

Industry Standards: Definitions, Uses and Benefits



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2006 Users Conference ♦ San Francisco

Your panelists...

- Eric Shepherd, Questionmark – Moderator
- Tom King, Chief Consultant, Mobilemind
 - Actively involved with AICC, ADL, and IEEE standards initiatives
- Chuck Allen, Director, HR-XML Consortium
 - Director of the HR-XML Consortium
- Robby Robson, President, Eduworks Corporation
 - Chairs the IEEE Learning Technology Standards committee



Open standards provide...

- The language for interoperability
- An environment in which...
 - Best-of-breed technologies flourish
 - Innovation thrives



Questionmark Supporting Standards

- Questionmark Perception is:
 - AICC certified
 - HR-XML certified
 - ADL SCORM compliant
 - .NET certified
 - QTI compliant



Standards enable integrations and interoperability

- Check out the new white paper on Integrations
- Basic integrations:
 - Pass data into Perception
 - Launch and track assessments from LMS's
 - Launch assessments from portals
 - ◆ Single sign-on for participants and administrators
 - Retrieve results data from Perception
 - ◆ Normally used within HR systems



Integration with Perception

Method of Integration	Example
Launch and Track	AICC SCORM
Data Integration	QMWISe HR-XML
Portals	Sharepoint JSR-168 uPortal



Format for this discussion...

- Opening remarks
- Each panelist delivers opening remarks
- Open question & answer sessions

- Tell us what you want from today's discussion
 - Why did you choose this session?
 - What questions do you have?
 - What are your goals...
 - ◆ To learn about standards?
 - ◆ Discover how to integrate Perception with other systems?



Standards Panel



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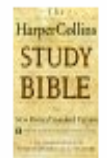
Narrow by Category

- [Books](#) (69)
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Showing results in: [Amazon.com](#) > "standards humor"

No results found

Listmania!



Reference Books

Standards Can ...

1. Specify the form and function of technology
2. Determine how information is exchanged
3. Require procedures to be followed
4. Define acceptable outcomes



Good standards are enablers

- Make it possible to build better products
 - Provide a basis for new solutions
 - Operate invisibly
-
- Good standards are about being *good enough*, not being perfect!



Why Bother With Standards?

INNOVATION

- Standards *define and catalyze new technology*
- Standards *enable new solutions*
- Standards *solve existing problems*



Why Bother With Standards?



**HELP THE
CONSUMER**

- Standards *prevent lock-in*
- Standards *accelerate commoditization*
- Standards *increase reliability*
- Standards *enable competition*



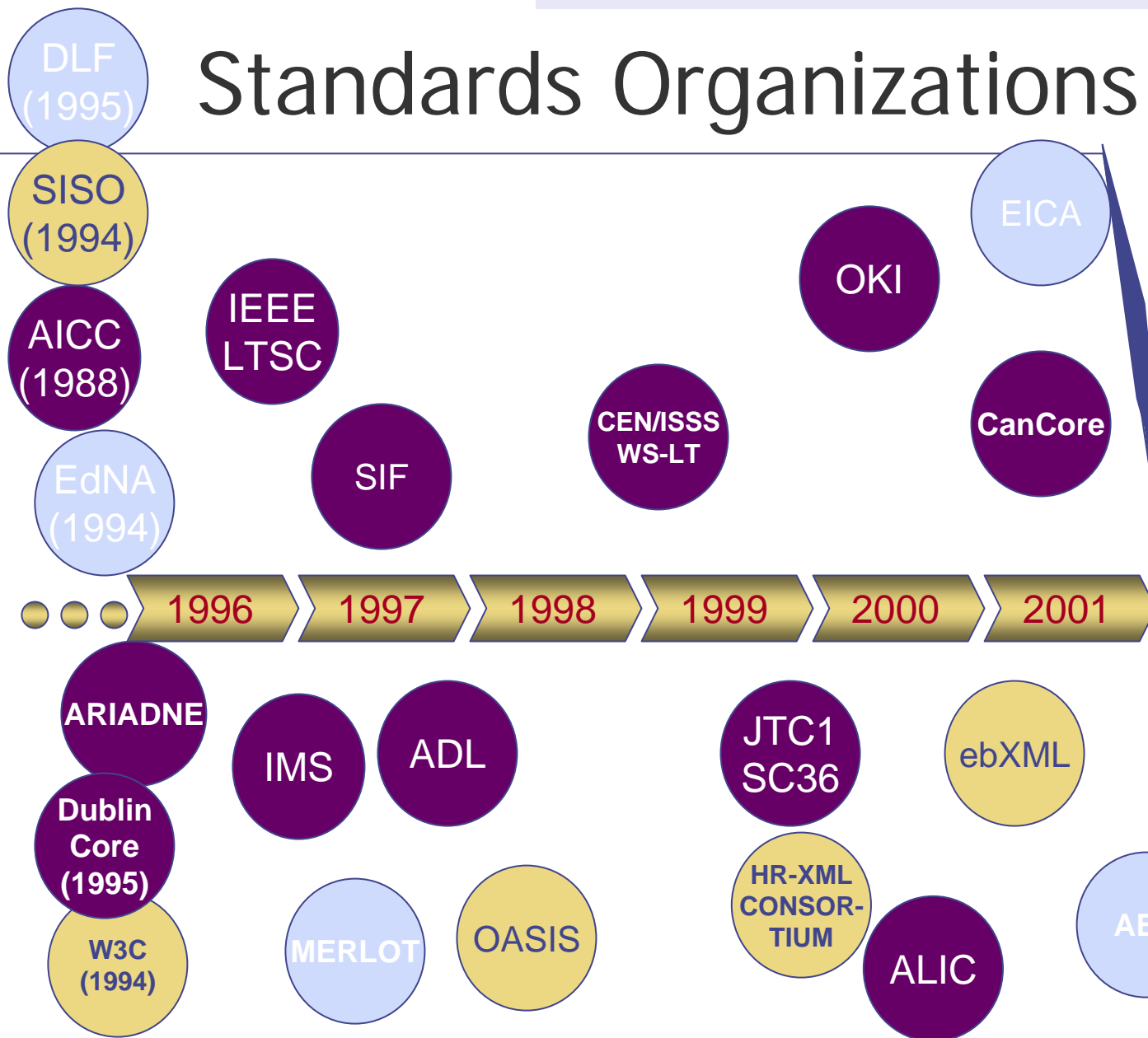
Why Bother With Standards?



