Sakai, Openness, and the New Reality in Education

Ian Dolphin - Sakai Foundation Executive Director

Ja-Sakai Conference - Japan - March 2012

Sakai® Foundation

Covering

- **Background** - where is Sakai from, what we are
- **Context** - Challenges facing Higher Education
- How is the Sakai Community **responding** to those challenges?
  - Sakai **Open Academic Environment**
  - Increasing our collective resources - **merger with Jasig**

Sakai® Foundation

Sakai Foundation

A Little History ...

Sakai Project Objectives (2003)

- Replace in-house LMS at 6 institutions with collaboratively produced, sustainable software
- More than an LMS - research, general collaboration
- Easy to add of tools, services; “pluggable”
- Personalize and Customize; uPortal integration
- Enterprise software - run at scale

Sakai® Foundation

How Did We Do? - Sakai CLE

- ☑ Sustainability: 330+ Adopters, 80 HE Foundation members. 40+ Contributors, 19 Commercial Affiliates
- ☑ Go beyond the LMS: Significant adoption for research collaboration - UK, Australia
- ☐ "Pluggable": partially accomplished, still needs work
- ○ Personalize, Customize? - uPortal: Finally ...
- ☑ Enterprise level software: Scale of deployment and use - UNISA, 200k, Indiana, 100k. Intensive use

Sakai® Foundation

Sakai Foundation

- **Collegiate** in nature - not an open source ‘pyramid’
- **Coordinator** of community - **not** a software house
- More than one ‘product’ -
  - Sakai **Collaboration** and **Learning Environment (CLE)**
  - Sakai **Open Academic Environment (OAE)**
- Members in **Japan** - Hosei, Kansai, Osaka, Nagoya Universities, Kanematsu Electronics, NS Solutions

Sakai® Foundation

A Little (Global) Context ...

Sakai Foundation

What's changed since we set out on this path?

Global Policy and Practice

- Higher Education - a key governmental **policy lever**
  - Changes in direction; responsiveness of HE
- **Learning** & **Teaching**
  - **Inclusion**; **diversity** of student population
  - Pace of **pedagogical** change; **diversity** of approaches
- **Research**
  - Concentration/dispersal; **viability**, **collaboration**
  - Stimulating **interdisciplinary research** a key theme

Sakai® Foundation

Global Landscape

- Public institutions - **variable changes in funding**
- **Structural** changes - Fees, Bologna
- Impact of **globalization** at institutional level
  - Multi-campus, distance education
- Private institutions - **endowment revenue decline**
- **Footnote**: Spend on Admin IT systems - rarely mirrored in support of IT related to mission delivery

Sakai® Foundation

Scale ...

... no longer means
"Enterprise", but Web Scale

Sakai Foundation

Interoperability...

...from complex to realistic

Sakai Foundation

Learner Expectations...

...learners expect the future

Sakai Foundation®

Sakai® Foundation

‘An unprecedented capacity to share’

David Wiley

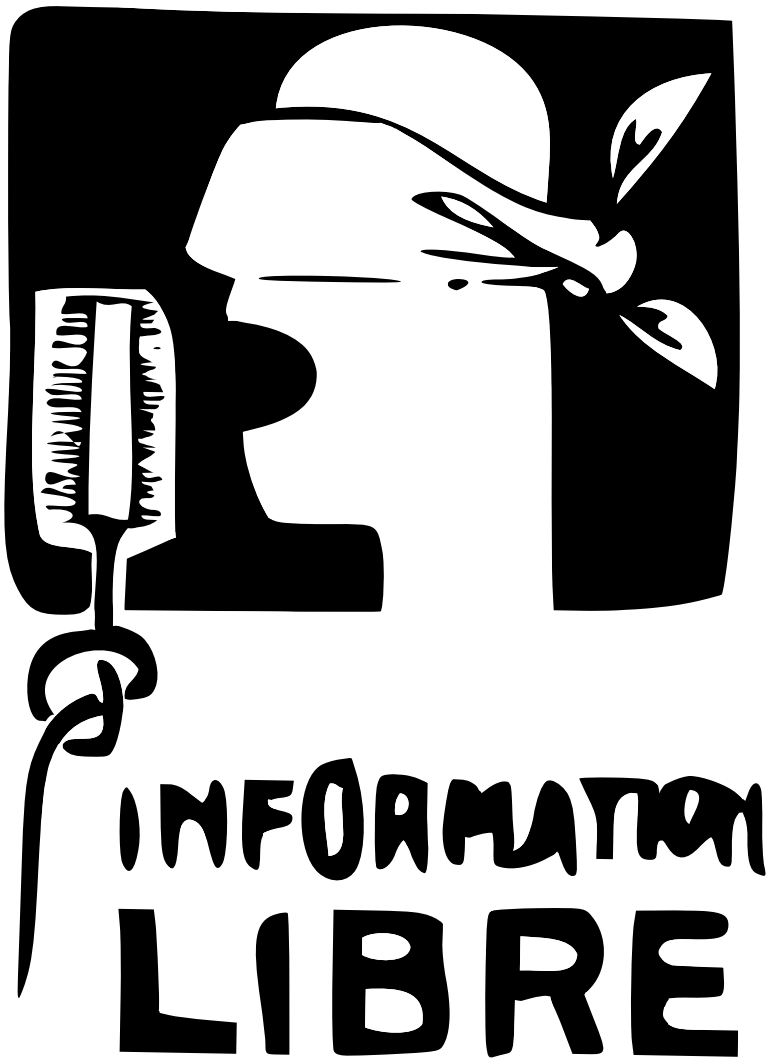
Responding to the Challenge

The open agenda in higher education

Sakai® Foundation

'A central pillar of the academic community is its commitment to the free flow of information and ideas'

