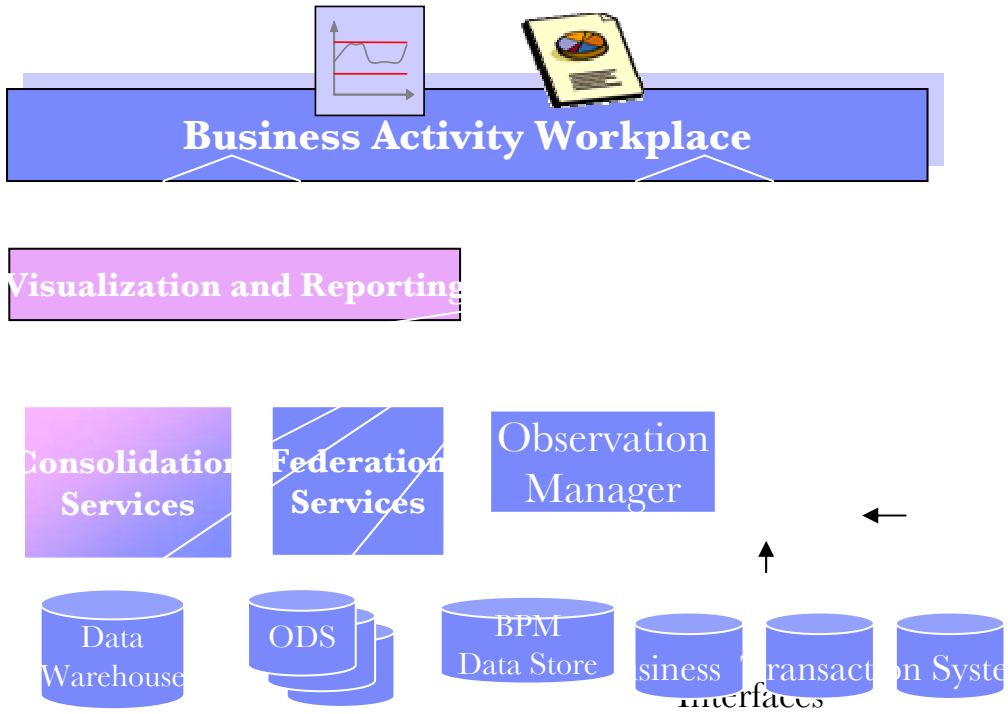
Relational Storage

Real Time Business Performance Management Information

- Proven performance, range of benchmarks
  - TPC-C, TPC-H, SAP, PeopleSoft, JDEdwards, Siebel benchmarks
- Real Time updates/Online Utilities
  - Concurrent loading + queries
  - Queued data loads
- Policy-based query management
- Data Node groups for workload management
  - ODS and Real Time tasks on their own nodes



Information Domain: Interfaces



Information Domain: IBM Capabilities

Information Domain Capability	Products
Visualization and Reporting	Partner
Consolidation Services	Partner DB2 Information Integrator DB2 Warehouse Edition
Federation Services	DB2 Information Integrator
Information Storage	DB2 UDB

IBM Business Performance Management: Business Process Domain

Kumar Bhaskaran

- Role of Workplace in BPM
- Workplace Architecture
- User Experience & Dashboards

Business Process Management Domains

The Information Domain

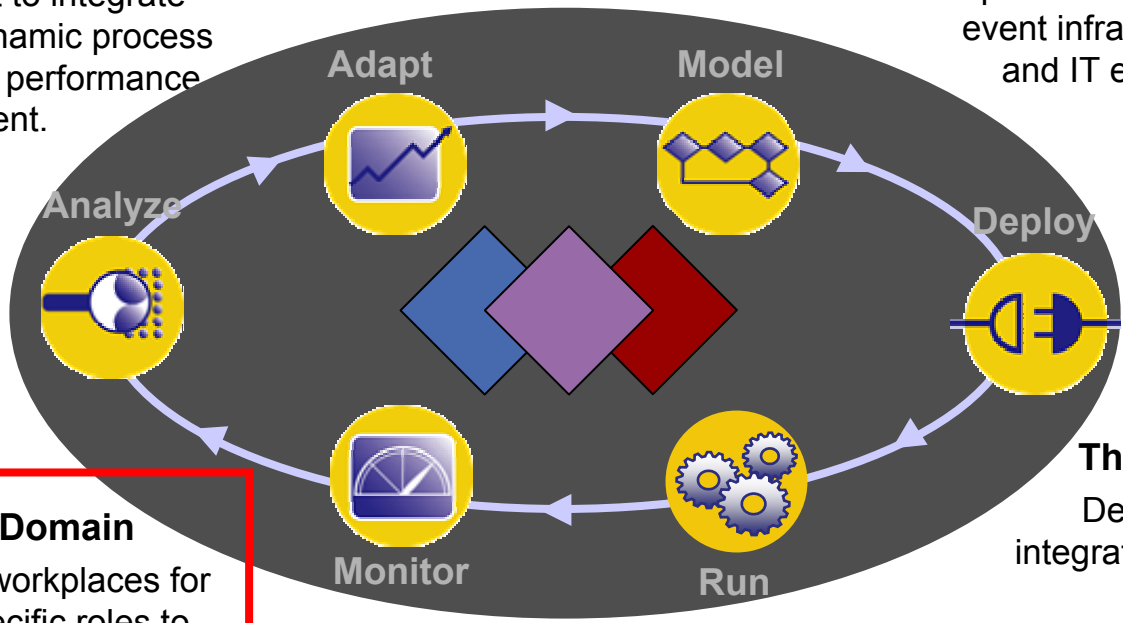
Specifies the technical interfaces that partners can exploit to analyze and report real-time business event and performance information.

