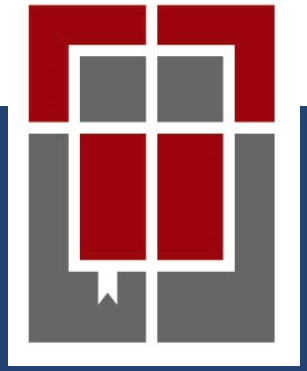
COMMUNITY COLLABORATION TRANSFORMATION

MOODLE VS. SAKAI



WHAT IS THE OPTIMAL LMS FOR SUPPORTING THE LONG-TERM FUTURE?

TWO PARADIGMS

- **AN OPEN SOURCE PLATFORM**

- **AN OPEN SOURCE COMMUNITY**

Looking into the future will help determine which system is the best fit.

MOODLE VS. SAKAI *NUMBER OF USERS*

Moodle

- **INSTALLATIONS:** 50,000 installations in 2010
- **REPORTING:** Automatic reporting of individual installations
- **PUBLISHED** Number of times software is downloaded is published

Sakai

- **INSTALLATIONS:** 350 installations in 2010
- **REPORTING:** No automatic reporting – self-reporting by institutions
- **PUBLISHED:** Number of institutions actively using the software (Providing they are willing to publish it)

MOODLE VS. SAKAI *THE COMMUNITIES THAT USE THEM*

Moodle

- **Tends to be smaller institutions**
  - **K-12 schools**
  - **Individuals**
  - **Departments within larger organizations**
- **But there are larger schools as well**
  - **Open University, UK**

Sakai

- **Focused on higher education**
- **Focused on collaboration between educational institutions**
- **Other organizations use Sakai**

MOODLE VS. SAKAI *COORDINATING ORGANIZATION*

Moodle

- **Easier to install**
- **Loosely organized community**
  - **A much more amorphous group**
  - **Caring and dedicated people**
- **Does not have an overseeing organization, only the creator: Martin Dougiamas.**

Sakai

- **Started by four institutions (MIT, Princeton, University of Michigan, and Indiana University)**
- **Intended to be a well-organized framework**
  - **Designed for growth and scalability**
  - **Designed to meet the needs of both larger and smaller institutions.**
- **Sakai Foundation, the critical hub**

MOODLE VS. SAKAI *TECHNICAL APPROACH*

Moodle

- **A loose connection of parts and pieces**
  - For example, multiple modules with essentially the same purpose
  - Each has its own approach and idiosyncrasies.
- **Lacks an overarching framework**

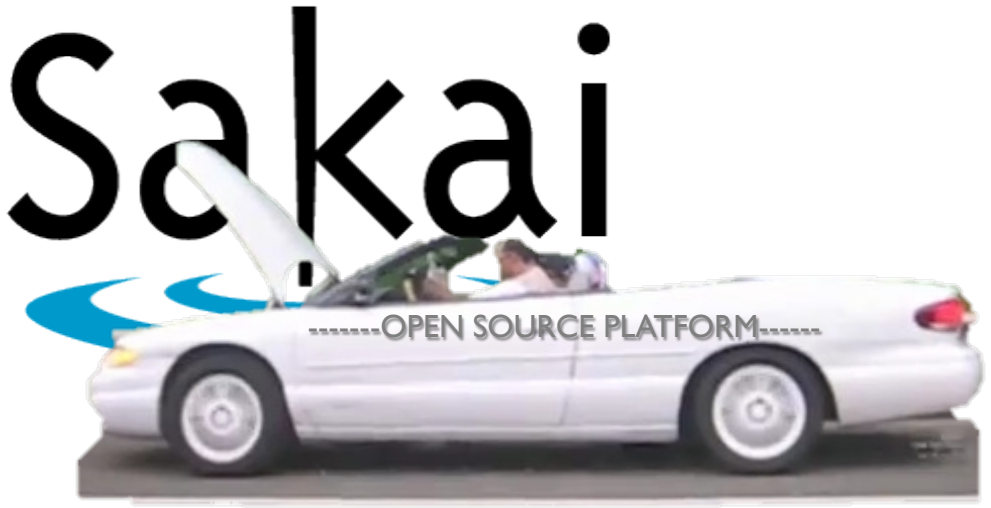
Sakai

- **Designed to be a framework**
  - Pedagogical tools independently developed and installed….but….
  - Based on organizing principles and structures
    - Clear guidelines for interfaces
    - Independently created tools are seamless to the user
    - Framework provides precise ways for tools to interact.