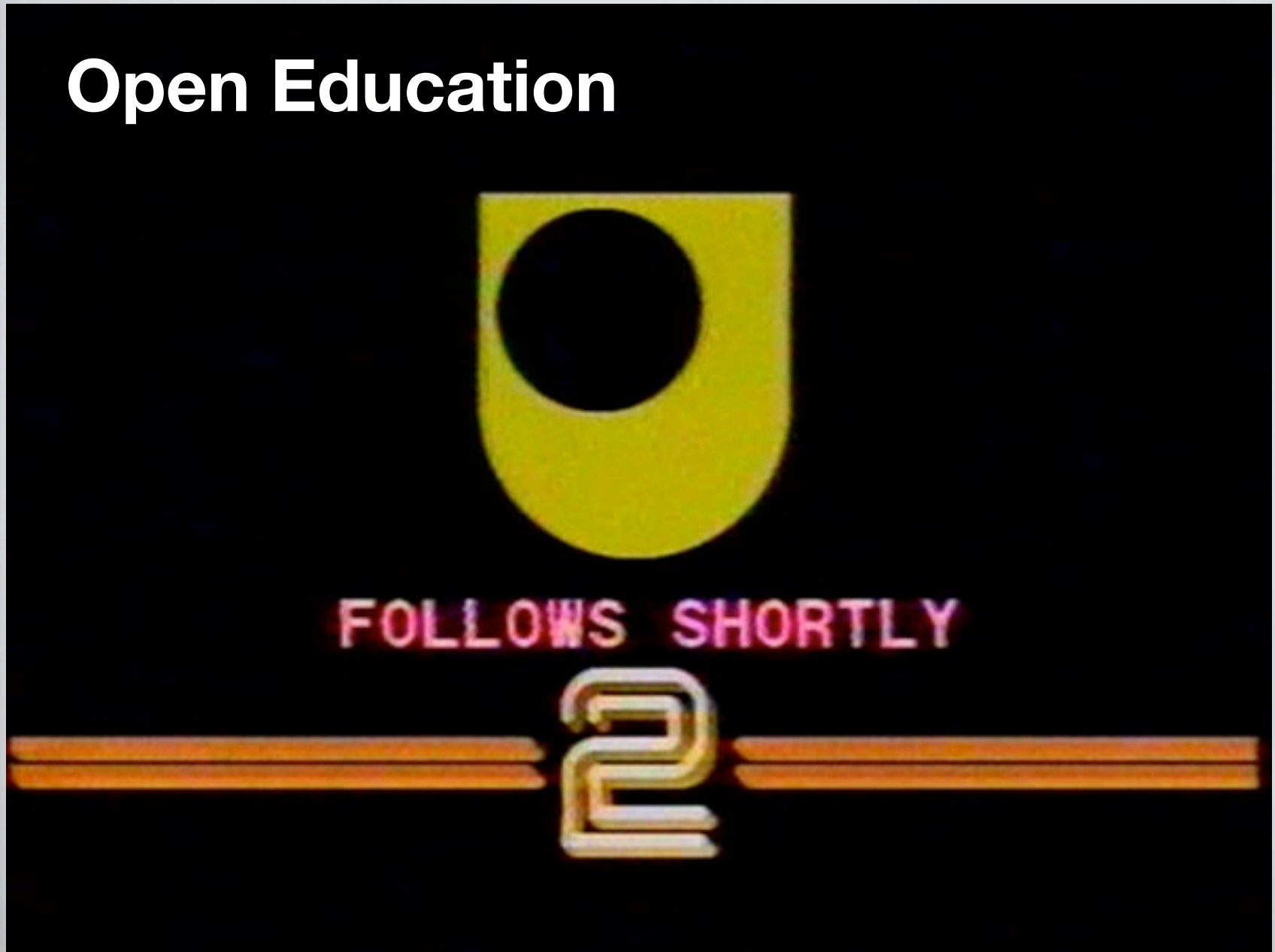
Jonathan R. Cole, The Great American University, 2009



The Open Agenda (s) ...

Sakai® Foundation

Open Education



Sakai®
Foundation

Open Education

Sakai® Foundation

Sakai Foundation

Open Educational Resources

Open Access Publication

Sakai®
Foundation

Open Data Open Doors

JISC and RLUK Resource Discovery Taskforce Newsletter

JISC

RLUK Research Libraries UK

Issue 1 - March 2011

What is Open Data? Why should I care?

This is the first newsletter of the JISC & RLUK Resource Discovery Taskforce, which was set up in 2010 as a collaboration of national stakeholders from the UK libraries, archives and museums communities. The newsletter is intended to profile both RDTF activities and developments that are relevant to the RDTF work.

The aim of the RDTF is to help to make resources more discoverable by both people and machines - discoverable resources that can then be reused through integration and aggregation for purposes beyond, but including, formal institutional commitments to exposure and access.

JISC and its partners are committed to a programme of activities designed to build a community of practice and critical mass through open data, exemplars of use and communication. This programme involves:

- **Engaging key stakeholders** from directors to developers across libraries, archives and museums, who have the power, the ideas and the will to make things happen
- **Building critical mass** of freely available quality data that will inspire others to participate in opening up their own data and developing purposeful aggregations and compelling applications

Open Data

Sakai® Foundation

Open Source Software

Sakai®
Foundation

Open Source Drivers

- ‘Courant Report’ surveyed US HE IT leaders (2006)
  - **Cost** - the multi-million ERP/Finance system
  - **Performance** - suitability for purpose
  - **Control** - market size, & vulnerability to monopolization?
- **Innovation** and academic **mission delivery**
  - Was the LMS a the “freezing point” of eLearning?
  - Community Source - collaborating to close innovation loop