The Business Rules Domain

Outlines the technical interfaces partners can exploit to integrate business rules for dynamic process control and adaptive performance management.

The Common Event Infrastructure

Specifies a commonly applicable event infrastructure for business and IT event management.



The Workplace Domain

Delivers collaborative workplaces for human users with specific roles to manage business & IT operations based on visualized real-time performance metrics and alerts.

The Process Domain

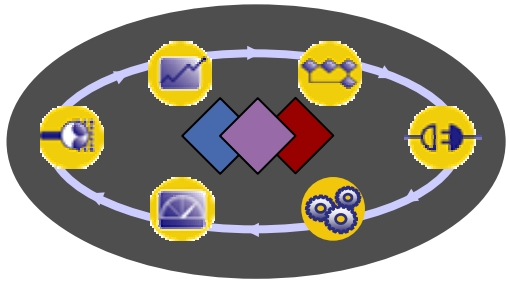
Delivers tools to model, integrate, and manage business operations.

The Business Systems Domain

Delivers tools to align IT with business operations to assess impact and optimize value.

The Workplace Domain

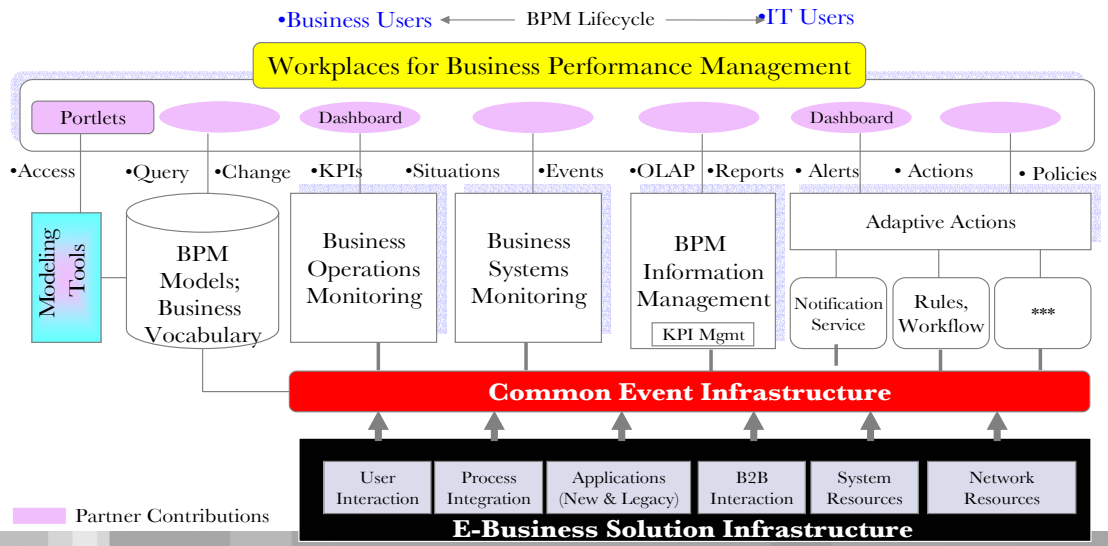
Delivers collaborative workplaces for human users with specific roles to manage business & IT operations based on visualized real-time performance metrics and alerts