- Standards can *lower design, development and production costs*
- Standards help *modularize supply chains*
- Standards *build consumer confidence*
- Standardization *distributes effort*



Standards Organizations



But few since 2001

Learning Technology Standards

- Metadata (search & discovery)
 - LMS – Content communication (interoperability)
 - Content representation (including questions & tests)
-

- Workflow
- Simulations / games / experiential training
- Security
- Competencies
- Distributed architectures



Standards Panel



Tom King

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Emerging Standards

- **ADL CORDRA** (for repositories)
- **AICC PENS** (for publishing 'packages')
- **IEEE/SISO** Task Group
Simulation Interoperability
- Others



Package Exchange Notification – What is it?

- “A better way to get content to an LMS.”
- Guiding Principles for PENS
 - Focus on learning & training uses
 - Simplify deployment for authors (*AICC and SCORM and ...*)
 - Use established & understood technology
 - Easy for vendors on all sides to implement & interoperate
 - Enable evolution & extension
 - ◆ Fast track with AICC, move on to IEEE
 - ◆ Separate concept (model) from binding (transport)

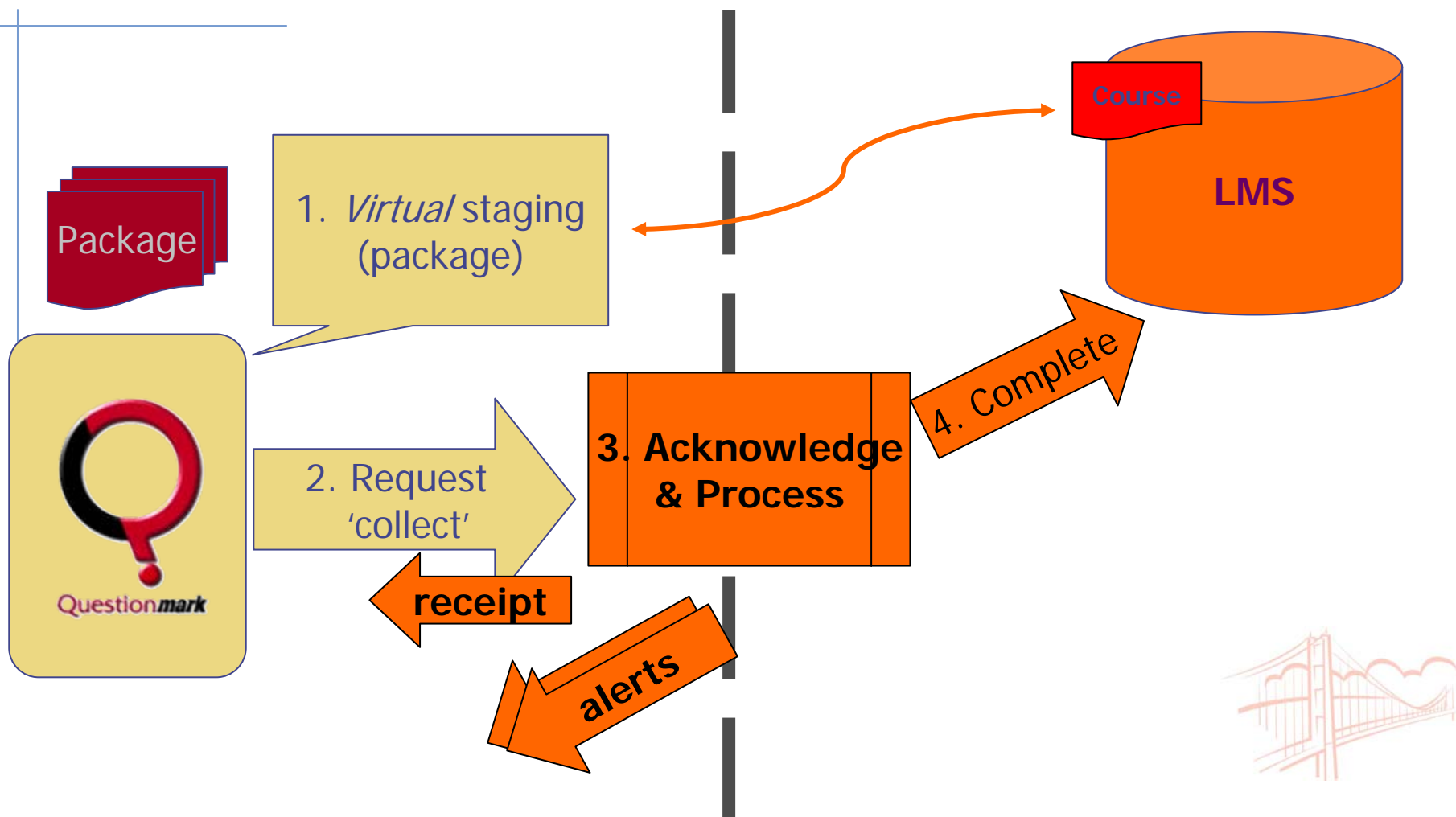


PENS Leadership



many others monitoring & implementing

Model PENS for Deployment



Implementations

- **Questionmark**
 - Perception (*prototype*- server sends PENS for *hosted* content)
- **EEDO**
 - ForceTen (sends PENS, *prototype receives* PENS)
- **EMC-Documentum**
 - Learning Services Integrations (see Documentum web site)
- **Harvest Road**
 - Harvest Hive (sends PENS)
- **Recombo**
 - Recombo Router (receives PENS, sends PENS)
- **Macromedia**
 - Authorware & Captivate (*sample* client-side tool extensions, sends PENS)
- **Pathlore (SumTotal)**
 - SDK-based Add-on, supporting authoring & CMS
- **Plateau**
 - OpenSuite (receives PENS, additional workflow extensions pending)



NEXT STEPS

- Other Bindings - Web Services or WebDAV
- Migration of spec to IEEE (now est. 2006 or 2007)
- ADL interest in PENS supporting CORDRA

- Get PENS documents from AICC.ORG
 - AGR-011 (Overview): <http://aicc.org/docs/AGRs/agr011v1.pdf>
 - CMI-010 (Full Spec): <http://aicc.org/docs/tech/cmi010v1.pdf>
- Talk to your vendors
- Send questions & feedback
 - AICC PENS Forum: <http://aicc.org/cgi-bin/yabb/YaBB.pl?board=PENS2>
 - My email: tom.king@aicc.org



An HR-XML Certified Solution Provider!



Chuck Allen



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HR Service Delivery Trends

- The way HR does business has changed dramatically and continues to change.
- HR's embrace of e-business, outsourcing, and ASP-model services means that work is more distributed outside the enterprise than ever before.
- More HR processes involve strategic partners and other intermediaries.
- ***Standards are essential*** for making this distributed processing environment productive.



