

Web 2.0 Customer Experiences

Smart
SOA

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- Web 2.0 – the elevator description
- We didn't expect SOA
- The Chemical and Petroleum Example
- The Retail Example

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So what is Web 2.0 and Why is this important ?

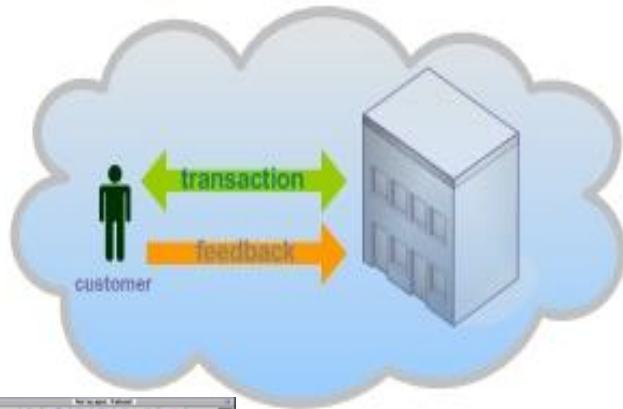
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The evolving Web platform

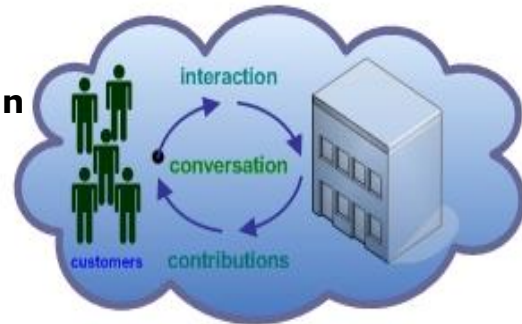
Web 1.0 was about connecting computers and making technology more efficient for computers.



Web 2.0 is about connecting people, and making technology efficient for people.



Web 2.0 changes the way in which businesses interact with its customers

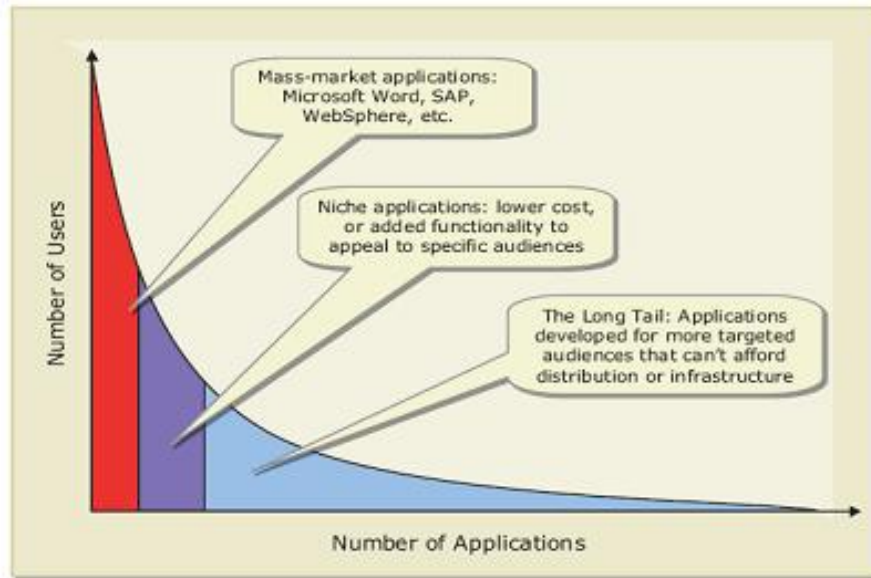


Web 2.0:

- **Is about communities and social networks**
- **Builds contextual relationships and facilitates knowledge sharing**
- **Is about people and the way they collaborate**