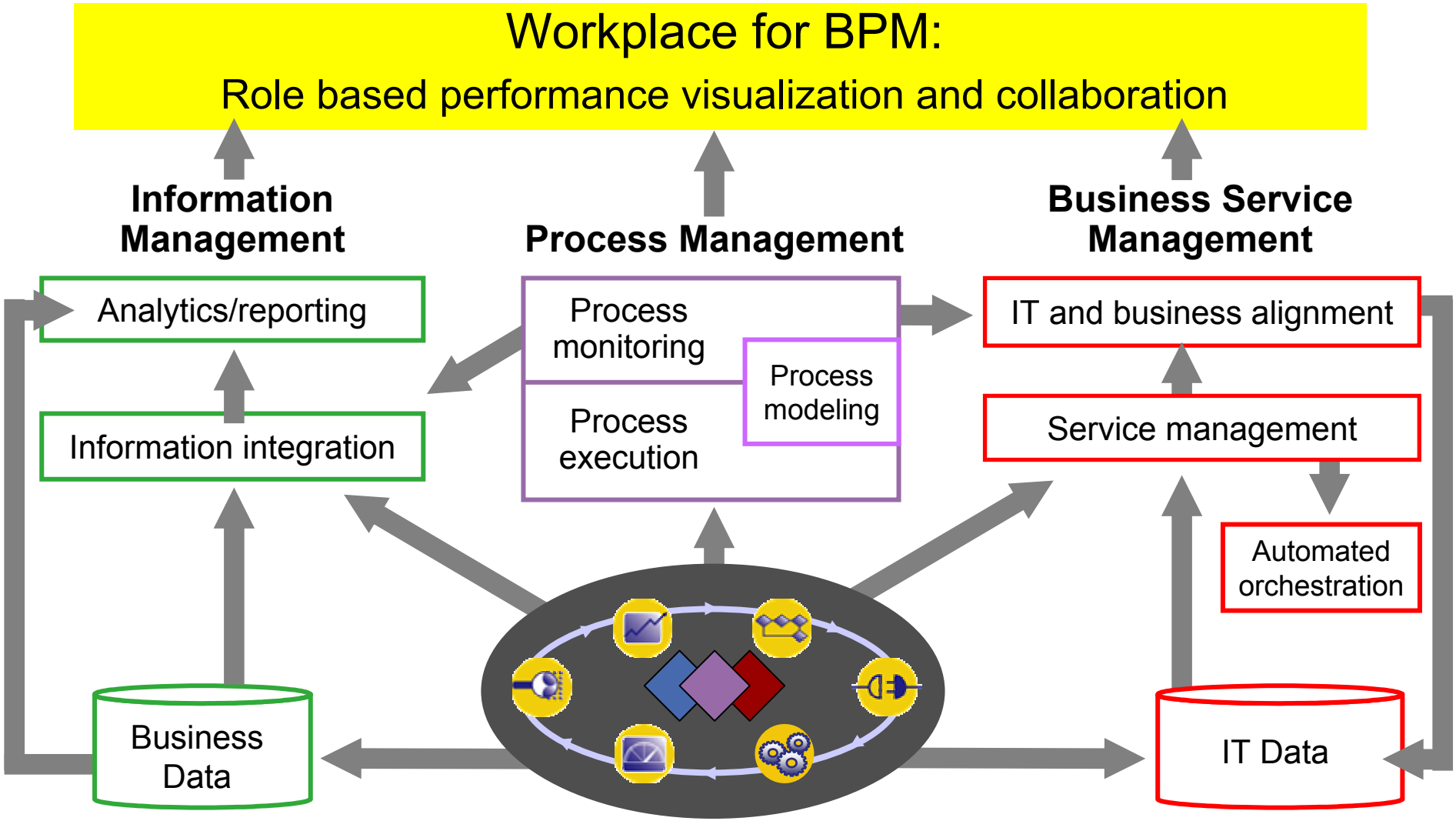
Enable partners to provide user-customizable actionable insights and virtual team collaboration to take real time actions using role-based, context-sensitive Workplaces.

- **Available Today**
  - Lotus Workplace supports human interaction and collaboration capabilities that can be extended using WebSphere Portal to access enterprise process, applications and systems.
  - Whitepaper

- **Commitment to Open Standards**
  - Workplace Domain is based on J2EE, Web Services and Content Management Standards