THE DIFFERENCES ARE NOT IMMEDIATELY APPARENT TO THE AVERAGE USER…

…until you look under the hood

A LOOSE CONNECTION OF PARTS AND PIECES

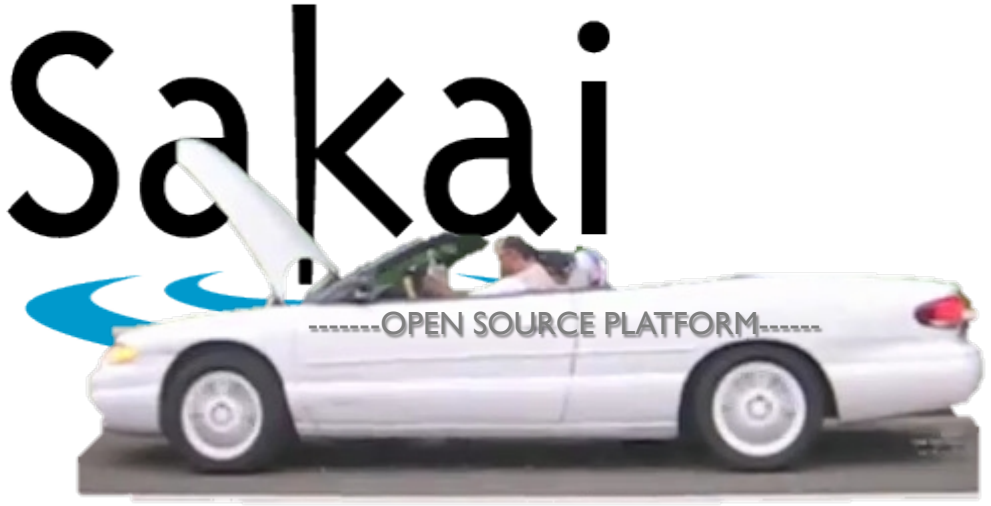


A STRUCTURE AND A FRAMEWORK

THE DIFFERENCES ARE NOT IMMEDIATELY APPARENT TO THE AVERAGE USER…

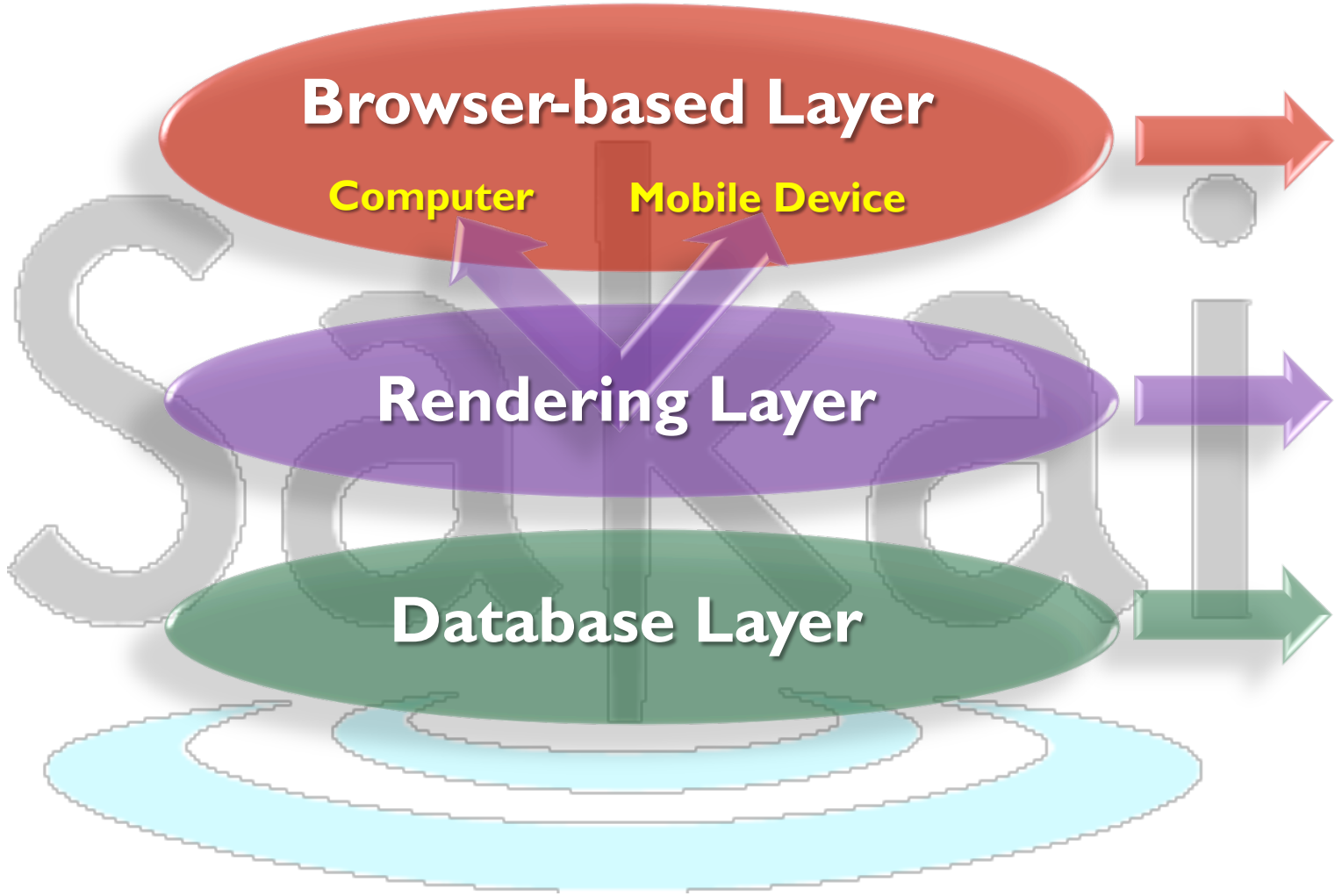
…until you look under the hood

MORE APPLICABLE TO SMALL INDEPENDENT APPLICATIONS



MORE ENTERPRISE-READY

THREE LAYERS TO SAKAI



What the user experiences
(Substantial and subtle differences that impact pedagogy between devices)

Extracts data from Sakai's databases and renders it for the browsers to display

Where the actual content resides

MOODLE VS. SAKAI *SCALABILITY*

Moodle

Moodle counts every time a user downloads a copy but no guarantee that that user is using the software.

- **Moodle reports 50,000 installations**
  - **17,000 (34%) have ten or fewer users**
  - **30,000 (60%) have fewer than 100 users**
  - **Only 78 installations worldwide have more than 50,000 users.**

Sakai

Sakai doesn't report every download—only when an institution reports it is using the software significantly. Software is used by some of the largest and most prestigious institutions in the world—typically large, enterprise-wide implementations. For example:

- **University of South Africa**
- **MIT**
- **Georgia Tech**
- **Indiana University**
- **Rutgers**
- **Stockholm University**
- **University of California Berkley**
- **University of Michigan**
- **John Hopkins**
- **Stanford**
- **Boston University**
- **Duke University**
- **Yale**

MOODLE VS. SAKAI *DEVELOPMENT COMMUNITY*

Moodle

- **Worldwide and dedicated**
- **Desire to produce product enhancements**
- **No worldwide coordination**
- **Development based more on individual efforts than on institutional or collaborative projects.**
- **276 "individual" developers**
- **Organizational collaboration is possible**
- **INDIVIDUAL FOCUS**

Sakai

- **Worldwide and dedicated**
- **Desire to produce product enhancements**
- **Coordinated developments around the world**
- **Foundation does not dictate development**
- **Organizational collaboration common**
- **Collaborative approach is the only way Sakai developments proceed.**
- **ORGANIZATIONAL FOCUS**

