



## **XML Web Services Analyst Report**

# **Real Best Practices from Real XML Projects**

Excerpt: from the Sand Hill Group - Web Services Derby Report 2003  
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Consistently called a “must read” and a “practical guide to Web Services success” for Enterprises looking to deploy Web Services based solutions, this report presents a detailed adoption roadmap and 60 unique business case studies. Synthesized from over 200 hours of interviews with 117 senior executives from 76 companies, the report contains unique primary data on what the entire eco-system is doing and plans to do with Web Services. Westbridge Technology is pleased to sponsor an excerpt of this report that discusses the top business problems and the best practices advice to succeed in your XML Web Services implementations.

## Web Services at Work in the Global 2000

It works. That’s the consensus among early users of Web Services in the enterprise. An analysis of 60 pilot and implementation projects found business needs – rather than technological merits – were driving the use of Web Services projects. This means corporate customers were not only conducting small trials within the firewall. In fact, a significant portion of projects took place outside the firewall connecting partners and customers.

### The Bottom Line

Innovator Web Services companies are thinking business value. As one Fortune 500 respondent put it, “Think ROI, not SOAP.”

Web Services are generating real business value for enterprises today. Facing intense pressure to drive profitable growth, business executives should identify the areas of maximum operating inefficiency – the “leakiest pipes” so to speak.

A subset of these problems is addressable using Web Services-based solutions, both inside and outside the firewall. Businesses are largely addressing external constituencies (customers, suppliers and channels) through internal projects.

Outside the firewall projects were principally focused on areas where information exchange led to reductions in operating costs.

Surprisingly the study did not uncover very many negative reactions and perceptions of Web Services technologies, or failed projects. Corporations can therefore be confident that the technological risks can be worked around.

Common Characteristics of Web Services Projects:

- 1) Inaccessible data:  
What critical business data are being requested by multiple constituencies? Is that data locked up in inaccessible backend systems?
- 2) Highly distributed data:  
Where is there an urgent need to aggregate data and information from multiple sources in one central location?
- 3) Highly dynamic:  
Is the information itself, or the need for it, highly dynamic?

## Top 10 Web Services Projects at Global 2000 Companies

1. **Creating services of data and functionality to be used at multiple locations, applications and/or access points. This included wrapping and accessing legacy applications (for example, auto vehicle identification, insurance rating engines, retail configurators, etc.)**
2. **Integrating multiple outward facing Web sites by componentizing and integrating backend systems**
3. **Using Excel as a front end for backend application such as ERP so that business analysts can access critical data in real time**
4. **Customer self-service applications for specific pieces of information, such as order status**
5. **Integrate within enterprise portals to consume backend applications for visual co-location**
6. **Integrate within private exchanges or integration hubs**
7. **Automating information exchanges with fragmented channels and suppliers, replacing phone- and fax-based interactions**
8. **Providing employees self-service applications for benefits, 401K, stock options management and so on**
9. **Establishing a unified internal view of customers, inventory or risk**
10. **Facilitating collaboration with trading partners to share sales leads, design products jointly or conduct vendor-managed inventory projects**

## Technology Best Practices – Take Action Now

A Services-Oriented Architecture (SOA) is widely recognized as the foundation of the next wave of enterprise architectures, and especially as an enabler of the Real-Time Enterprise. Respondents report several advantages from such an architecture, including decreased development costs, improved application quality and higher IT productivity. But poor performance and management challenges make the benefits from a Services-Oriented Architecture difficult to realize. Closely following a set of “best practices” will improve results. These include designing business interfaces for components, managing semantic standards and improving IT and business relations. These best practices will also make it possible to realize the benefits of managing business processes that go across multiple applications.

The study identified several success strategies for companies wanting to deploy a Services-Oriented Architecture:

Tips	Traps
1. Use coarse-grained business services defined at the business-object level or higher	1. Use fine-grained services created from programmatic objects
2. Create user-based business interfaces which enable components to be treated as more of a “black box”	2. Convert Programmatic API into WSDL
3. Separate business process definition from application logic	3. Tightly intertwine process definition with application logic
4. Code components to represent the way the business works and get buy-in from business groups on this representation	4. Reuse fine-grained programmatic services which have not been approved by the business side
5. Establish tight cooperation between business and IT departments	5. Condone adversarial, combative relationships between IT and business groups
6. Define well-understood, organizational practices around internal semantics, where any deviations must gain the architecture board’s approval	6. Maintain data dictionaries that nobody adheres to in practice

## Supplement: Westbridge Technology Secures and Manages XML Web Services

Web Services is increasingly the technology of choice to enable a variety of IT initiatives including Services-Oriented Architecture (SOA), Straight Through Processing (STP), EAI and B2B communication. Use of Web Services results in huge cost savings and opens new windows of business opportunity.

Westbridge Technology is the leading provider of XML infrastructure solutions for XML and Web Services. Westbridge provides comprehensive solutions for securing and managing XML networks, a critical requirement to the success of any Web Services project.

Westbridge Technology enables you to connect, secure and manage your business services and with the Service View capability, enable you to publish the right service to the right requestor with the right interoperability all without adding any code. Westbridge provides a full set of capabilities to organize your XML and Web Services, including a centralized directory store of all of your services, a testing and approval process to ensure proper usage of your business services interoperability at multiple levels, including semantic level transformations. Westbridge can enforce the use of standards and semantics and block or alert of improper usage. Westbridge facilitates the collaboration of different departments that use Web Services, including business analysts, architects, developers, quality assurance, network operators, security administrators and compliance managers.