Distributed Process Example



hiring manager 1



hiring manager 2

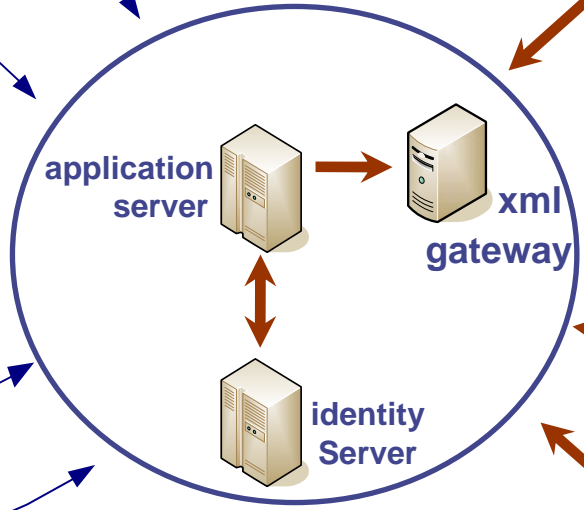


HR manager

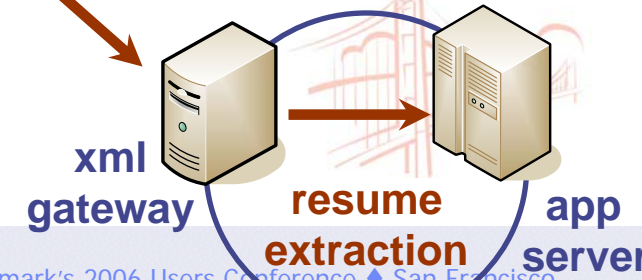
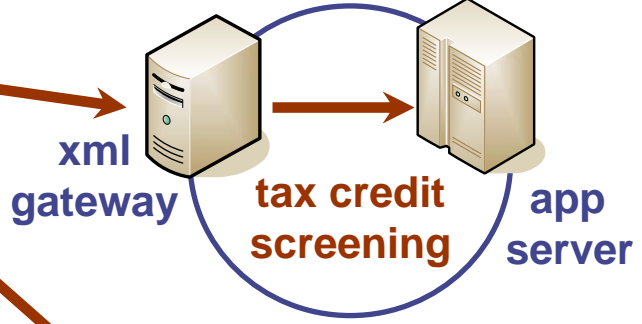
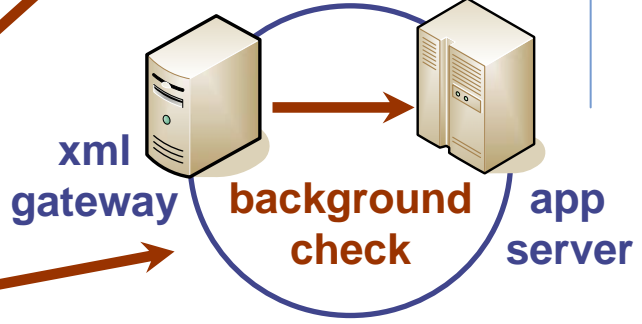
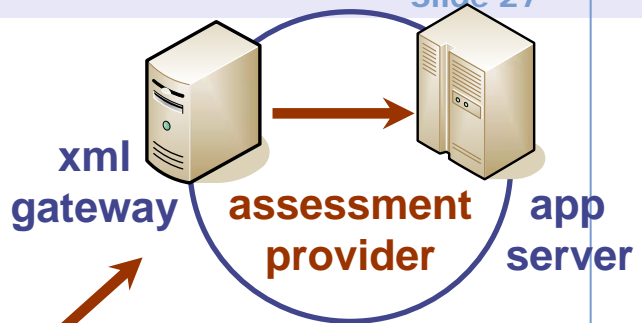


hiring manager n

Secure Access Via Web App



Hosted Applicant Tracking Solution



HR Technology Trends?

- There are broad, but discernable trends that favor solutions that are:
 - **Opaque** (details are hidden)
 - **Connected** (e.g., service centers possible because data can be retrieved electronically from central databases)
 - **Real-Time** (vs. batch)
 - **Distributed** (economics – Work migrates to where it can be done with the highest quality and lowest cost; where most value can be gained).
 - **Secure** (work cannot be distributed and connected if it is not secure).