Sakai® Foundation

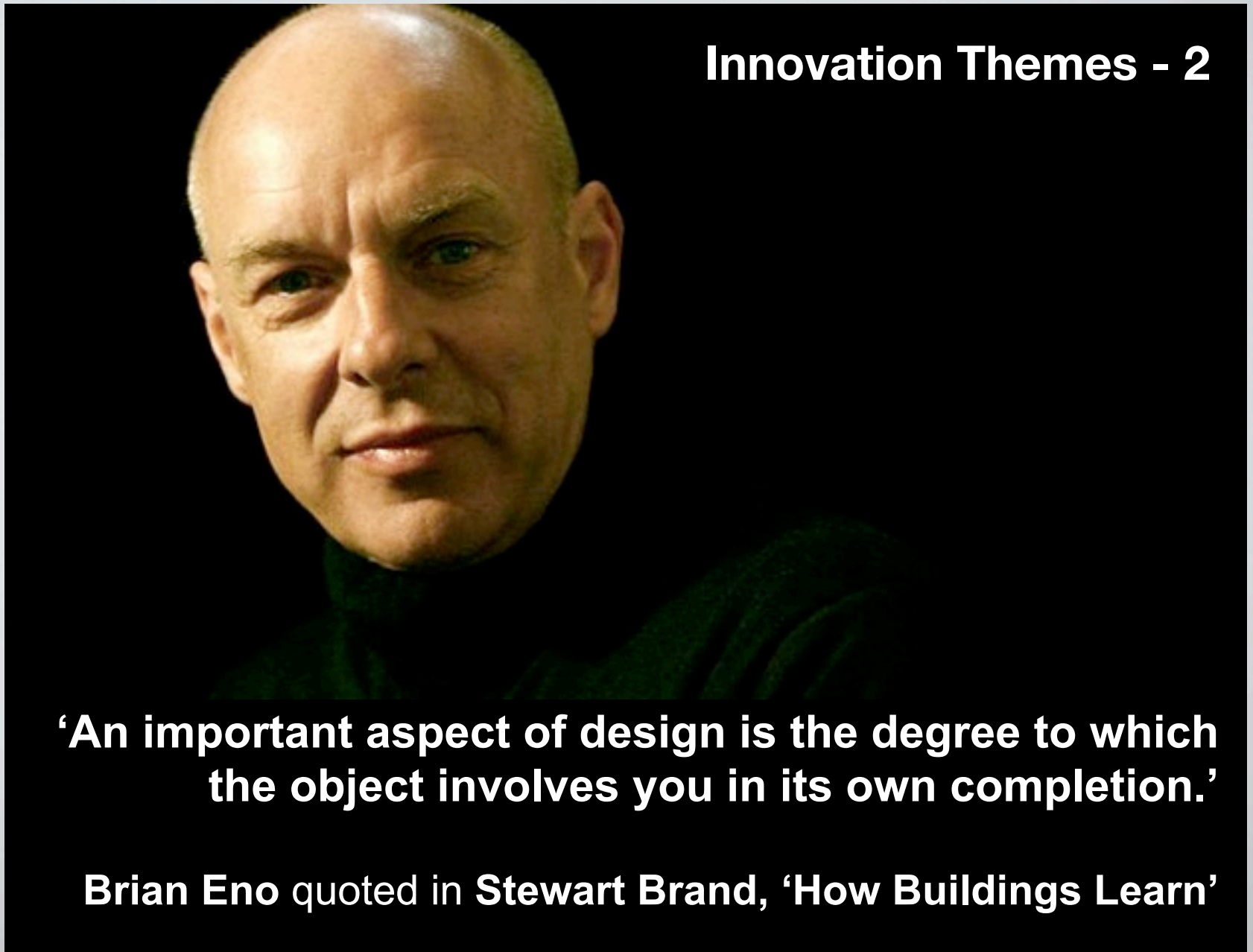
Innovation Themes - 1

Innovation shifting from *manufacturer* to *user*

Democratizing Innovation / Eric von Hippel

Sakai® Foundation

Innovation Themes - 2



‘An important aspect of design is the degree to which the object involves you in its own completion.’

Brian Eno quoted in **Stewart Brand, ‘How Buildings Learn’**

Sakai® Foundation

Sakai Foundation®

Role of **networks** of people and **openness** in **stimulating innovation**

Where Good Ideas Come From: The Natural History of Innovation / Steven Johnson

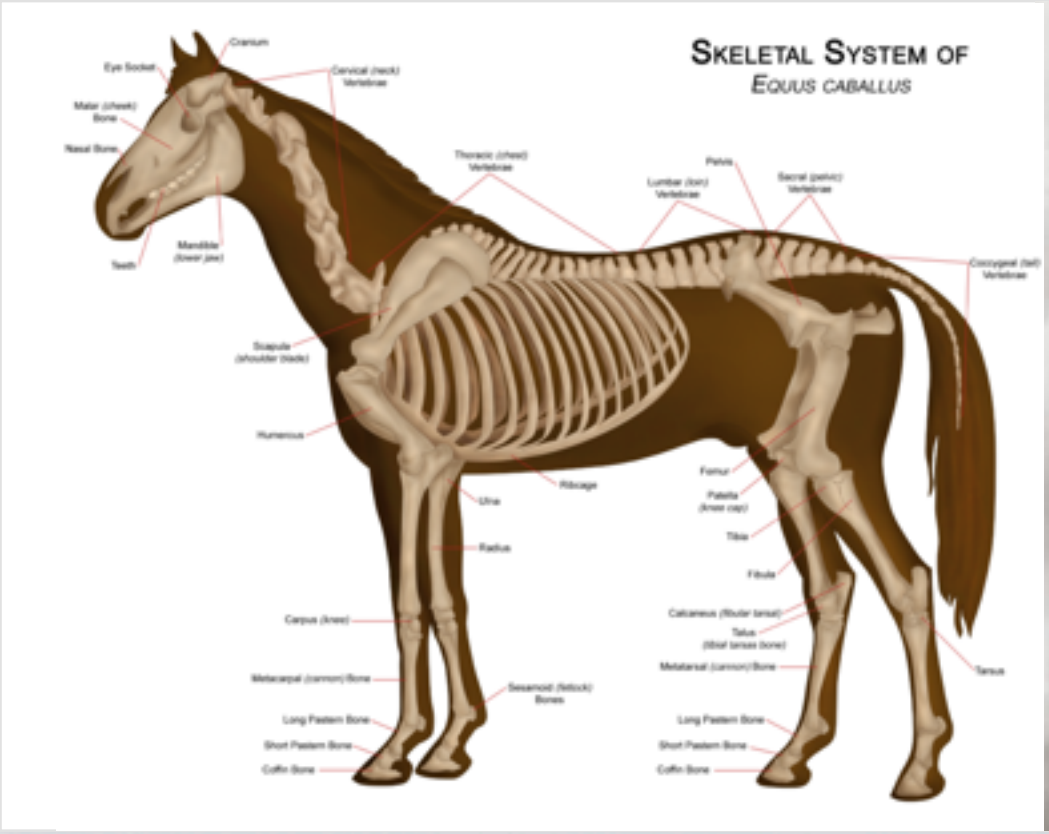
"It’s not that the network itself is smart; it’s that the individuals get smarter because they’re connected to the network."