O'Reilly's view of Web 2.0



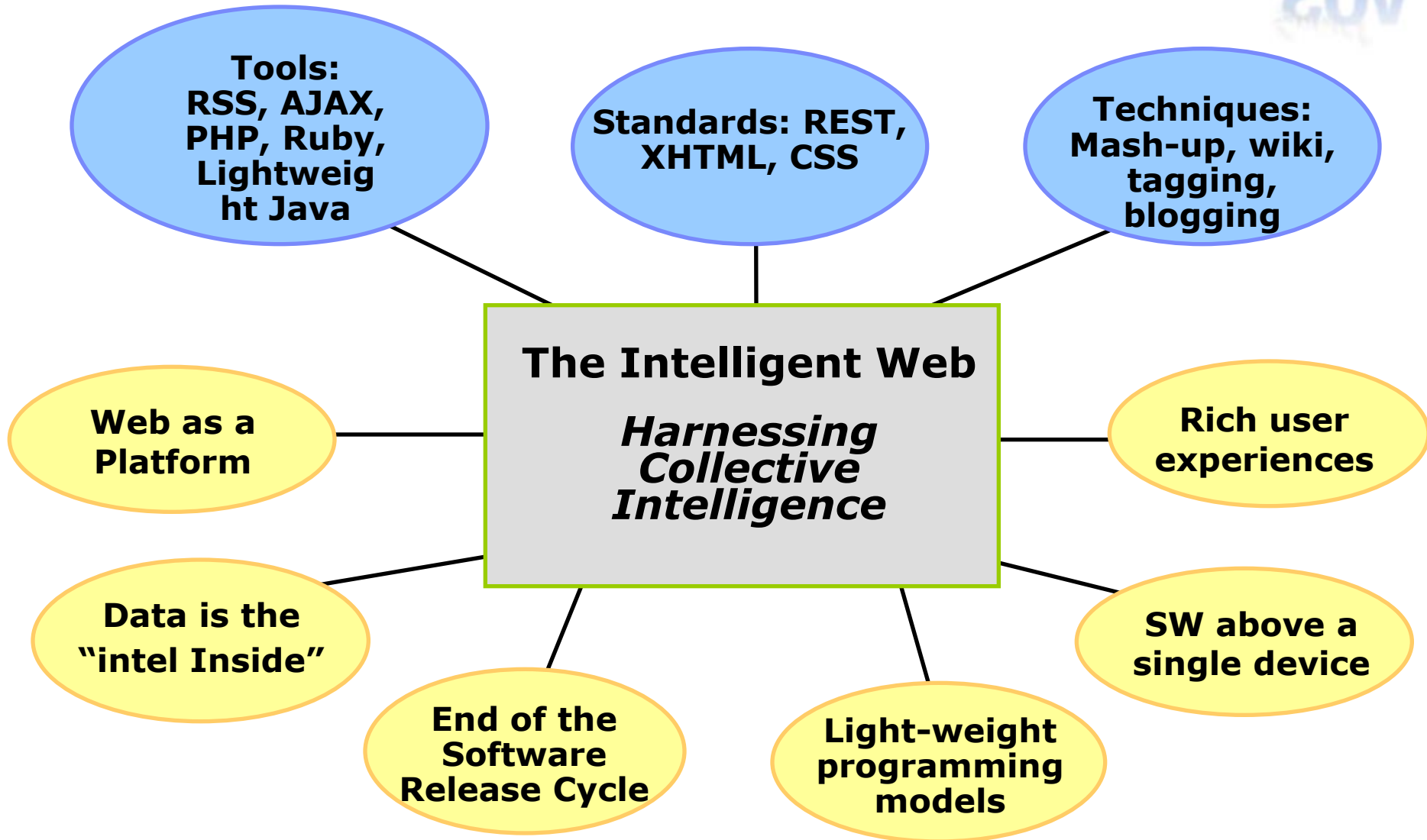
Source: Summit Strategies, Inc., www.summitstrat.com

Web 1.0		Web 2.0
DoubleClick	-->	Google AdSense
Ofoto	-->	Flickr
Akamai	-->	BitTorrent
mp3.com	-->	Napster
Britannica Online	-->	Wikipedia
personal websites	-->	blogging
evite	-->	upcoming.org and EVDB
domain name speculation	-->	search engine optimization
page views	-->	cost per click
screen scraping	-->	web services
publishing	-->	participation
content management systems	-->	wikis
directories (taxonomy)	-->	tagging ("folksonomy")
stickiness	-->	syndication

Core Competencies of Web 2.0 Companies

- Services, not packaged software, with cost-effective scalability
- Control over unique, hard-to-recreate data sources that get richer as more people use them
- Trusting users as co-developers
- Harnessing collective intelligence
- Leveraging the long tail through customer self-service
- Software above the level of a single device
 - Lightweight user interfaces, development models, AND business models