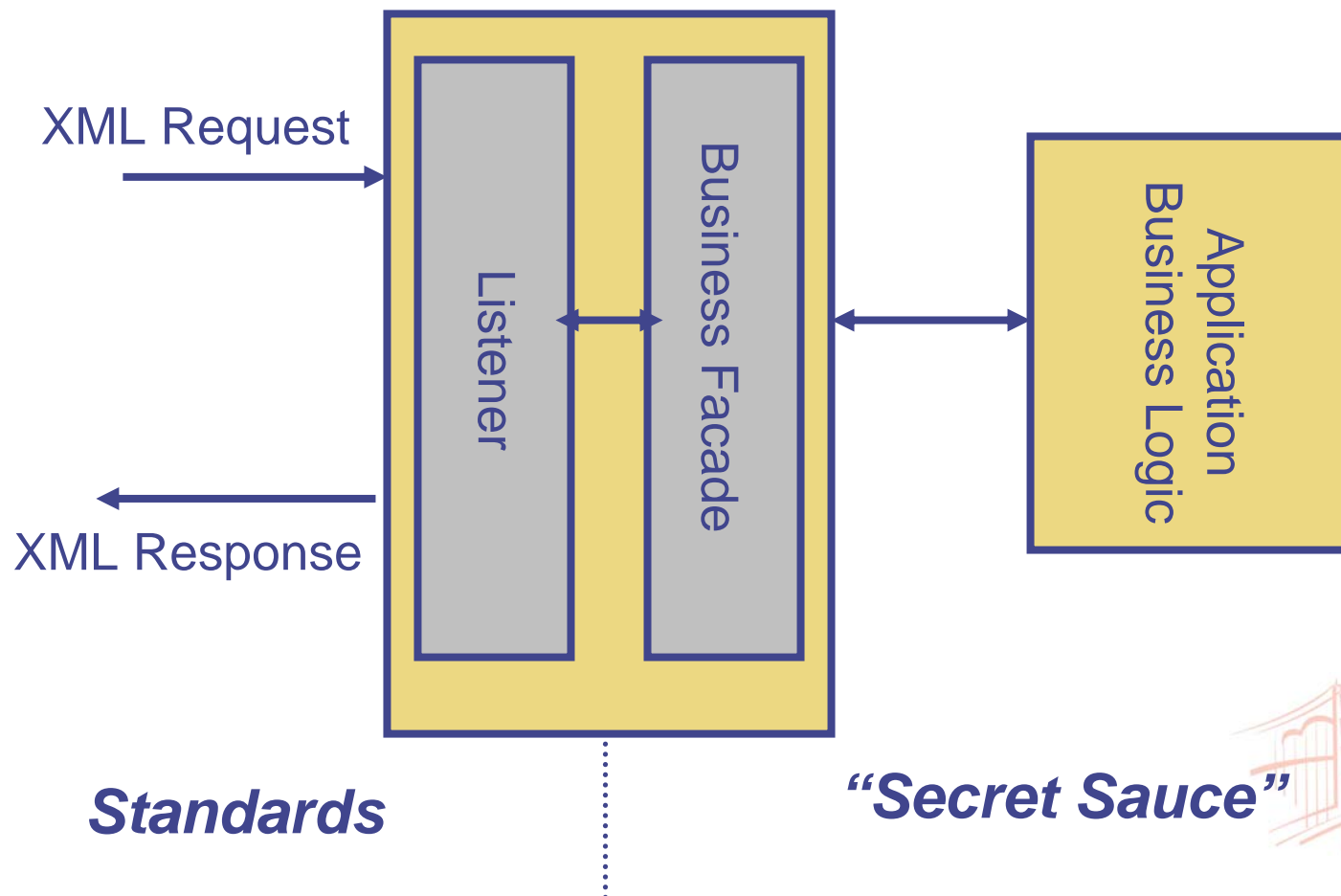


What is HR-XML?

- Independent, non-profit corporation (Dec 1999)
- Open to users, vendors, consultants, standards bodies, employers and other end-users, and individuals. 100+ organizational members
- Mission:
 - Enabling interactions (conversations) between *arms-length* trading partners.
 - Defining a common, freely available language: Nouns and Verbs
 - Relevancy and use in many countries. Japanese, European Chapters. Chinese Chapter?
 - Focusing on the practical vs. theoretical; the common vs. the 'secret sauce'

