



The Power of Global Collaboration
Defense | Government | Industry | Academia

Next Generation Learning Environment

iFest 2011 – 3, 4 August 2011

Jonathan Poltrack (Co-Lead) and Nik Hruska, Technical Team,
contractors with Problem Solutions

Tom Creighton and Rob Chadwick, Technical Team,
contractors with Katmai Support Services



Do you see the plenary?



1. Yes
2. No

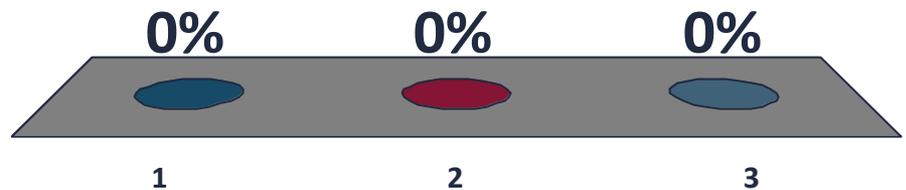




Are you...



1. Technical?
2. ISD?
3. Other?

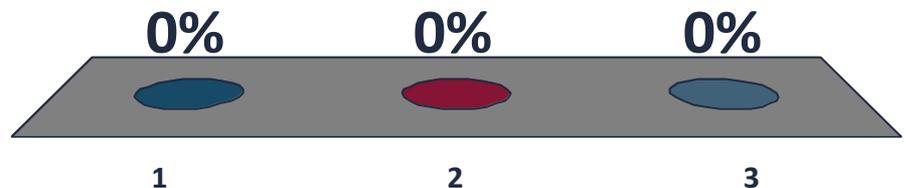




Are you interested in the LRS?



1. Yes
2. No
3. Abstain

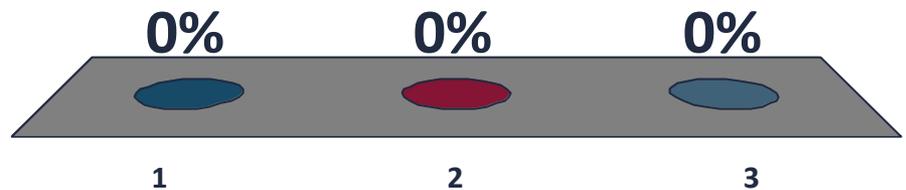




Are you interested in the mobile app?



1. Yes
2. No
3. Abstain

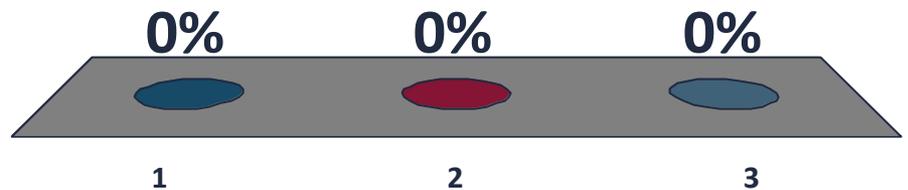




Are you interested in CaaS?



1. Yes
2. No
3. Abstain

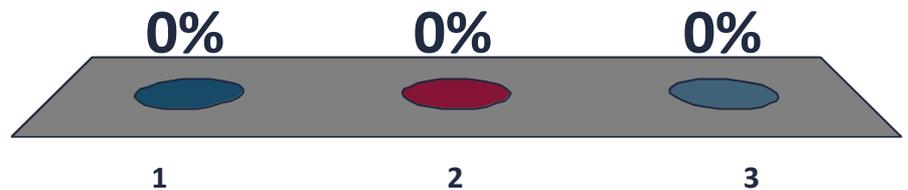




Are you interested in Unity?



1. Yes
2. No
3. Abstain

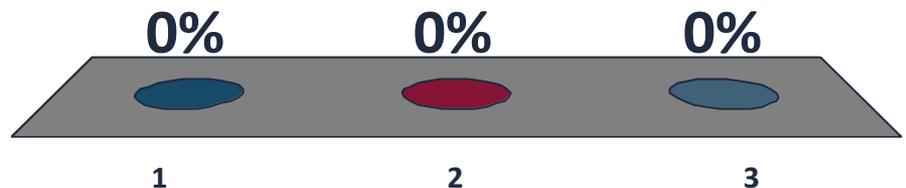




Are you interested in supporting legacy content?