The XMS includes XML Firewall technology that provides bulletproof protection for XML Web Services. The XMS is noninvasive and requires no coding or integration and fully leverages your existing infrastructure. Organizations can feel confident that their XML Web Services are fully secure and audited while maintaining a low TCO. Westbridge Technology's management capabilities include:

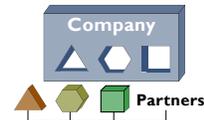
 Security	 Interoperability	 ServiceViews	 Real-time monitoring
 Exception handling	 Dynamic routing	 Content inspection	 SLA management
 Quality of Service	 Enforcement	 Versioning	 Publishing testing and control

Westbridge's fault-tolerant, highly scalable, high performance architecture includes a sophisticated Message Processing Pipeline which enables administrators to control how each message gets handled. That coupled with an extensible and flexible Rule Execution Engine provides complete control over the XML message stream.

The Westbridge XML Message Server (XMS) is being used at the most intensive and largest scale Web Services implementations. Westbridge is the choice of Global 2000 companies and public institutions around the world to make their XML Web Services projects succeed with the lowest cost and lowest time to market.

## Why are Global 2000 companies using Westbridge Technology?

- ▶ Westbridge enables seamless partner connections, without adding any code



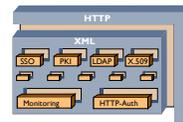
- ▶ Westbridge secures all sensitive communication according to your business rules



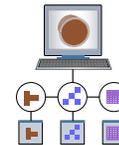
- ▶ Westbridge offloads security from your development team, saving you money and decreasing time-to-market



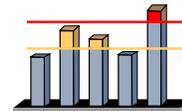
- ▶ Westbridge leverages your existing infrastructure for securing and managing XML Web Services



- ▶ Westbridge uses Services Views to upgrade your services automatically and provide instant interoperability and publishing control



- ▶ Westbridge maintains business continuity, providing QoS monitoring and exception handling tools



- ▶ Westbridge gives you visibility into your transactions with business activity monitoring and fine-grained, rule-based content inspection



- ▶ Westbridge provides low TCO solutions that scales linearly as your network grows exponentially



- ▶ Westbridge provides a central point of enforcement and control for regulatory compliance



- ▶ Westbridge is a key enabler of your XML-based business and IT initiatives



## Westbridge Technology Provides XML Infrastructure Solutions. Some Examples:

Westbridge is being used by Global 2000 and public institutions around the world to secure and manage their XML Web Services projects.

### Case #1

#### **Services Oriented Architecture (SOA) initiative Financial Services Company**

**Goal:** Building an SOA for IT cost savings and business agility

**Requirements:**

- Must comply with GLBA, HIPAA, State, Six Sigma and ISO regulations and standards
- Tie together .NET, J2EE, mainframe and packaged applications over HTTP, MQ
- Centrally manage components

**Solution:**

- The XMS provides a central point for all compliance requirements. The XMS enabled hundreds of policies to be implemented, enforced and audited.
- XML Broker enables interoperability with existing and future standards

**Benefits:**

- Calculated they will save over 30% off their Web Services development costs
- Save significant costs with centralized service management
- Enable rollout of SOA company-wide with the Westbridge XMS as the cornerstone

### Case #2

#### **Integrating multiple outward facing services from backend systems Federal Government**

**Goal:** Integration with various government agencies

**Requirements:**

- Highest levels of security required for classified services
- Massive load and reliability requirements
- Strict compliance requirements

**Solution:**

- XML Firewall provides security and malicious attack protection for all services
- The XMS provides a high performance, massively scalable architecture to handle transaction growth
- Service Manager provides scalable management, maintaining low TCO
- Service Tracker provides real-time monitoring and configurable audit trails

**Benefits:**

- Fault tolerance and bulletproof security exceed their requirements
- Ability to leverage existing PKI infrastructure to secure XML Web Services
- Save significant dollars centrally managing compliance

**Case #3****Integrate with Private exchanges  
Large Manufacturing Company**

**Goal:** Supply Chain Management: automate internal and extended supply chain network

**Requirements:**

- Connect with partners that use different technologies
- Reduce latencies in supply chain transactions
- Enable legacy systems to participate in extended network
- Rigorous standards compliance required

**Solution:**

- The XMS provides Service Views which enable Service Upgrades of legacy systems. Without any additional code, legacy XML interfaces are now exposed as SOAP, some even requiring WS-Security and SAML.
- Service Views allow instant connection and interoperability with partners using different technologies
- The XMS provides standards and schema validation, enforcement and transformation to ensure messages are standards compliant

**Benefits:**

- Customer has one-stop-shop for all internal and external service management and security.
- Project time-to-market drastically reduced

To find out more about how Westbridge Technology is essential to your XML Web Services projects, visit our website or contact us at [info@westbridgetech.com](mailto:info@westbridgetech.com)

## About Westbridge Technology

Westbridge Technology is a leading provider of XML infrastructure solutions for securing and managing XML Web Services. Westbridge Technology is the choice for Global 2000 and public institution companies around the world to succeed in their Web Services projects.

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## About Sand Hill Group

Sand Hill Group provides investments and management advice to emerging enterprise technology leaders. Sand Hill also publishes an electronic newsletter called "Enterprise Critical", produces a series of "Enterprise" conferences for CEOs and other high level executives in the industry and creates high-impact research reports for its constituents.

For info on obtaining the full report please visit:

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