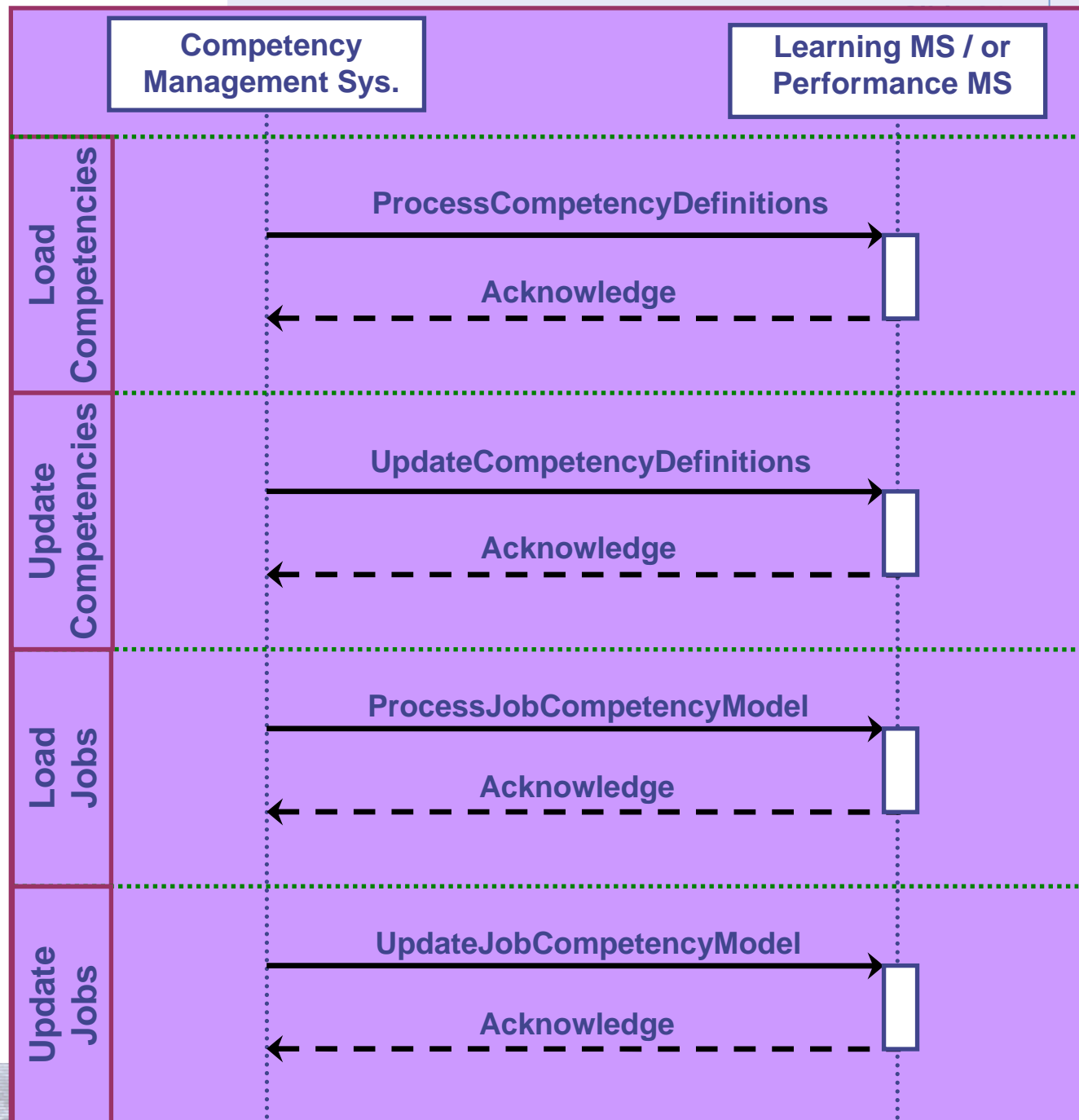


Web Services: A “Loosely Coupled” Approach



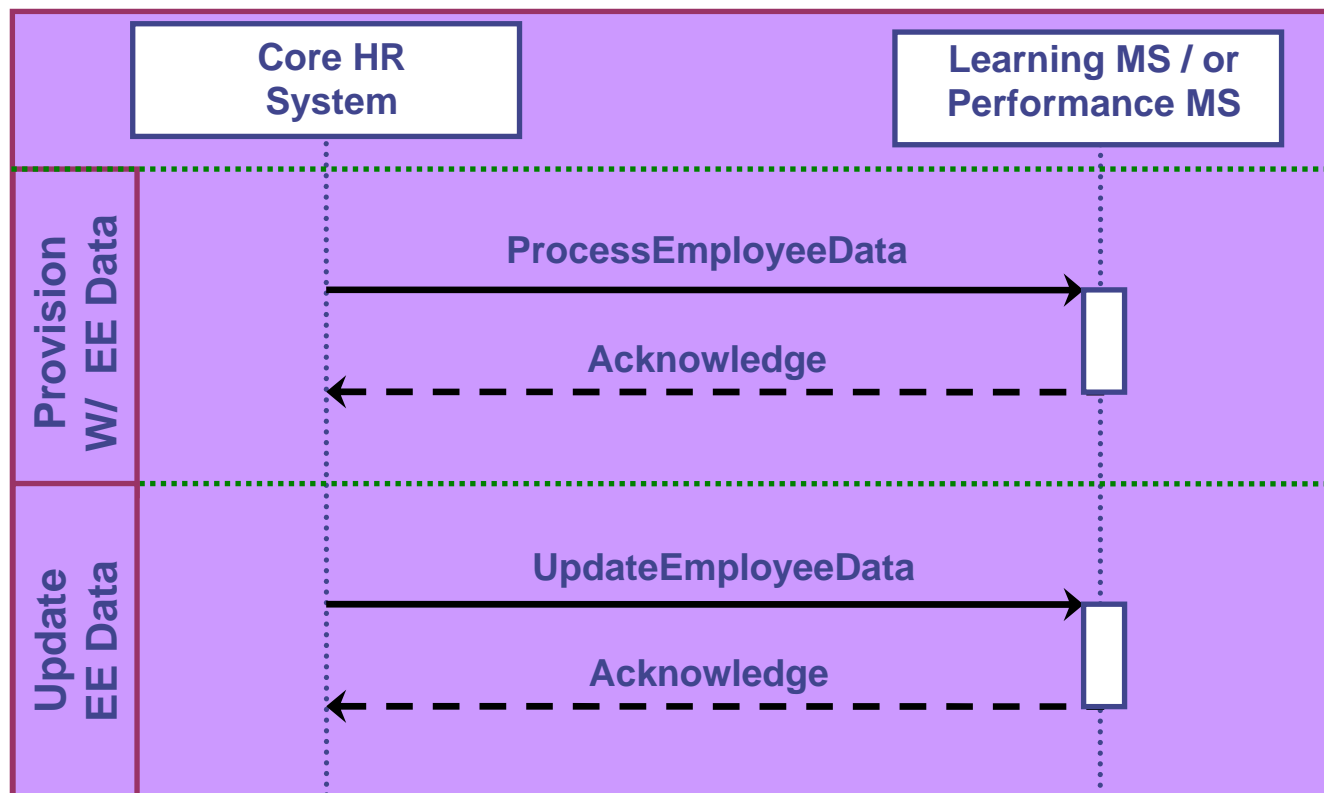