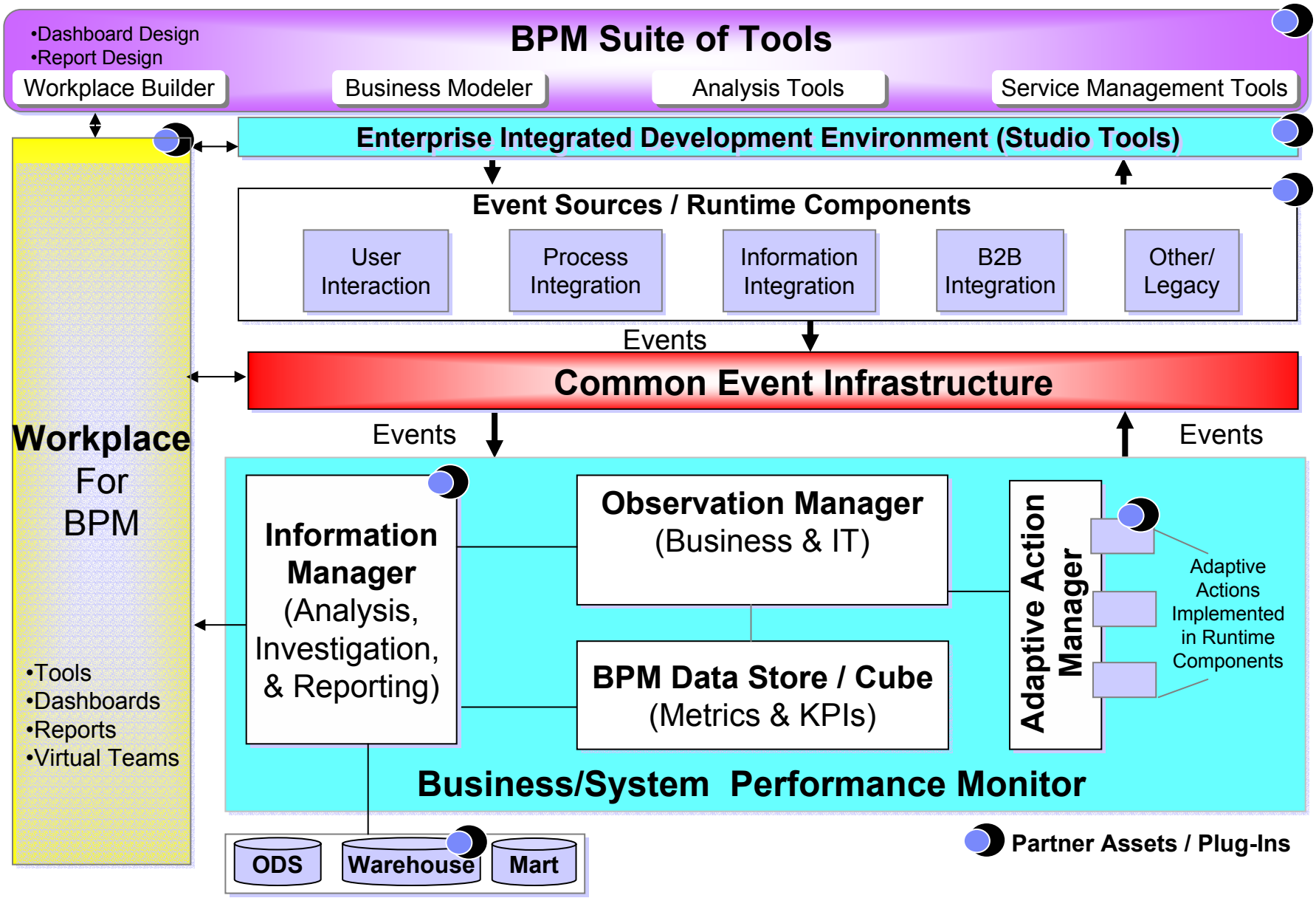


Business Performance Management: Core Capabilities

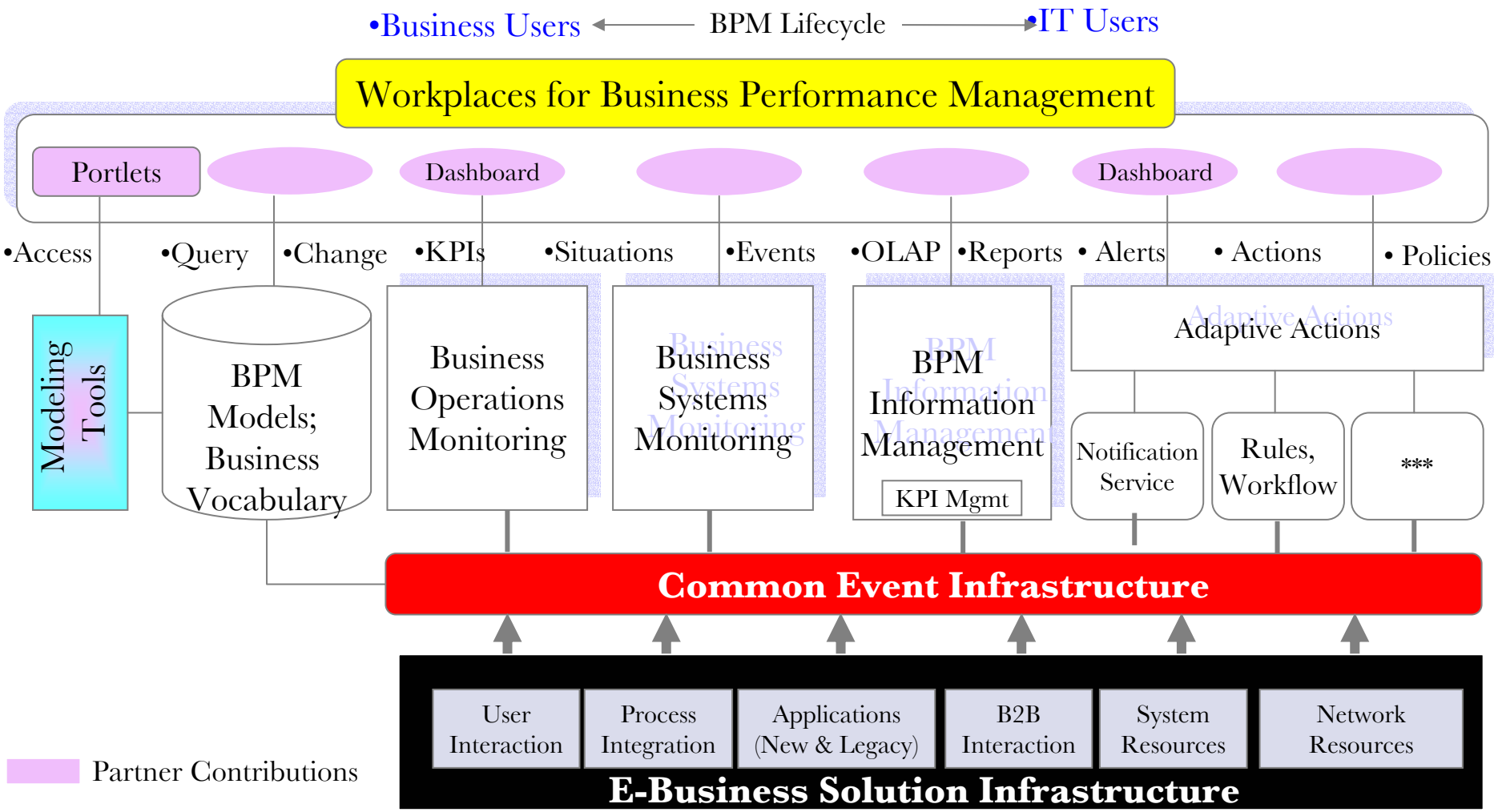


- Role of Workplace in BPM
- Workplace Architecture
- User Experience & Dashboards