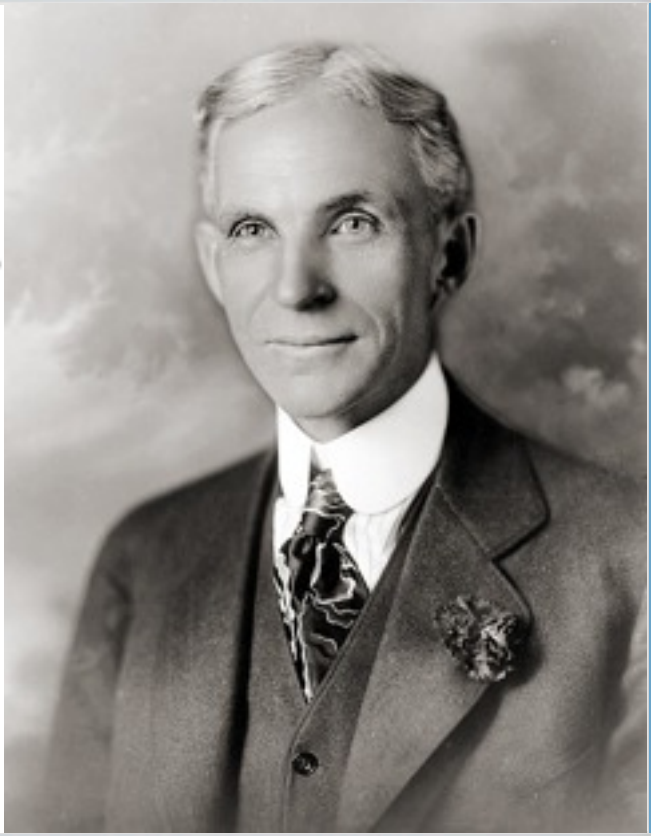
Sakai® Foundation

People Networks

- Open **Education**
- Open **Content**
- Open **Access**
- Open **Data**
- Open **Source**
- **Do we need to inter-network openness?**

Sakai® Foundation





Sakai Foundation

Sakai Open Academic Environment

"Not <*just*> a faster horse…"

Sakai Open Academic Environment

- Rooted in **community experience** of Sakai CLE
  - Work of Sakai **Teaching and Learning** Community
- Early work at Cambridge (UK) “Sakai 3”
- **Managed project** from July 2010
- Cambridge, Indiana U, Georgia Tech, Charles Sturt, NYU, UC Berkeley, U Michigan
- Readying 1.3 release

Sakai OAE **Design** Goals

- **Openness** and **permeability**: navigable public access, access, use external content (& vice versa)
- **Networking** people and groups
- **Composable workspaces**. Tools and resources exposed on pages via placement of tool widgets.
- **Sharing** one to one/many without being members of common workspace.
- **Modern user experience**

Sakai OAE **Technical** Goals

- Open, standard interfaces
- Widget development - small, composable components
- **Re-use** technology from OSS communities outwith HE
- Designing -

Affordances for innovation

Simplified Continuum

Learning Management System — **Open Academic Environment**

Highly Structured
Tool Centered
Worksite/Space/Course Centered

Loosely Structured
Person Centered
Content and Networking Centered

Continuum also reflects skill set, person capability with technology
It may also reflect institutional capacity to support diversity ...