Web 2.0 Themes

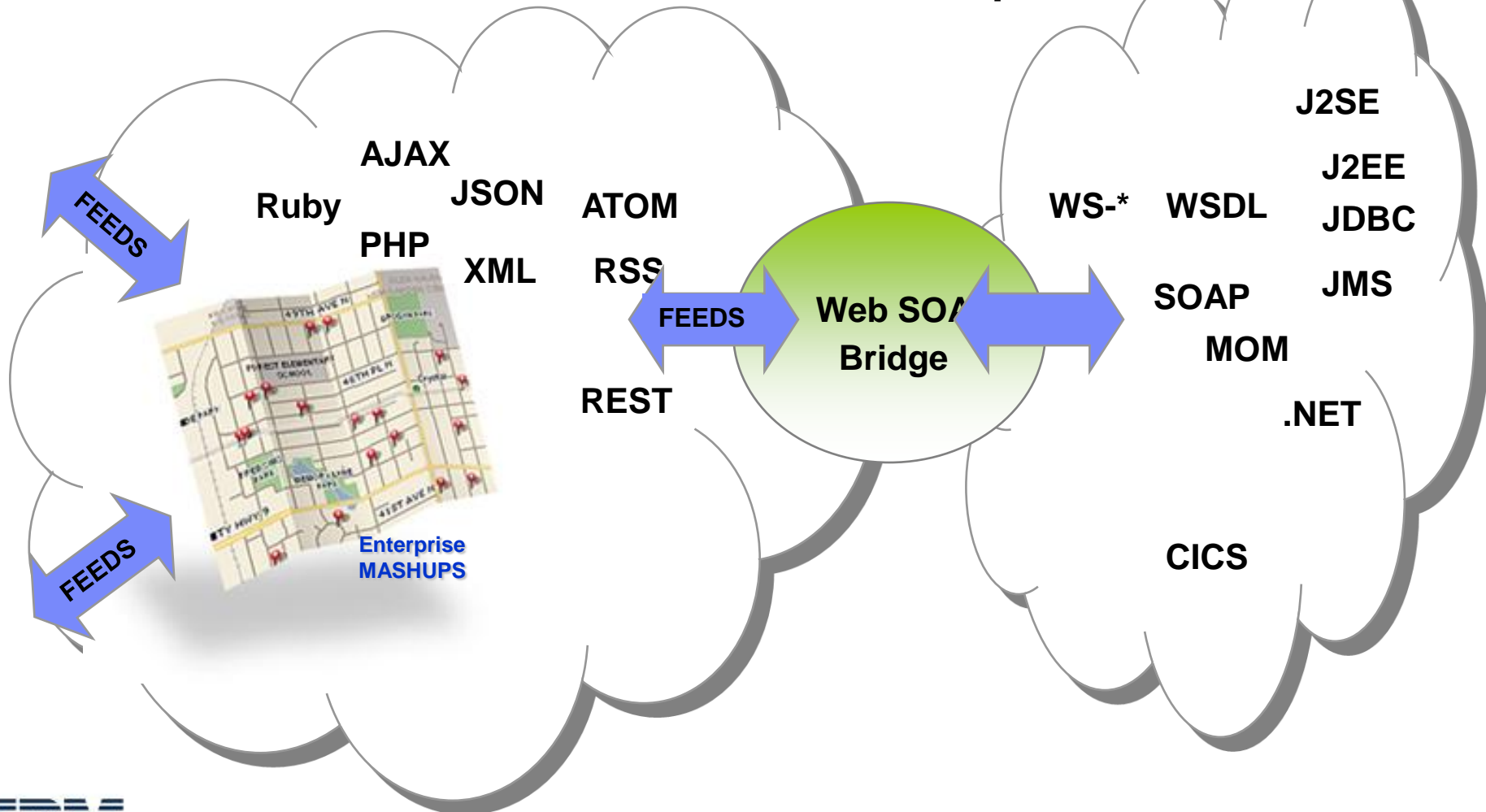


Bridging Web SOA and Enterprise SOA



Web SOA

Enterprise SOA



SOA Entry Points



Selecting Projects

Moving Incrementally Toward the Vision

A pilot project for SOA should ...

