Issues With Open Source and Standards

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Open Source Motivation ??

- Pro
  - Open source products have low market share see standards as a way to get in quicker
  - Good support for interoperability fits the Open Source philosophy
- Con
  - Those who are *in* - are not so interested in investing resources in interoperability - leads to a low priority

Publishers have shown a willingness to fund.

Open Source .vs. Closed Process

- The IMS "members-only" access to drafts under development grates on Open Source values - drives some folks away on principles - this makes it hard to get volunteers "motivated" because they are working based on principles and passion
- Interestingly, lots of spec development organizations have limited distribution while documents are in draft - many reasons

Work Around - LTI

- Created parallel open discussion around LTI - simplelti.appspot.com
  - Full specification
  - Test harness
  - Sample source code
- Operated in parallel with the TI 2.0 Working Group

SimpleLTI – Developer Web Site

http://simplelti.appspot.com/

Google

SimpleLTI

Home Overview Developer Testing Download Screenshots About

Simple Learning Tools Interoperability

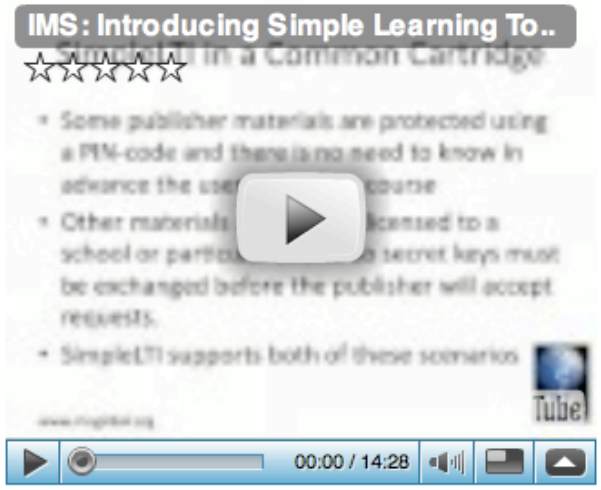
New: I have completed the first version of the test harness for a SimpleLTI descriptor in an IMS Common Cartridge.

New: An open source implementation of this spec is available for Microsoft SharePoint at http://www.codeplex.com/LTIWebPart - this was developed by LearnGauge.

New: Sample code for .NET is available in the download section.

In anticipation of IMS Learning Tool Interoperability Version 2.0 spec, I have developed a simple approach that can quickly be used to integrate externally hosted tools into Learning Management Systems.

This site is written in Python and is running on the Google Application engine.



IMS Learning Tools Interoperability v2.0 Working Group
IMS Common Cartridge Alliance
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It is important to note that this is an experimental activity done as part of the IMS Developer Network and this document is *absolutely not* an IMS Standard. The IMS LTI 2.0 working group is currently developing a specification that will cover this area. This SimpleLTI specification is only for developers who want to experiment with something that might be *similar* to IMS LTI and embedding SimpleLTI in a Course Cartridge. When the IMS LTI specification comes out - it is almost certain that the formal specification will not be the same as this spec.

This spec is very much part of ongoing engineering experiments and demonstrations - so it will naturally change as experience is gained. The experience gained in these efforts will be fed back into the IMS LTI 2.0 Working Group as input.

Please make sure I am aware if you are implementing any production code based on this specification. The key is that I need to be able to inform you when this spec changes or becomes completely obsolete as the real IMS LTI 2.0 specification matures and is approved.

SimpleLTI Implementations

- Content Integration
  - McGraw-Hill Katana
  - Pearson TPI
  - K12 - www.k12.com
  - Google Documents (SAML)
- LMS Integration
  - Angel
  - Sakai (3 places)
  - Moodle
  - Microsoft MIRLearn
  - Blackboard Building Block