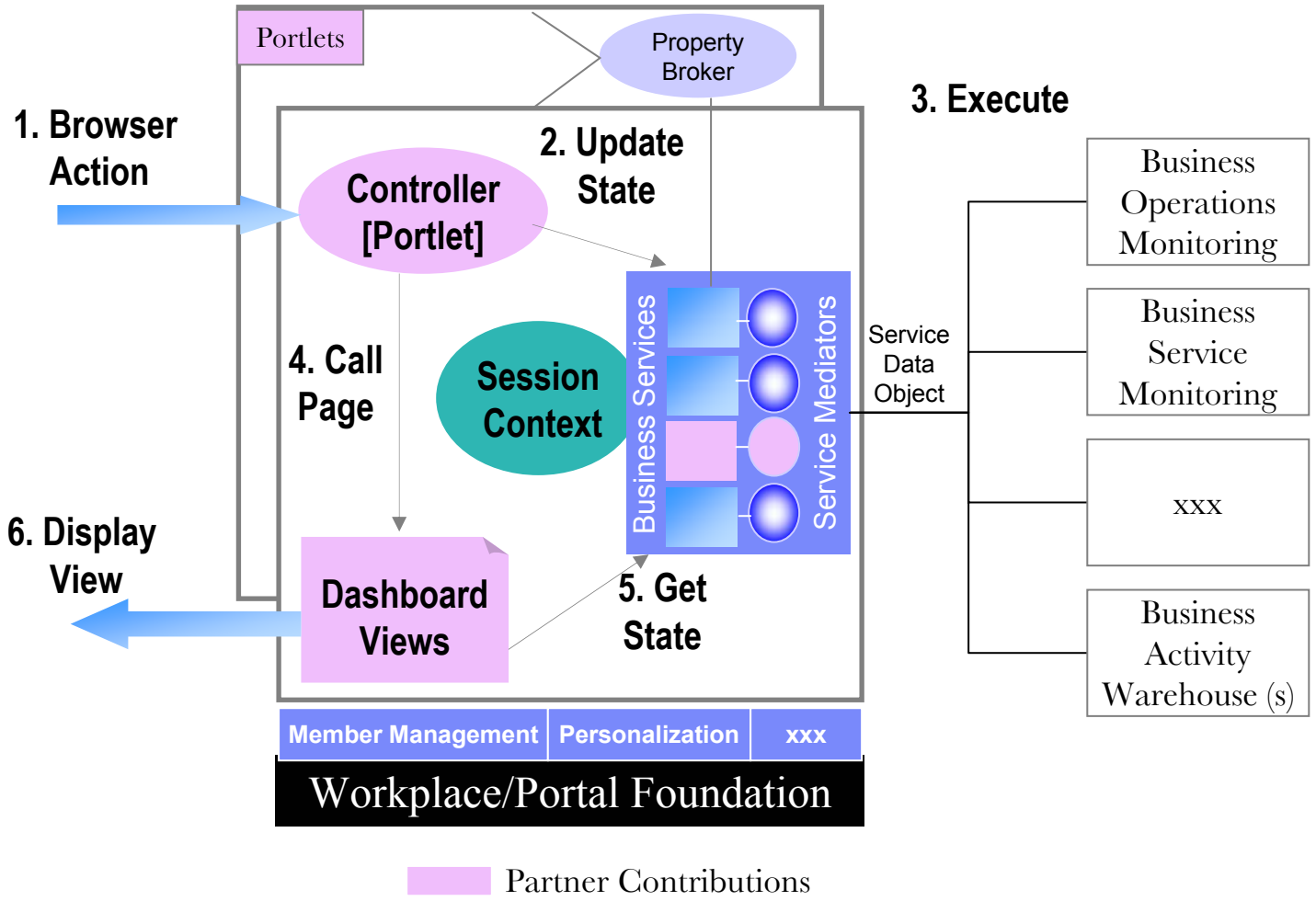
BPM Framework



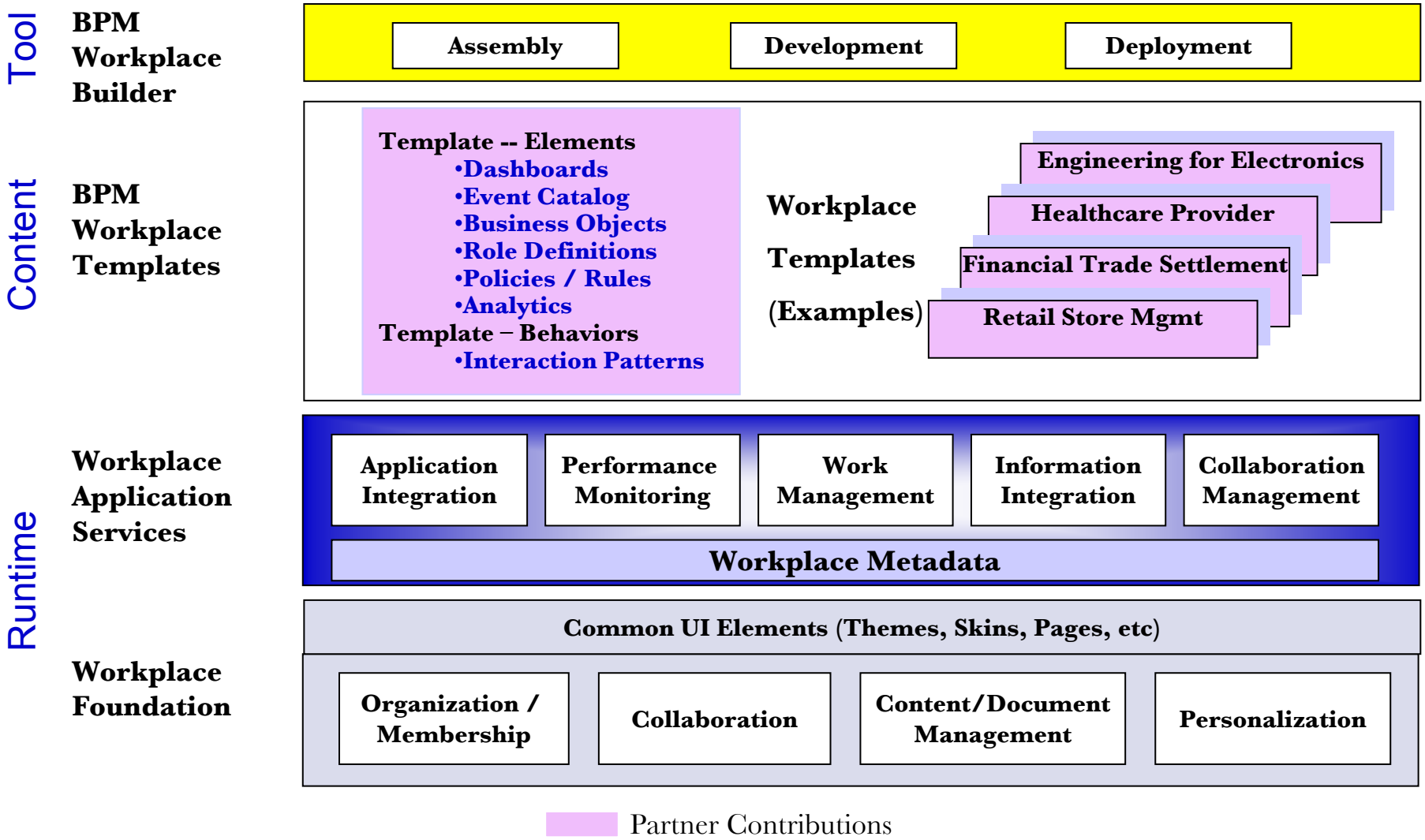
Dashboard Functional Architecture