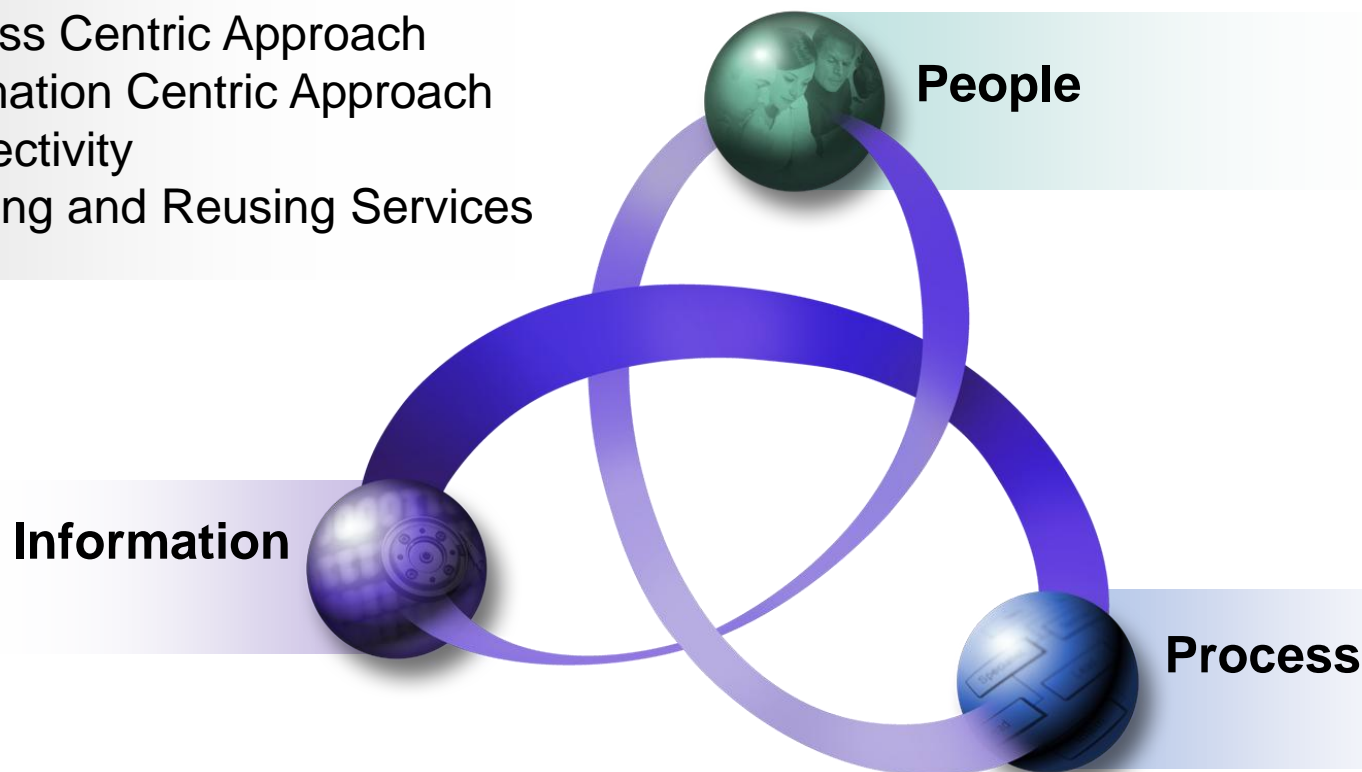
- 1. Address a well understood Business problem**
- 2. Incorporate aspects of governance**
- 3. Include Line-of-business objectives and IT objectives**
- 4. Leverage SOA entry point patterns**
- 5. Require an achievable stretch beyond current capabilities to address gaps (skills, processes etc.)**
- 6. Be something you will put into production**

Leveraging Entry Points to SOA

Consider Your Needs and Capabilities

SOA Entry Points

- People Centric Collaboration
- Process Centric Approach
- Information Centric Approach
- Connectivity
- Creating and Reusing Services