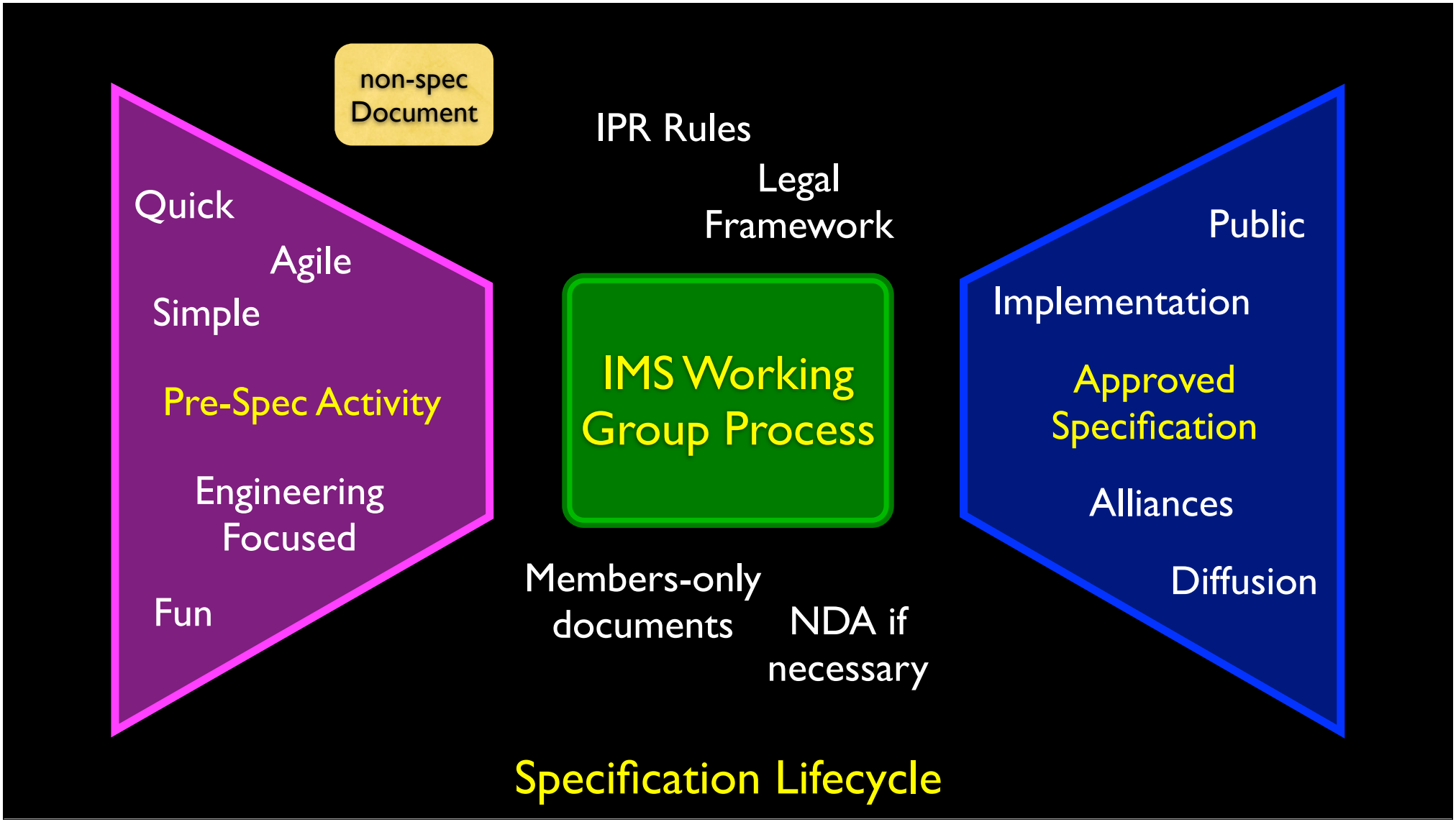
This has gotten a little out of control.

SimpleLTI Technical Lessons

- Many eyes on the spec is a great benefit
  - Found security flaw in the Wimba Spec
  - Discovered OAuth
- A diverse set of implementation experiments reveals bad assumptions
  - Realized the advantages of in browser POST as “plan A”

SimpleLTI non-Technical Lessons

- Having an open non-spec greatly expands the discussion around a spec
- Few organizations really want to be part of a Working Group for 2-3 years
- Lots of organizations like to play and do interoperability demos as long as it is easy and they are well-supported
- Having an open non-spec allows for broad involvement and increases interest in IMS membership