Sakai® Foundation

Simplified Continuum

Learning Management System — **Open Academic Environment**

Highly Structured
Tool Centered
Worksite/Space/Course Centered

Loosely Structured
Person Centered
Content and Networking Centered

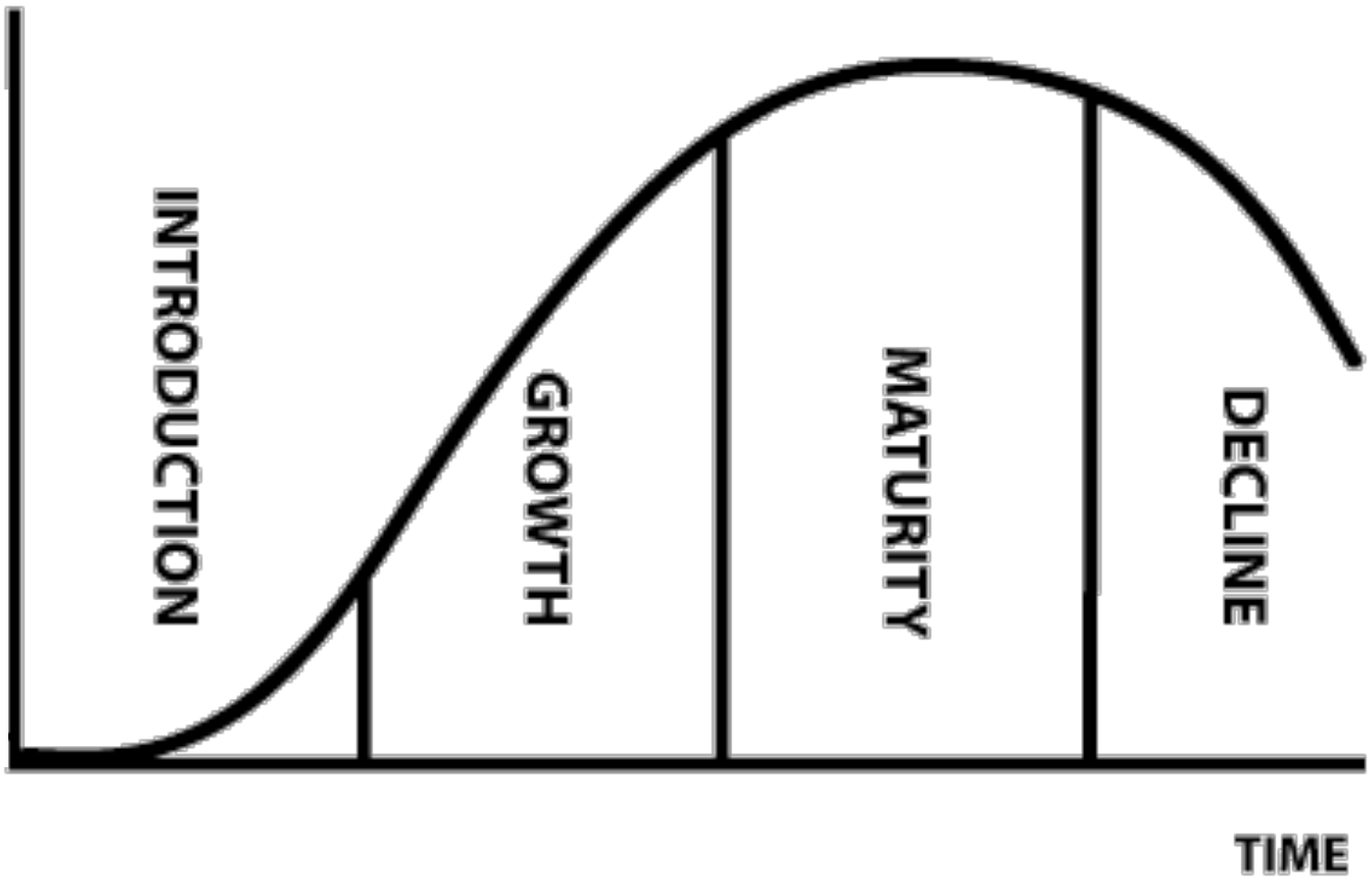
Continuum also reflects skill set, person capability with technology
It may also reflect institutional capacity to support diversity ...

Sakai® Foundation

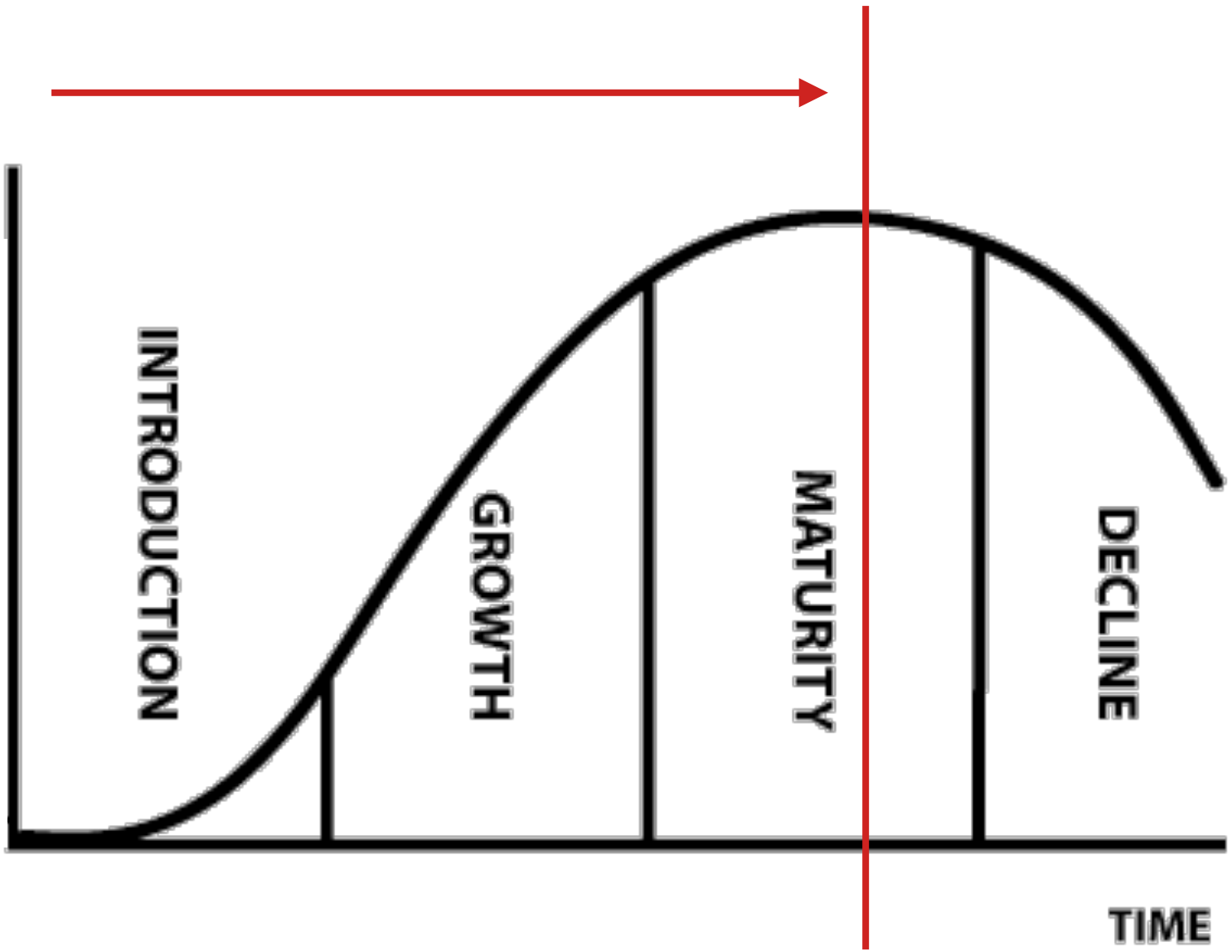
A Small Sustainability Detour ...