People Centric Collaboration : Entry Point Intuitive & Adaptive User Experience

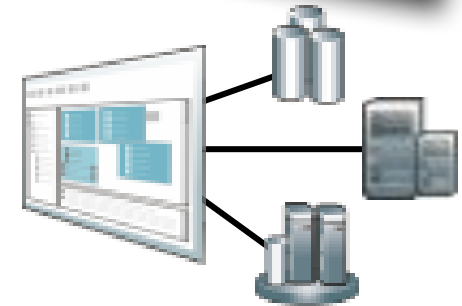
- How to recognize the entry point

- Business needs/pain points
 - *Too many applications required to complete a process*
 - *Information gathering delays business processes*
 - *Multiple participants in business process need differing access*
- IT needs/pain points
 - *Business processes span applications that don't integrate well*
 - *Supporting IT functions for business processes span organizations*
 - *No single sign-on, no role-based information/application delivery*



- Business and IT benefits

- Business applications are consistent and tailored to a given task/role
- Freedom to change IT resources without impact on the user experience
- Freedom to incrementally adapt to changing business requirements



Example: Chemical and Petroleum

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C&P – Problem statement

- Businesses need an effective way to measure and analyze manufacturing process performance in the context of installed equipment base.
- Today many different applications are deployed across the enterprise at both the business and manufacturing levels to manage and record operations performance. Each instance has its own unique reference and data model.
- Inter/Intra manufacturing facility and cross work flow business processes, transactions and events are not captured in the context of equipment configurations or manufacturing relevant events. Views are incomplete; analysis is sub-optimal and localized. Integrating additional facilities or introducing new functionality is difficult, time consuming and costly.

