Intranet and Portal Technologies

Computers in Libraries
Washington, DC

March 15, 2003
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Topics / Questions

• Why?
• What?
• How?
• Wrap up
Section 1

Who / why? and some lessons

The Key Question

What new technologies will enable libraries to build new types of relationships with their clients?
The Situation Today... Search This

Intranet and Portal Trends in 2003

- Consolidation ... a handful of survivors
- Prices...very difficult to pin down ... content more expensive... devices ever cheaper
- Blurring lines... difficult to know what is possible
- Costs ... license fees are about 20 percent of the total cost of implementation
- Lock in... vendors want to get enterprise business ... open standards are relative
Key Points for 2003

1. Technology: outsourcing does not reduce total costs
2. Search ... far from perfect
3. XML ... key enabling technology ... can be expensive to implement
4. Low cost = limited functionality
5. Double the original time estimate for projects large and small
6. Integration remains expensive... connectoids must be tweaked or coded from scratch

Characteristics of a “Real Time Enterprise”

- Computing and communications available to every employee or authorized user
- Superior Information availability across the value chain
- Streamlined business processes using the Web via communications plus content
- Lower costs through improved analytics
- Data entered only once
- Single interface to applications
Value Proposition

- Lower system maintenance cost
- Faster delivery of new services
- Higher scalability and availability of business

Gateway / Portal Needed

- Facilitate
  - Communication
  - Smooth flow of information: no bottlenecks
- Increase
  - Response speed
  - Options for communications
- Web integration with other Federal and commercial services rapidly and without costly rework
Section 2

What Intranets Must Now Support

The Devices...
PDAs

Section 3

How?
Our Understanding of the Issue

- Usability—essential
- Flexibility—a necessity
- Integration with existing business processes as required—a must
- Technology—stable
- Results . . . easy-to-see, on time, and on budget with available resources

A Definition… In the Beginning

A portal is an originating Web site with search engine capabilities
Portals and Views

How Many Types of Portals?

✓ Public portal -- Yahoo!
✓ Corporate portal -- Chase
✓ Personal portal -- Nokia MMS mobile phones
Today... Portal Is Much More

✓ Information searching
✓ Information dissemination
✓ Collaboration (bringing people together)
✓ Business service integration

What Is a “Portal”?

• A doorway page that allows a user to access static information
What Is a “Portal”? 

- A page that leads to static information.
- A page that aggregates information dynamically.
Dynamic HTML ... Information Aggregation

User name and password

A Doorway to Data... Updates Automatically

Yahoo! stocks
What Is a “Portal”?

- A Web page that leads to static information
- A Web page that aggregates information dynamically
- A Web page that integrates *applications*
Views = Portlets

- An Integrated view of enterprise applications
- Personalized views for users

Snap Together… Reusable

Standardized pieces that snap together...

Lego blocks can be used to build different things by snapping the standardized pieces together...
The Workspace “Model”

Integrated Risk Analytics

Transaction Services

Online catalog

What Web Services Do
What are Web Services?

Simply... web services are applications that interact with each other using Web standards

- Self-describing, self-contained modular applications
- Platform and implementation neutral
- Based on open standards for description, discovery and invocation
- Programmatically connect business processes together
- Typically transactional, requiring integration with existing systems

What are Web Services?

- Web services perform encapsulated business functions
- Functions can be from simple request-reply to full business process interactions
  - stock quotes/stock charting
  - credit card verification/payment processing
  - integrated travel planning
  - RFO/bid process/auctions
- Can be mixed and matched to create complete process, product
  - Enable dynamic integration with decreased human interaction
  - Both new and extensions to existing applications
Self-Describing Applications

- The buzz word for software that:
  - Allows enterprise portals to be built
  - Facilitates application integration
- A portal is a common interface to information and services
  - Browser-based: relatively easy to use, most people understand how it works
  - Applications available: click an icon and the needed function appears
- Application integration
  - Key initiative in most large organizations (Morgan Stanley, 2002)
  - Use Extensible Markup Language and other standards as a way to move information from Point A to Point B

Net Net of Web Services

- The major corporations are going to move a bit faster:
  - Price competition will be brutal as the enterprise software vendors vie to land key accounts
  - Discontent is likely to rise at the department level because the new services will be not be available quickly
  - Microsoft may be able to exploit this opportunity to “attack from the bottom up”
- Key non-commercial buyers appear to be lining up for non-Microsoft solutions when decisions about the applications server, enterprise integration tool, and portal are being made
- Small- and mid-sized enterprises are opportunities but the window of opportunity may close if the economic environment deteriorates further
Moving Up the Triangle

Portlet

Tab to Other Portlets

Portlet

Portlet
Graphical Administration

Typical Enterprise Process...

Corporate Action System (as-is)
But There Were ...

Six duplicate corporate actions in existence at the same time

Reduce Duplications

Straight Through Processing

Corporate Actions Vendor

Workflow Engine
(i.e. CrossWorlds)

Common Announcement Format

Data Transformation

Message Broker
(i.e. MQSeries Integrator)

Data Warehouse
(i.e. Oracle)

Legacy Custody System

Web Delivery
(i.e. WebSphere)
Integration to Reduce Costs

✓ Extended Enterprise Portal
  - B2B portal owned and managed by a single enterprise
  - Provides supply chain, communications, and traditional portal functions
  - Examples: Grainger, GM, Toyota, Boeing, GE Financial
No Either Or... Both Necessary

Set Up of the “Business Vehicle”
Then Apply a Process to Customers

4. Summary

Wrap Up
Pay Offs

- Digital information dissemination
  *Reduce printing / travel expenses*
- Workplace integration
- *Reduce duplication*
- Decision oriented workplace integration
- *Streamline business processes and work flow to reduce costs*

IT and 360°ROI: Fatten Cost Curves

1. The largest inefficiencies lie in interactions between units in a business and enterprises in an industry sector.
2. Communications and information are critical to interactions among enterprises.
3. The Internet’s biggest influence is on business process innovation, and reducing communication and interaction costs.
4. Content has to be the “Teflon” of work
The 7x24 “Trading Floor” Model

This Presentation

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