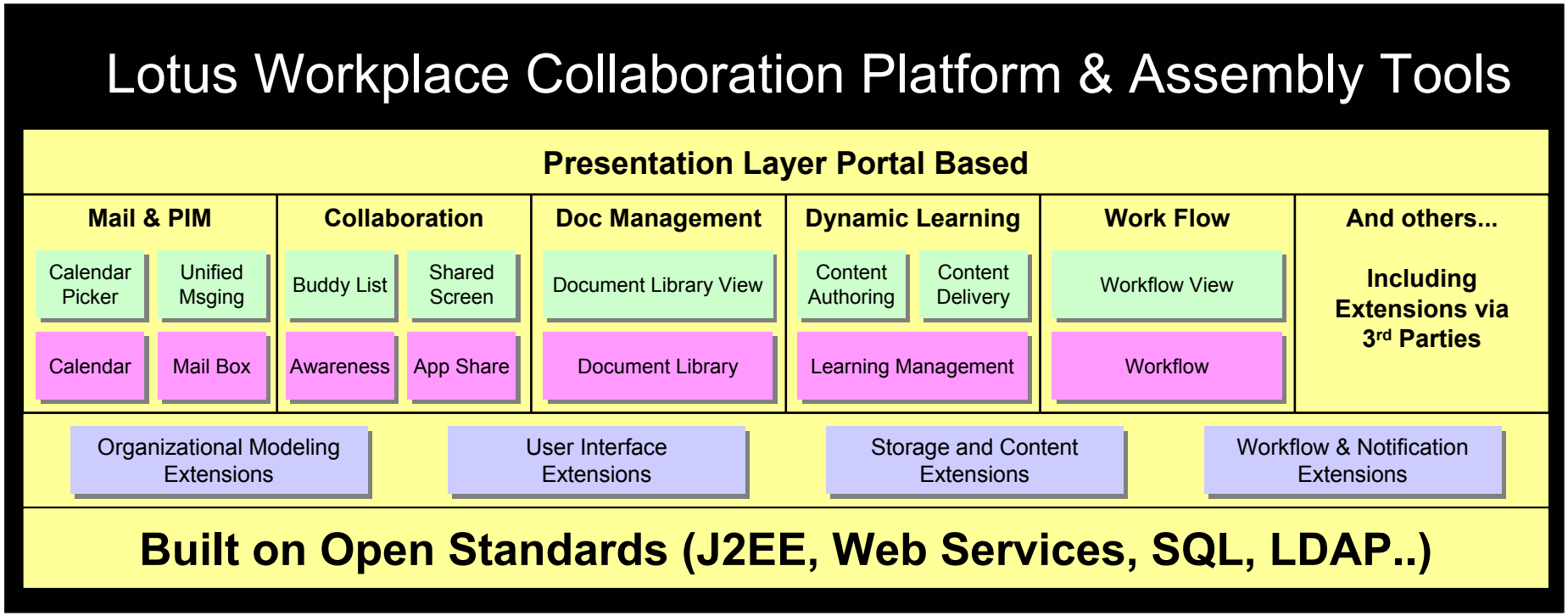
Dashboard Assembly based on Model-View-Controller Pattern