Classical Integration Problem

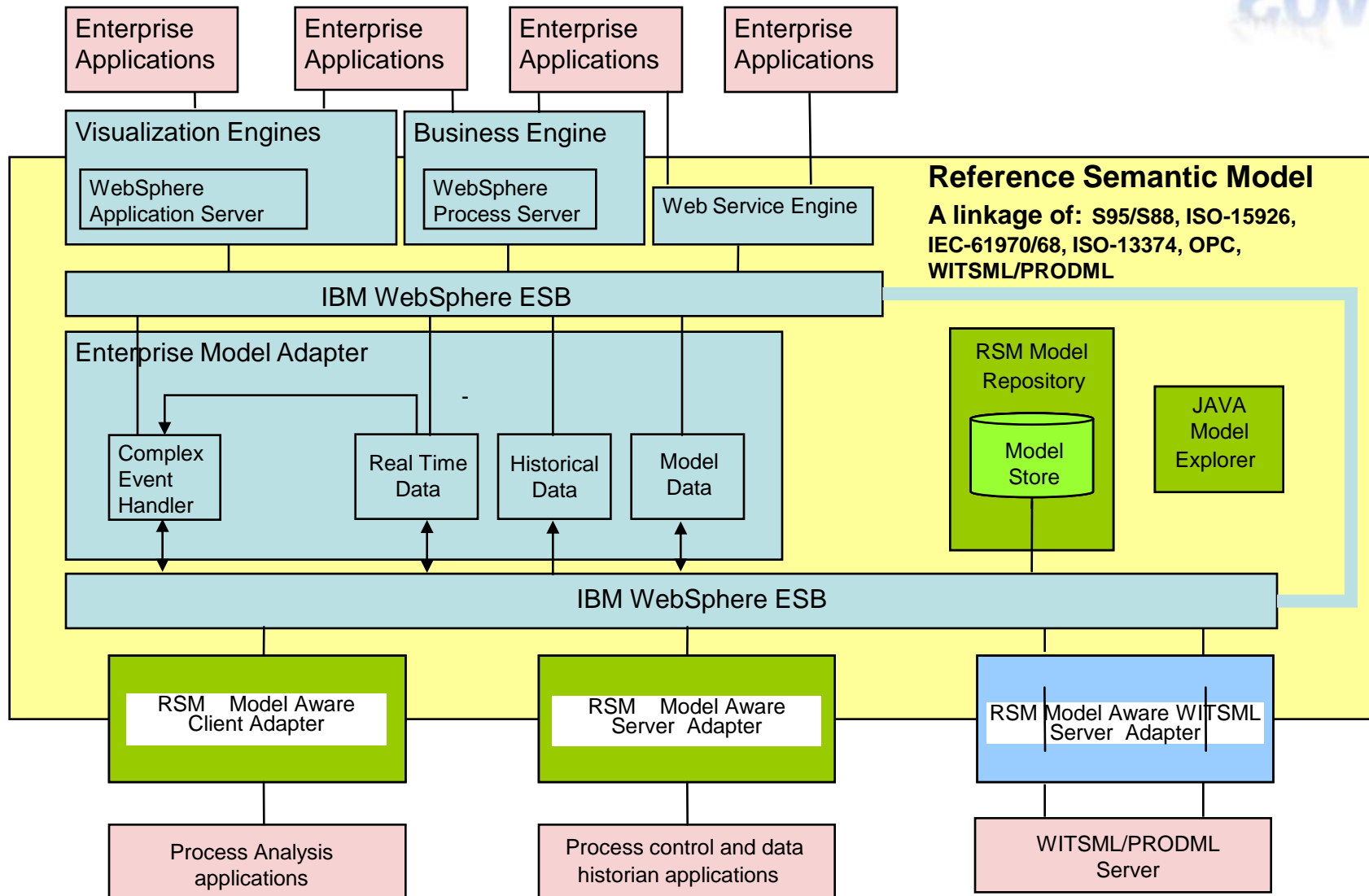
C&P – Problem statement

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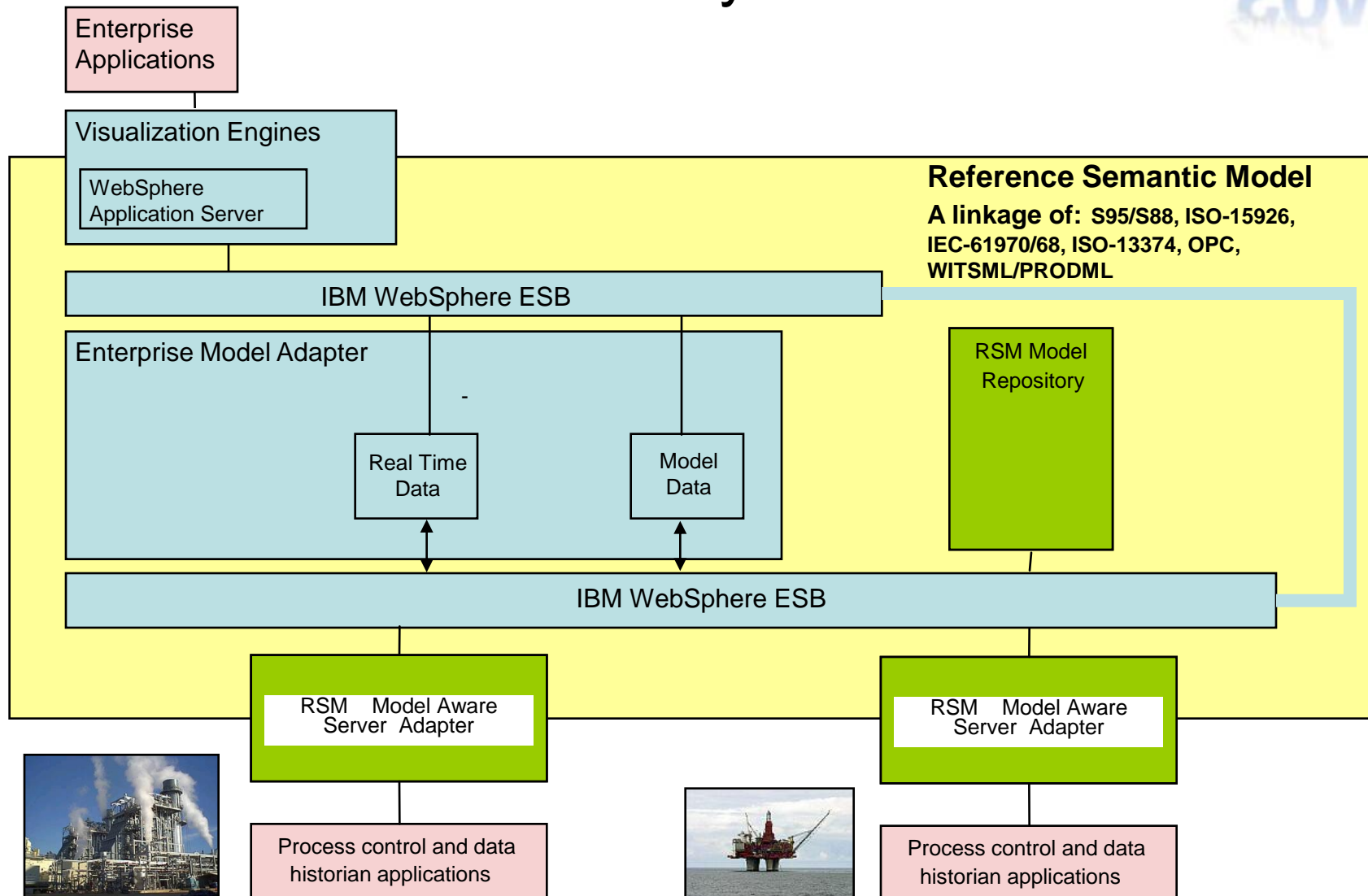
Effort-intensive: deep domain knowledge needed