Competency Web Service

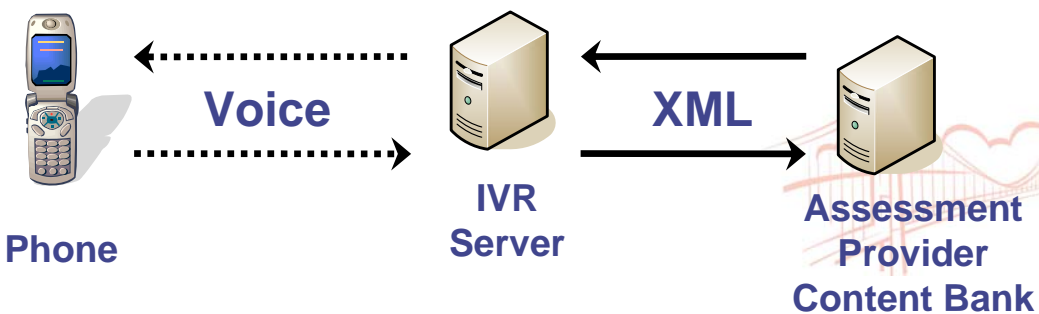
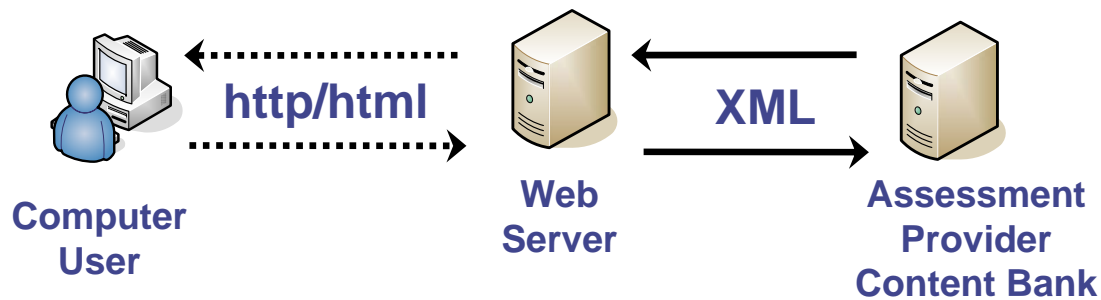
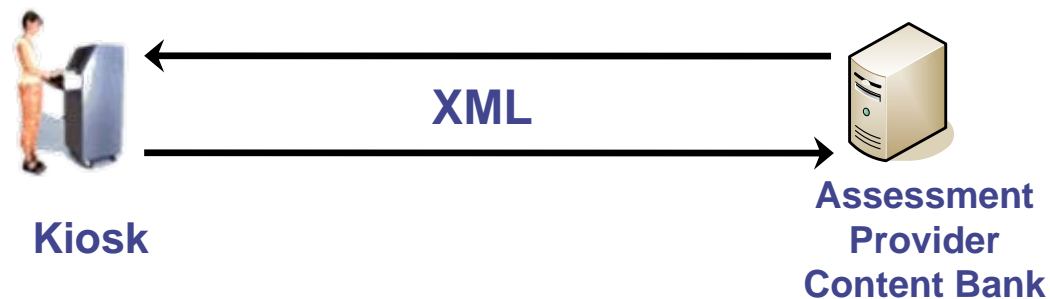
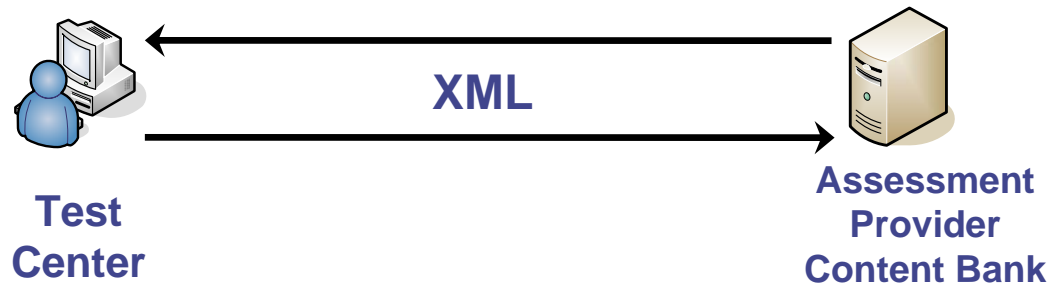
Provisioning Systems With Competencies and Job Competency Models.