Workplace for BPM Reference Architecture



Workplace Foundation Architecture



- Role of Workplace in BPM
- Workplace Architecture
- User Experience & Dashboards

User Experience in Workplace for BPM

The workplace
(WebSphere Portal)
Tailored reporting

Visualization tools, "portlets"

Manage/orchestrate
systems
Tivoli BSM

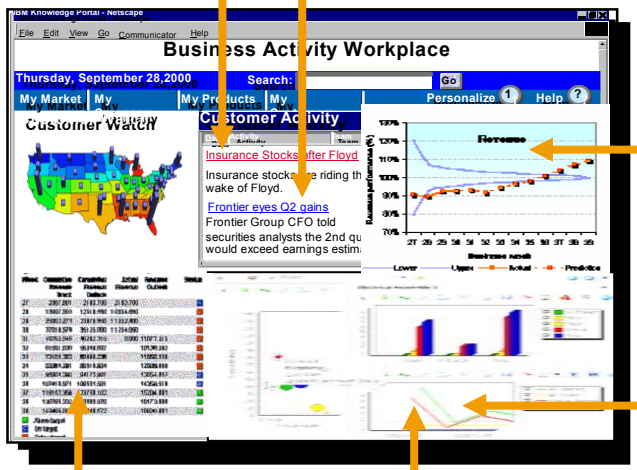
Integrated Solutions Console

Alerts
Tivoli BSM, WBI Monitor,
business intelligence,
business rules

Application, system, data and process events

Prompted actions
(WBI Monitor/business rules)

Customize rules; provide rules management system



Collaboration service
(IBM Lotus Instant Messaging)

Collaborate with Virtual Teams

Comparative analyses
DB2 Information Integrator
Business Intelligence

Provide industry specific analysis & reporting

Process monitoring
WBI Monitor
"Insurance leading practice"

Provide leading best practice model, costing, key performance indicators

Types of Dashboards

Simple classification of dashboards

Who uses?	What purpose?				
	Executive	Business	Process	Analytic	Console
Executive					
Line-of-business managers					
System administrators					

Executive Dashboard

Demand Monitor

Quoted at: 2002-07-30
Current Period: Quarter = 3, Year = 2002

Family	QTD Forecasted Shipments	QTD Actual Shipments	Status
00006K2152	3409	2824	↓
00012P9314	3303	2817	↓

Refresh

↑ Above target
○ On target
↓ Below target

Revenue Monitor

Quoted at: 2002-07-30
Current Period: Quarter = 3, Year = 2002

Family	Target (Full Quarter)	QTD Actual	Status
00006K2152	143485	39674	↓
00012P9314	2780836	767068	↓

Order To Delivery Monitor

Quoted at: 2002-07-30
Current Period: Quarter = 3, Year = 2002

Family	Service Level Agreement	Actual OTD Performance	Status
00006K2152	98.00%	98.50%	○
00012P9314	98.00%	100.00%	○