- The “adoption” of open source software
  - Adopting ***software***
  - Adopting ***approach***
- Adoption ***and*** Contribution is implicit in “approach”
- **Sustainability**: not just a long march to the plateau
  - Managing **lifecycle** and **transition**

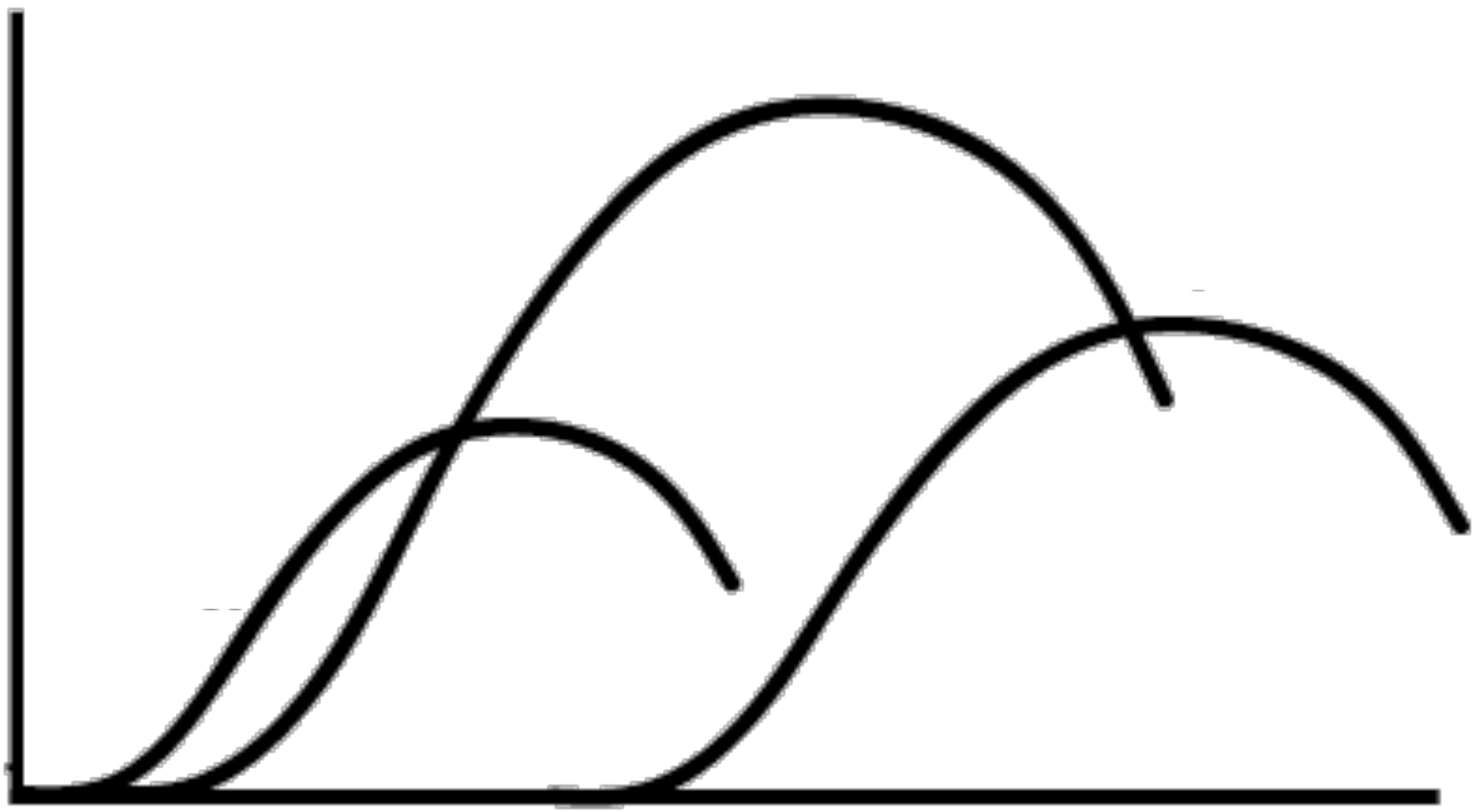
Sakai® Foundation



Sakai®