LMS/PMS Provisioning Web Service

Provisioning
Systems With
Employee Census
Data and Joblds.



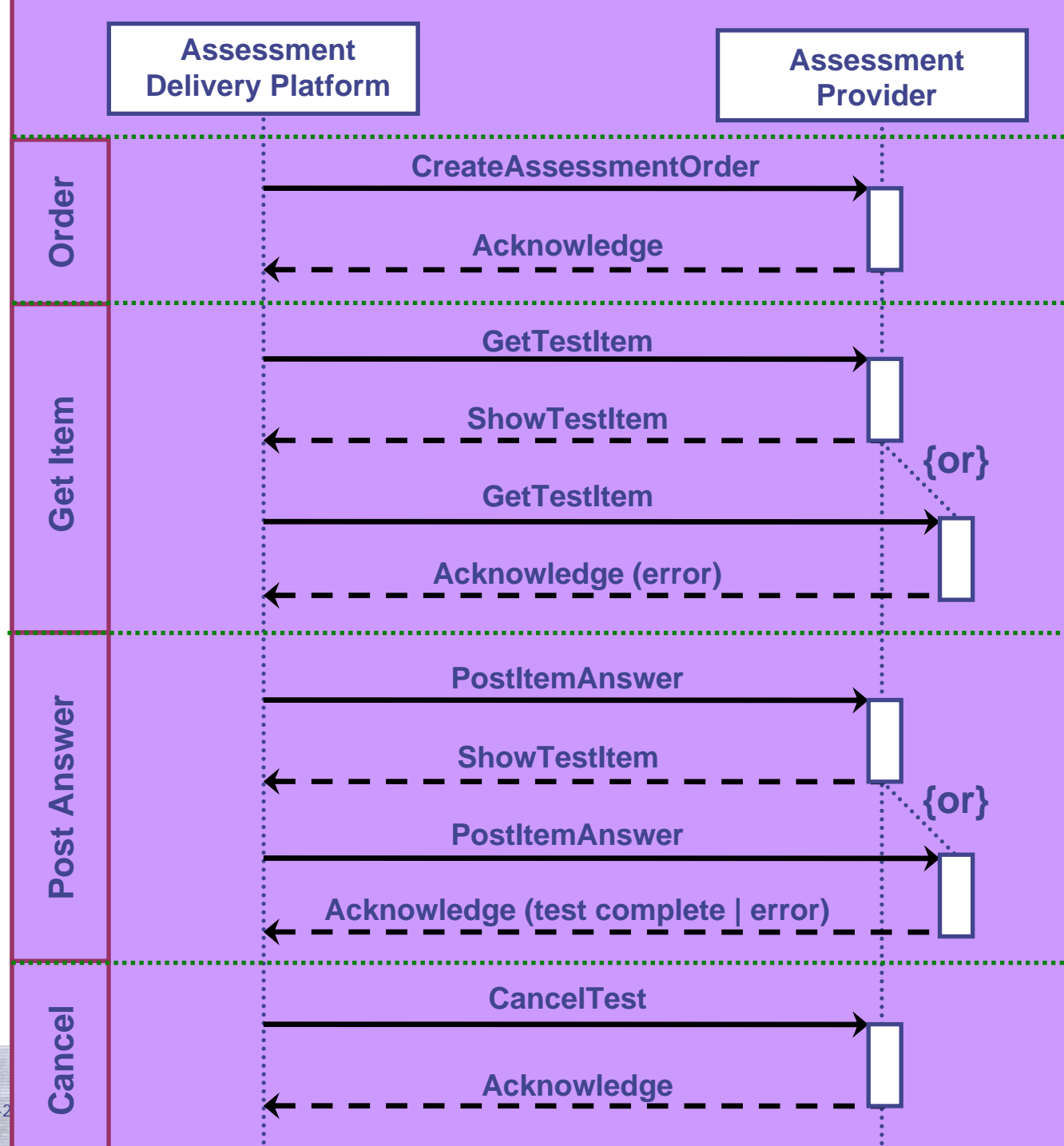


Batch Provisioning and/or Return Of Results

Real-Time Serving Of Items and Return of Results

Interactive Assessment Web Services

Simple WS Operations To Support Exchange of Assessment Content.



What Questions do you have?



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