Refresh

↑ Above target
○ On target
↓ Below target

Business Dashboard

Retailer Business Results

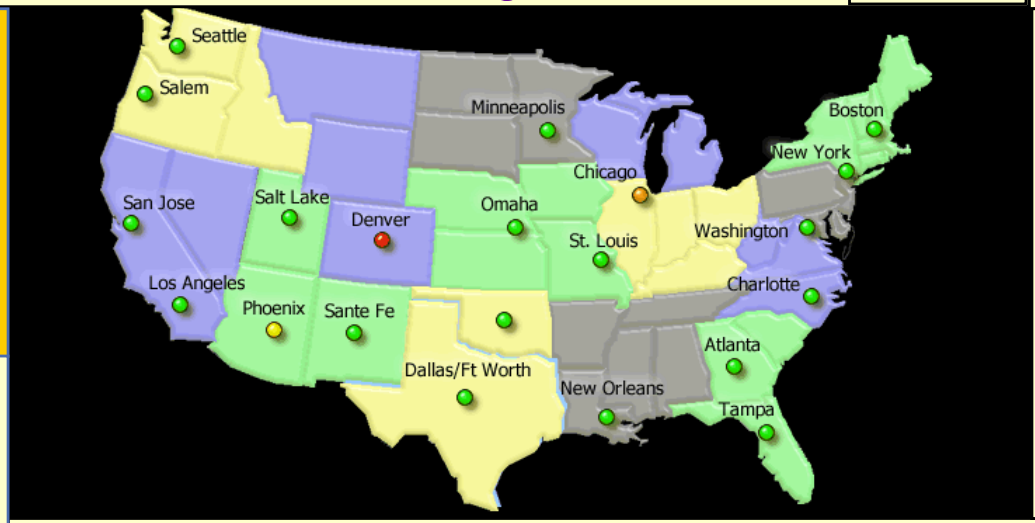
Cross Channel Integration

2:05 PM

02/26/03

Business Process Execution
Application Dynamics
Resources

Stores | Promotions | Product Category



Global

	Period	Total
Processed Orders	: 20,300	78,956
Processed Amount	: $ 20,300,000	
Never picked Orders	: 100	478
Never picked Amount	: $ 800,000	
Rejected Orders	: 2	29
Rejected Amount	: $ 5,000	
Not ready Orders	: 18	56
Not ready Orders Am.	: $ 20,000	

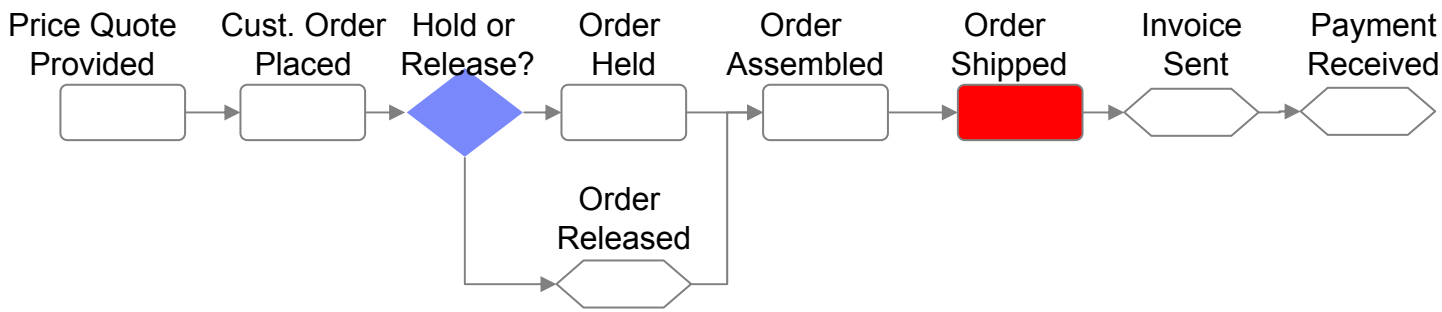
Massachusetts

	Period	Total		Period	Total
Processed Orders	: 10,300	45,764	Complete Orders	: 8,300	34,764
Processed Amount	: $ 20,300,000		Complete Orders Amount	: $ 16,000,000	
Never picked Orders	: 50	124	Partial Orders	: 2,000	9,000
Never picked Amount	: $ 500,000		Partial Orders Amount	: $ 4,300,000	
Rejected Orders	: 2	32	Additional purchase Orders	: 1,975	8,421
Rejected Amount	: $ 10,000		Additional purchase Orders amount	: $ 1,300,087	
Not ready Orders	: 1	24			
Not ready Amount	: $ 10,000				

Orders | Risks | Consolidated Information | Scope description |

Process Dashboard

Process Status



Process Stats

Outstanding Quotes without Orders

Customer	QuoteID	Quote Time
ABC	1234	02-12 16:41
SAFECO	7363	02-12 17:11
SCHMIDT	2627	02-13 18:14

	this	avg.	best
Avg. time from quote to cash		2.9d	2.1d
Avg. time from quote to assembled	4.0d	2.8d	1.0d

Process Alerts

Alert Notifications (also through pager)

1. Customer BRIGHTON order - # 82828 has been on hold for more than 3 days
2. Order Assembly task has exceeded 2 days for order #82922

Analytic Dashboard

Dashboard Designers: Ion Loghin, Aimee Silva

Questions?

Supporting the Partner Ecosystem

- **IBM BPM Technical Support:**
  - Contact your IBM Business Development representative
  - Direct technical inquiries and requests for BPM support to the following e-mail: bptswcc@us.ibm.com
    - Please indicate BPM as the subject of the note

- **Partner Community Calls – Today's Kicks-off the Series**
  - Calls occurring on a bimonthly basis. Calls will cover topics such as: analyst insight and market drivers, customer roundtable discussions, BPM infrastructure technical discussions, and BPM services engagement best practices
  - Next call: BPM Standards
    - Relevant BPM standard
    - What is the current status of the standard
    - How you could get involved
    - Call details to follow