Impacting business costs

Solution Architecture



Solution Architecture – Today's focus



DEMONSTRATION

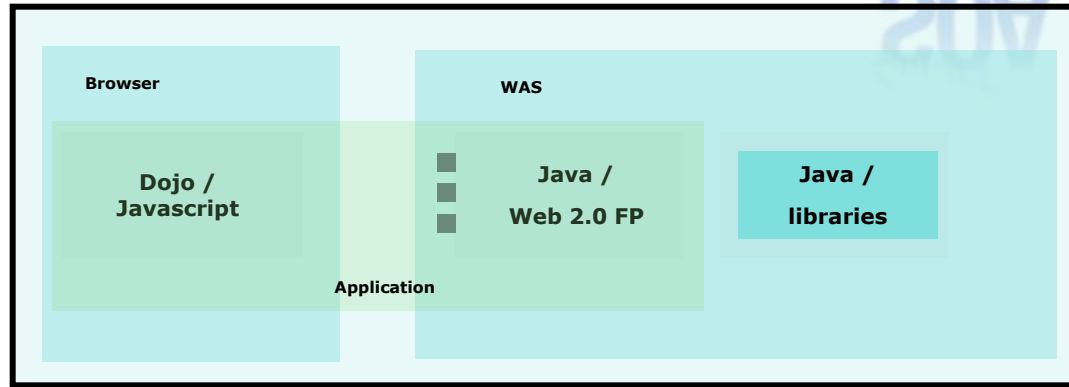
Visualization – Solution Characteristics

- Standards-based object model
 - Domain-natural data organisation, reduced education needs
- Exploits system “knowledge” of relationships
 - Contrast with hand-drawn diagrams, accuracy improved
- Visual navigation
 - Eases identification of relevant data
 - Diagrams aid comprehension – reduces level of required expertise
 - Single entry-point for user activities
- Live diagrams
 - Rapid Edit/View cycle

Demonstration – Technical Summary

- Browser-based
 - Low footprint, low rollout cost
- WebSphere 2.0 Feature pack (exploited and contributed)
 - Dojo for UI
 - Comet for real-time delivery
 - JSON/REST for service layer
 - REST Proxy for testing
- Data driven
 - No Industry knowledge in UI code

Design and Implementation



- Focus on Service Interfaces
 - Early mock-ups of Rest Services
 - Services potentially re-usable for other UI technologies
 - Careful division of responsibilities – maximise work in Java
 - Unit tests for services
- Ratio of effort
 - 1 UI developer to 1 Rest Service developers to 3 Library developers

Summary

- Web 2.0 solution based on WebSphere are a reality
- Diverse options for use within different industry sectors
- Web 2.0 Feature Pack and Dojo are assisting clients to achieve robust, scalable solutions
- IBM will be moving towards Restful SOA allowing all middleware to offer consumable integration end points

धन्यवाद

Hindi

多謝

Traditional Chinese

ขอบพระคุณ

Thai

Спасибо

Russian

Gracias

Spanish

شكراً

Arabic

Thank You

Obrigado

Brazilian Portuguese

Grazie

Italian

Danke

German

Merci

French

நன்றி

Tamil

多谢

Simplified Chinese

감사합니다

Korean

ありがとうございました

Japanese