1. Yes
2. No
3. Abstain

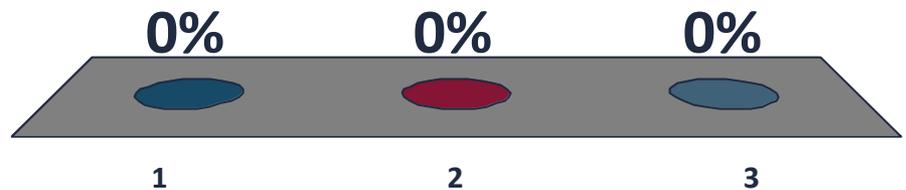




Are you interested in the VW?



1. Yes
2. No
3. Abstain

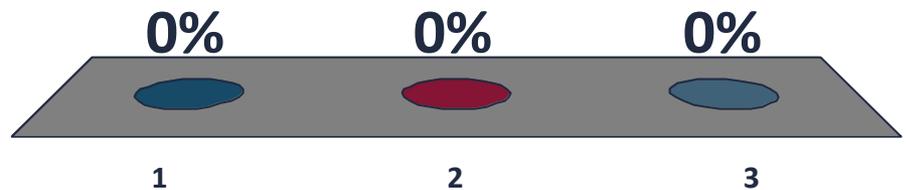




Are you interested in Kinect... or do you want to play with it?



1. Yes
2. No
3. Abstain





Future Learning Experiences



Goals:

- Enable learning experiences...
 - Rich, engaging, integrated, effective
 - Flexible with different pedagogies
 - Interoperable, Repurpose-able, Flexible, Accessible
- Enable the Personal Learning Associate



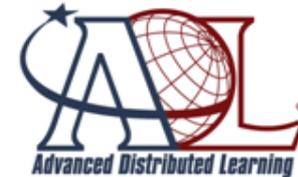
A Little History - SCORM®



- Initiated in 1997
- De facto global learning standard
- Packaging Content
- Describing Content w/ Metadata
- Run-Time Environment
- Sequencing & Navigation



