BACKSTAGE
What’s Behind the Curtain

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The Problem

• MIT Faculty are **investing heavily in content development** (notes, videos, assessments) for edX and OCW delivery.

• Ideally, MIT should **manage these resources** and make them available as needed to our community for re-use.

• Solution must...
  
  — Support integration with edX, OCW and others
  
  — Be adaptable to new technologies and market products
Current Development Workflows

- MIT Course
  - Faculty Production
  - Other MIT Support

- MIT Course from Stellar
- MIT Course from Prof.

- MIT Course for edX
- OCW Course (Scholar)

- OCW Production

- MITx (edX) Production

- MITx

- OCW

- MIT Course

- Stellar Course
- Class Only
- Course Site

- MITx on edX

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Possible Future

MIT Courses Context Experiences

MIT Digital Learning Infrastructure

MIT Content Repositories
MIT Context+ Repositories

MIT Course on Stellar
OpenCourseWare
MITx Course on edX
New Destination
Proposed Solution – Backstage Services

• “Headless” content services with published APIs
  – REST, Python, Java
• Key applications using these services
• Support a developer community
Producer – Asset Management for Reuse

• Motivation
  – Support content reuse in MITx (edX) content workflow
  – Ease content search and integration
  – Explore alternative authoring tools for edX delivery

• Status
  – Proof-of-concept being tested
Producer and Backstage Services

Online Course Platforms

Assessments

Assets

Videos

Learning Objectives
  • MC3

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Assessments

• Motivation
  – Manage, share and author assessment items
  – Track usage and IRT data across assessment offerings
  – Implement APIs for taking as well as managing/sharing

• Status
  – Proof of concept drag-and-drop authoring tool (demo)
  – App to Embed Assessments (QTI assessment items)
  – Physics Question Bank (PQB) under development
Assessment Backstage Services

Assessments

Assets

Videos

Learning Objectives
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Assessment Authoring

Drag and Drop edX assessment item authoring
• Motivation
  – Enable better use of whole-class lecture video (60-90 minutes) by segmenting by concepts/topics
  – Pre-production for MOOC courses
• Status
  – App to browse lecture videos by concepts (demo)
VCB and Backstage Services

- Assessments
- Assets
- Videos
- Learning Objectives
  - MC3

Navigate course video by concept or learning outcome

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Discussion Questions

• How are you reusing course content?
  – Between MOOCs
  – From existing sources, LMS/VLE, OER, etc.
  – What tools are you using?

• Are you tracking data about asset effectiveness?
  – E.g., Did learners have difficulties answering a particular question correctly? Did learners skip materials? Etc.

• Does your course include learning outcomes and transparently link outcomes with content and assessments?
BACKSTAGE
The End!

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