non-spec Document
IPR Rules
Legal Framework
Quick
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Simple
Pre-Spec Activity
Engineering Focused
Fun
IMS Working Group Process
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Implementation
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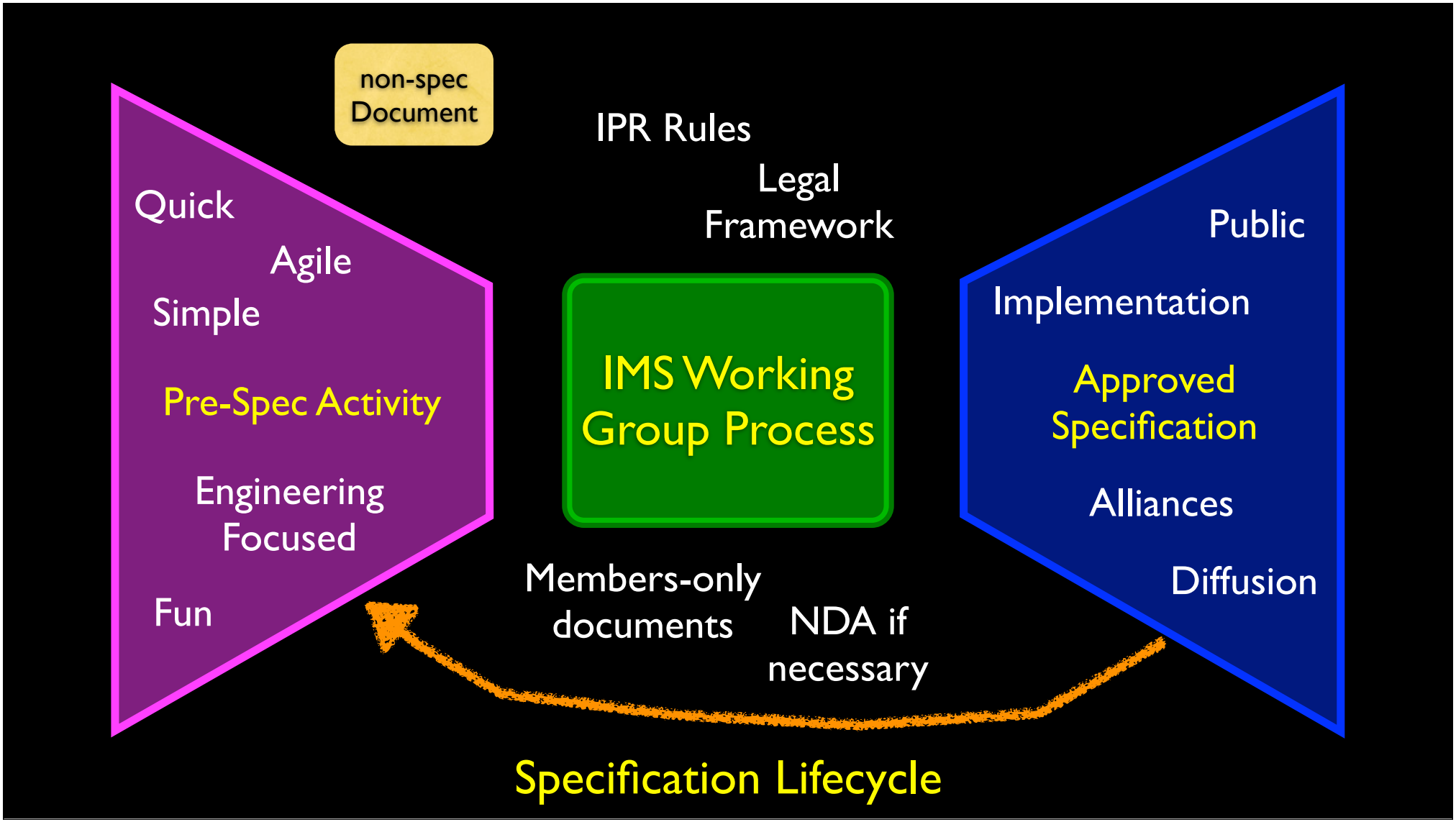
Diffusion
Specification Lifecycle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Going Forward

- I will encourage a series of "Simple" specifications that allow quick exploration of engineering issues that allow engineers and eningeering experiments to inform the formal standards making process.
- For certain specs, producing open non-spec documents that let new organizations and people become interested and involved in IMS processes in the early phases

One last thought...

- When open source projects mature, they start to look a lot like commercial vendors (for better or worse)
- IMS LTI Allows any major vendor to keep the “hackers” out of their source tree and lets the LMS vendors focus ontheir “core”
- If we end up with a popular desktop authoring environment that emits IMS CC - then LMS can outsource authoring - then it will become important
- It is all about stakeholders and pain points