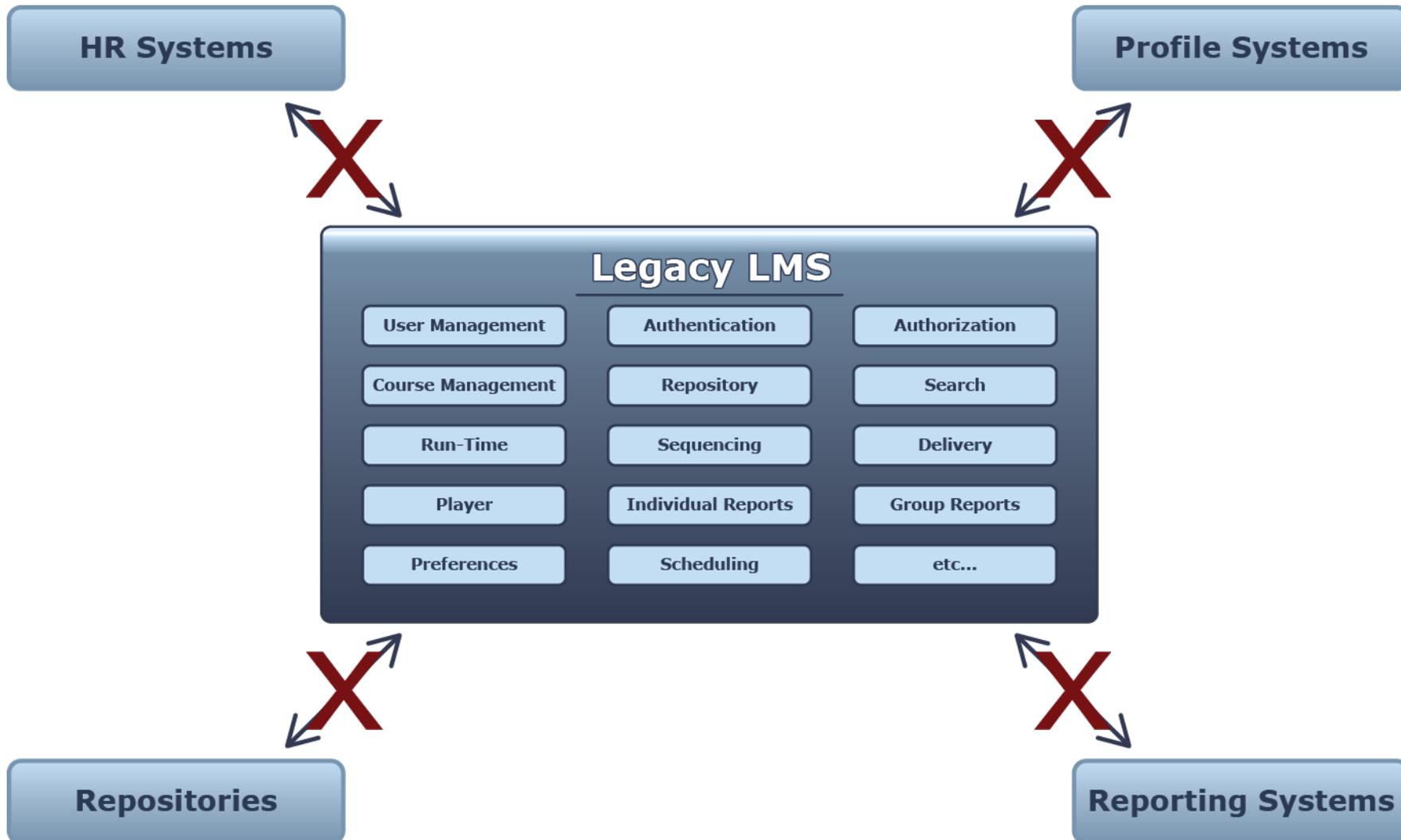
The Result



Monolithic Systems

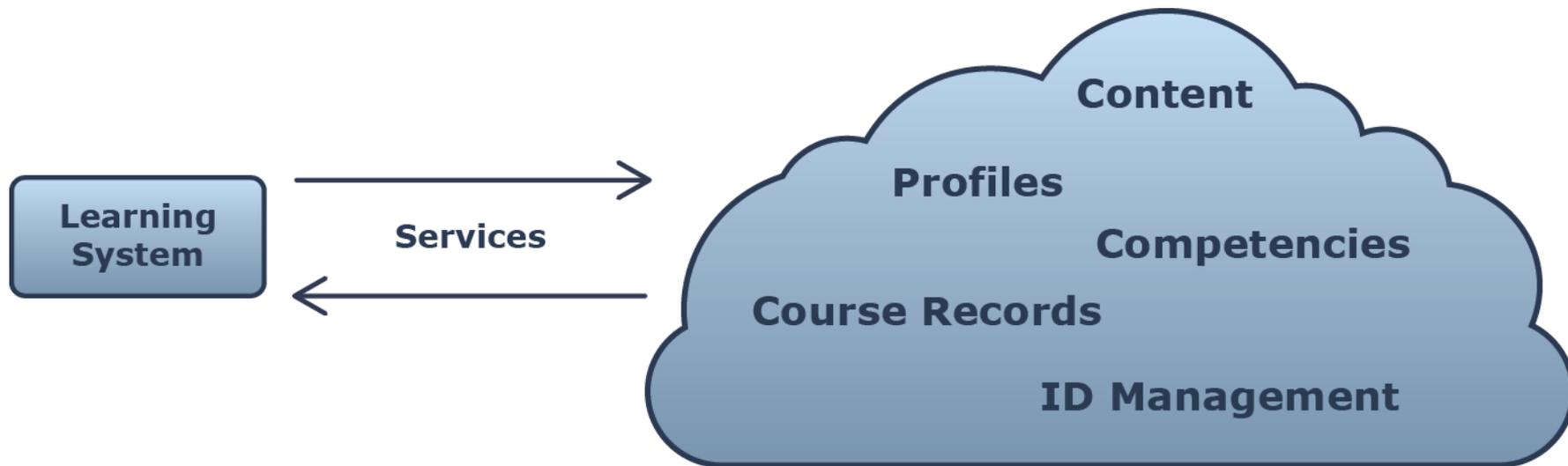
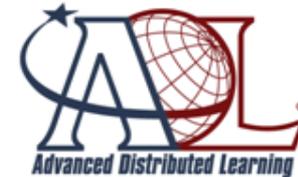


Enterprise Architecture





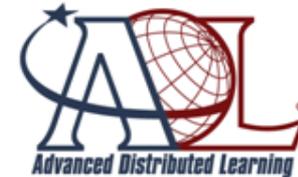
Web 2.0 and the Cloud



Enterprise Architecture Approach



Community Driven



Requirements from:

- Community Outreach
- Help Desk
- Project TinCan
 - UserVoice Site
 - 1-on-1 Interviews

Identified consistent issues



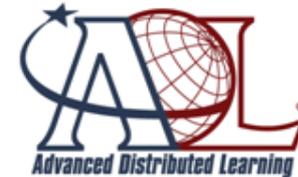
ADL's Role



- Research existing technologies and methods
- **Develop prototypes**
- Provide lessons learned
- Raise awareness



External Organizations



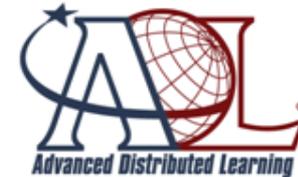
- LETSI
- IEEE
- AICC... and many others

- Aligning efforts and working groups
- Working together for the greater goal

To enable effective and efficient learning



Enabling Learning

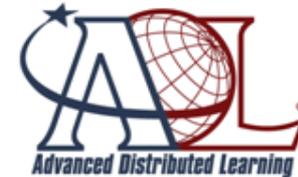


...to enable effective and efficient learning

- Know who the learners are*
- Know what types of outcomes are desired*
- Choose technologies that support those outcomes*



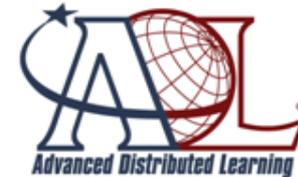
Tech Demos



- Learning Record Store (LRS)
- Android Tablet Application
- Mobile Content as a Service (CaaS) Course
- Unity Game
- Legacy Content/LMS
- Microsoft Kinect Simulation
- Virtual World Learning Experience

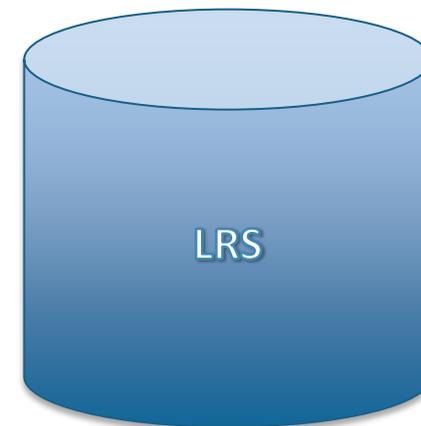


Learning Record Store



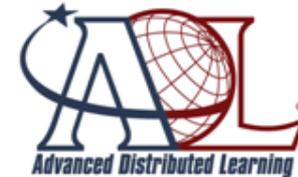
- LRS \approx LMSs of today
- Administration of demo components
- User management
- Content management
- Learning record storage

Does *not* provide sequencing
or navigation





Android Tablet Application

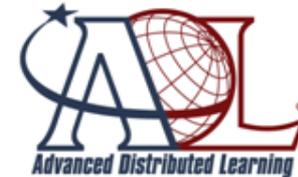


- Native Android tablet application
- External interface to LRS data
- “Learning dashboard”
- Out-of-browser administration





Mobile CaaS Course

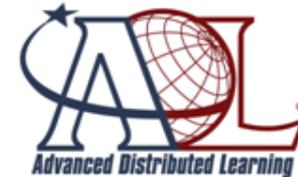


- Illustrates 'hosted' content
- Smart rendering per device
- Cross-domain content
- Tracking performance to LRS





Unity Game



- “Serious” game demonstration
- Open source Unity game
- Out-of-browser content
- Tracking performance to LRS





Existing SCORM Content

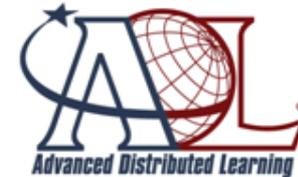


- Integration via a “wrapper”
- Legacy content tracking in a service-based system
- Uses legacy systems for import, sequencing, etc.





Microsoft Kinect Simulation



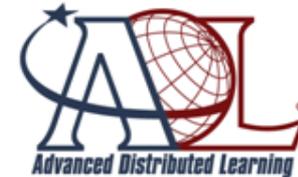
- Motion and speech control
"simulation"
- Microsoft SDK sample
- Out-of-browser content
- Tracking to LRS via voice command
- Speed of integration



KINECT™
for XBOX 360



Virtual World



- Multiple Users
- Tracking to LRS
- Integration of content within the virtual world
 - Learning dashboard
 - Autotutor Lite
 - Google Docs
 - Yammer
 - Legacy Content





ADL Initiative



Questions?