Foundation

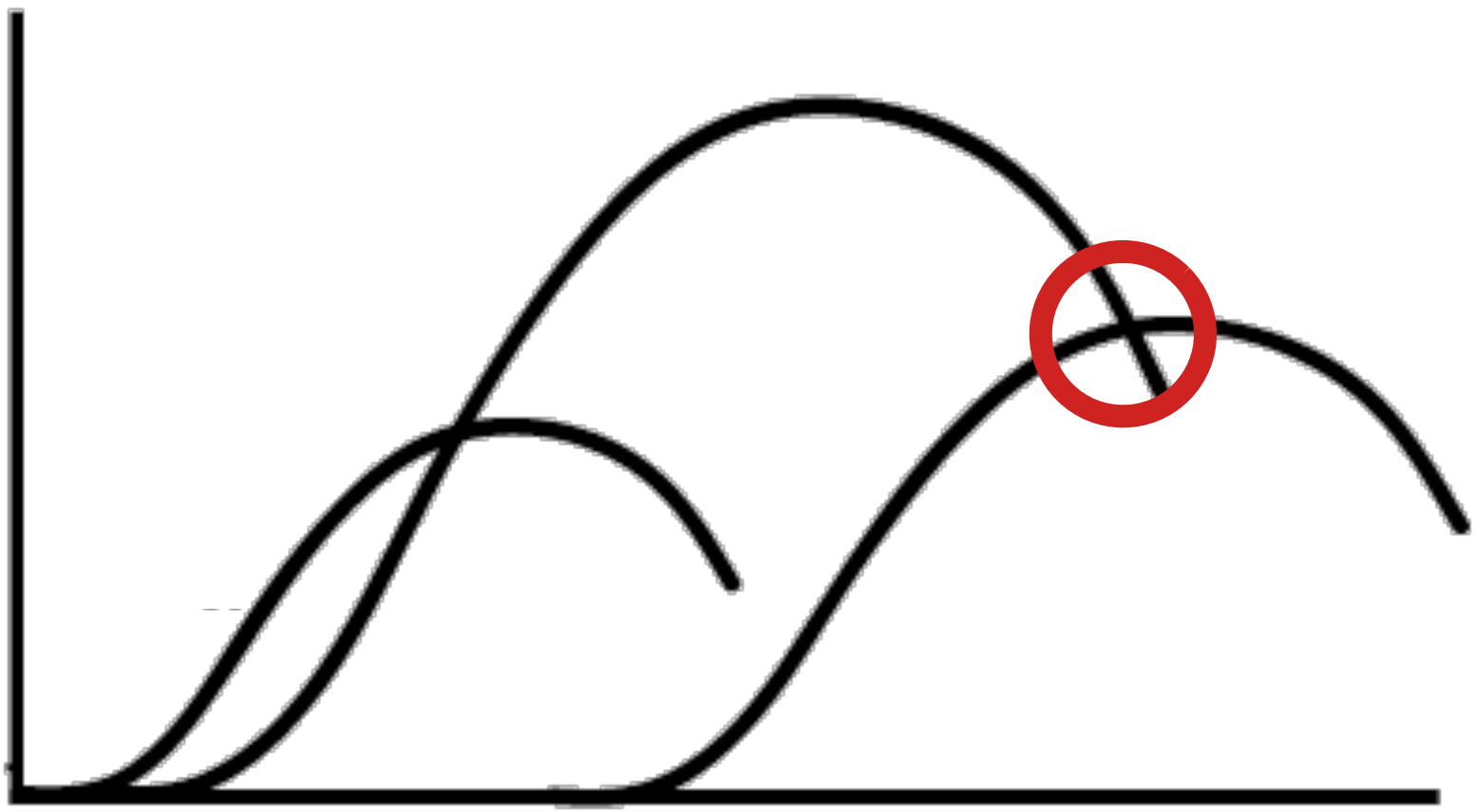


Sakai®
Foundation



Transition periods of unspecified duration...

Sakai® Foundation



Transition periods of unspecified duration...

Sakai® Foundation

Simplified Continuum

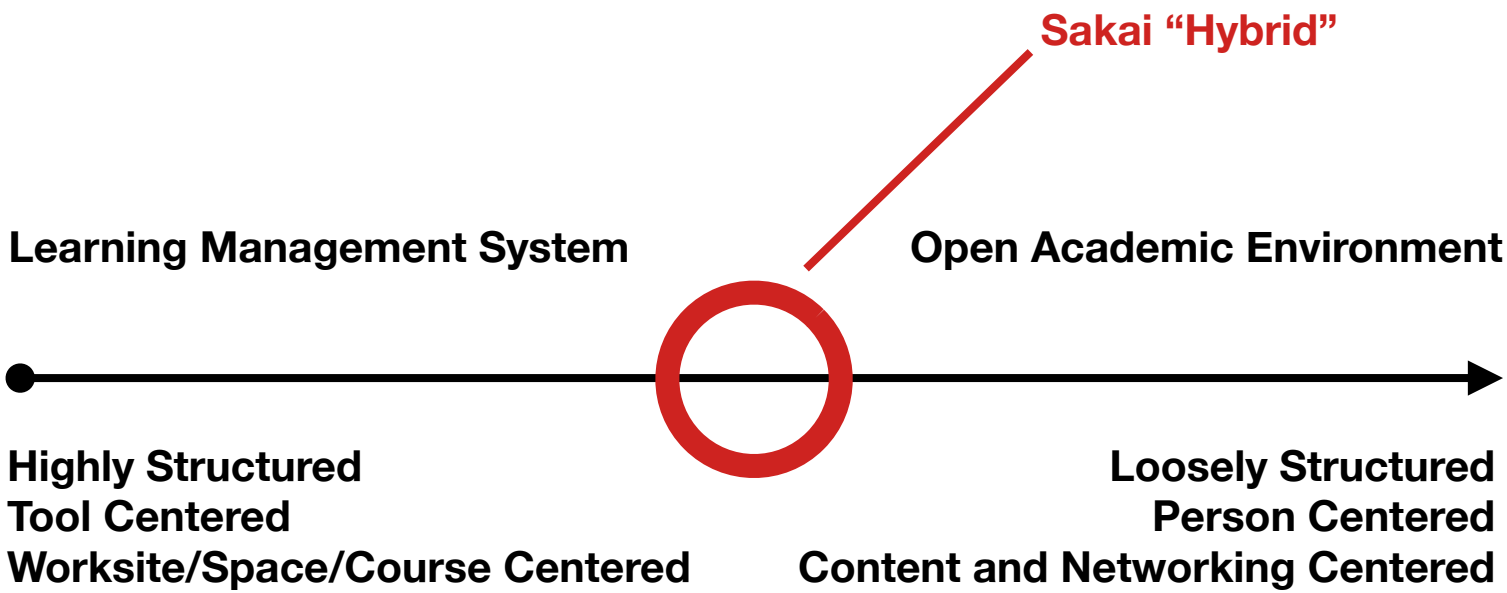
Learning Management System — **Open Academic Environment**

Highly Structured
Tool Centered
Worksite/Space/Course Centered

Loosely Structured
Person Centered
Content and Networking Centered

Sakai® Foundation

Simplified Continuum



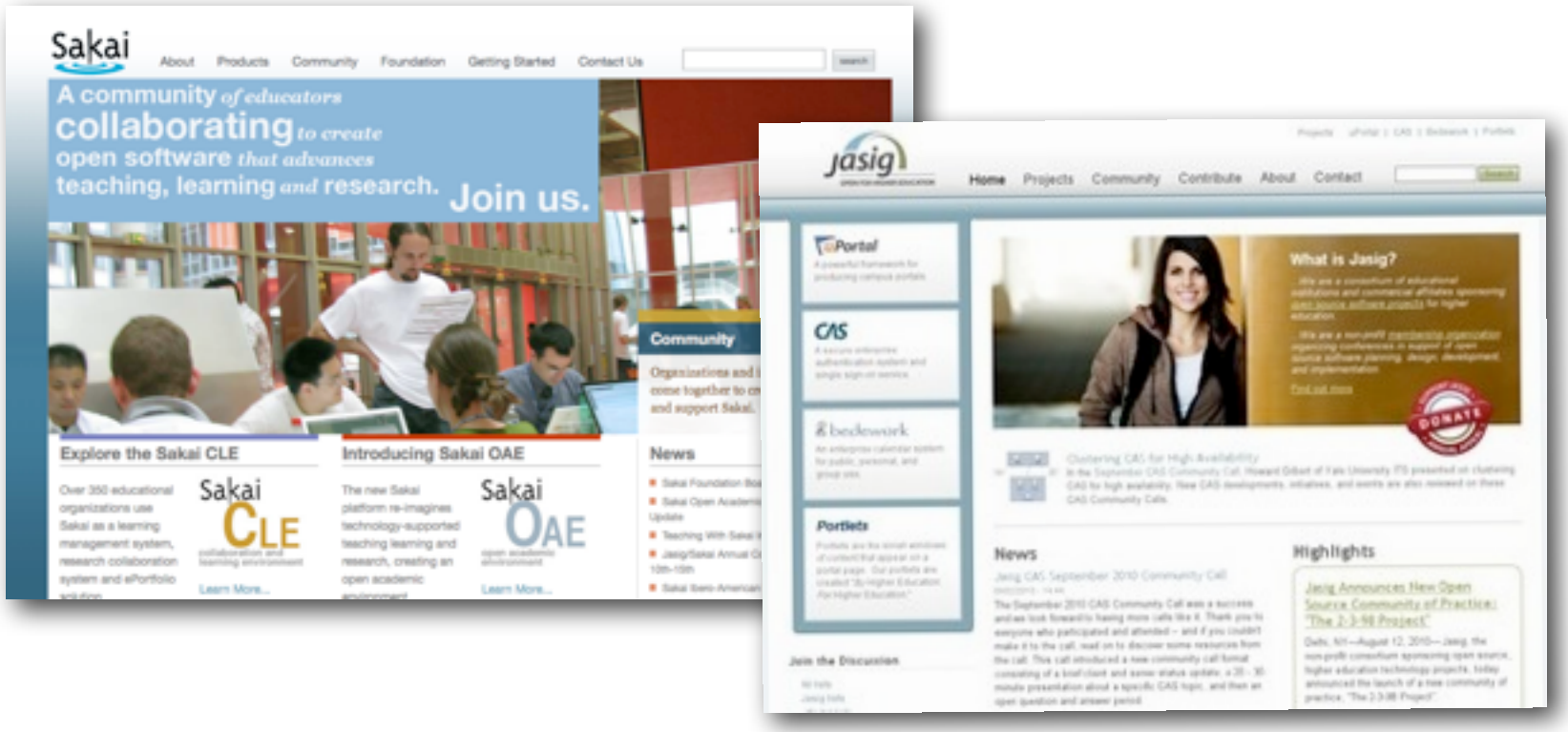
Transition point or an extension of capacity?
Different answers per strategic needs of institution

Sakai® Foundation

Two Sakai Environments - Working Together ...

- **Hybrid** - CLE and OAE connected via IMS Basic LTI
  - Other approaches to integration likely ...
- Enabling control of the **pace of change**
- How long will you need both ends of the continuum?
- ... think in terms of **supporting capabilities** ...
- Takes resource. Need to **change the landscape**

Sakai® Foundation



Sakai Foundation®

Accumulating Resource

Merging Sakai Foundation with Jasig

Jasig

- Multiple products; uPortal, CAS, Bedework, Portlets, UMobile, 2/3/98
  - Could be mainly categorized mainly as **infrastructure**
- Similar **consortial** model - some overlap of members
- Experience of **incubating** software / communities
- We need to **de-duplicate** - not make a **new Foundation** for each project

Sakai® Foundation

Why Merge?

- **Low hanging fruit** -
  - Conference organisation, Administration, Infrastructure
  - Licensing, IPR
  - Quality Assurance
- **Strategic** -
  - Influence in direction of external infrastructure components
  - Opportunity to grow re-use of Jasig software components

Sakai® Foundation

Extending Themes ...

- Openness is not only a ***product*** of collaboration, but a ***precondition*** for collaboration - a key value
- Aggregation of resources - alliances, and partnerships - **shifting patterns** over next decade
- **Networking** is not just embedded in our software it's what we ***are.*** Jasig merger enhances our network
- Focus on **innovation** in support of academic mission

Sakai® Foundation