MOODLE VS. SAKAI *QUALITY CONTROL*

Moodle

- **Invites participation**
- **Lacks comprehensive coordination**
- **Uses a bug tracking system**

Sakai

- **Sakai Foundation plays a critical role**
  - **Coordinates development and use**
  - **Clearinghouse for bug reports/resolution**
  - **Approves each new version**
- **Uses a bug tracking system**

MOODLE VS. SAKAI *PEDAGOGICAL APPROACH*

Moodle

- **Based on a specific pedagogical approach: social constructionism**
  - "Everything you read, see, hear, feel and touch is tested against your prior knowledge and if it is viable within your mental world, may form new knowledge you carry with you."
  - The constructionist pedagogy "asserts that learning is particularly effective when constructing something for others to experience."

Sakai

- **Based on a framework that allows the instructor to determine the pedagogical approach.**
  - Sakai has chosen not to be an arbiter of educational philosophy.
  - Provides a flexible pedagogical framework that allows the instructor to choose a learning design he or she believes suits the needs of students and the learning demands of the course itself.

MOODLE VS. SAKAI *COLLABORATION*

Moodle

- **COURSE MANAGEMENT SYSTEM**
- **Does allow for collaboration…**
- **Collaboration is not Moodle's core intent nor was it particularly designed to facilitate effective collaboration.**

Sakai

- **COLLABORATIVE LEARNING ENVIRONMENT**
- **Structured to be both a course management system and a system to support collaboration.**
  - Sakai lends itself to open-ended, project oriented work that is not tied to a particular semester or to a particular group known as "instructors" and "students"
  - Allows for non-traditional uses.
  - This is unique to Sakai.

MOODLE VS. SAKAI *HOSTING OPTIONS*

Moodle

- Can be hosted using a "cloud" computing model
- Moodlerooms: Moodle's major hosting provider
- Minor players:
  - ClassroomRevolution.com
  - Remote-Learner USA
- Copyright held by an individual: Martin Dougimas, licensed under the GNU General Public License
  - Does not allow for commercial derivations
  - Net effect: Hosting options are limited

Sakai

- Can be hosted using a "cloud" computing model
- Was originally conceived to allow and even encourage commercial derivations. Examples…
  - rSmart
  - Unicom
  - The Longsight Group → LAMP → LikeBerea
    - Customization donated back to the community
- The philosophy of Sakai to allow and support both completely open source and commercial derivative products encourages a lively and dynamic community.

MOODLE VS. SAKAI *CONCLUSIONS*

Moodle

Sakai

Both Moodle and Sakai are fine, viable learning management systems.
However, looking to the future will help determine which system is the best fit.

- If the future will be a smaller implementation, perhaps a single department in a larger college or a very small institution, Moodle is a good choice. It is probably easier to maintain.

- But if the future includes an enterprise-wide deployment, or a desire for an evolving technology framework and toolset, or a desire to maintain pedagogical flexibility, or the comfort of affiliating with a product that has a self-funded, on-going coordinating body, Sakai is the obvious choice. Sakai was the choice LAMP made in 2006 and they haven't regretted it.

WHAT YOU NEED TO USE SAKAI

- Computer + Browser + Internet connection
  - Sakai is indifferent to which browser you use and works well with all the common ones
- User ID and password
- The LikeBerea instance of Sakai is secure.
- A bit of training
  - Sakai is reasonably easy to use, but most people find it helpful to have an overview of how to navigate through the Sakai system and an indication of how the communities are organized and how the tools within Sakai work.
  - Some people, however, find they can discover it on their own.

WHAT ABOUT BANDWIDTH?

- Most of Sakai requires very little bandwidth; almost any speed, no matter how low, will allow Sakai to work.
- The preferred web meeting tool—Big Blue Button (open source tool created for education)
  - Multiple community members can meet on line with full audio and video but seeing each other's faces (8 at a time) as they meet together virtually, requires more bandwidth.
  - A minimum amount of bandwidth for web meetings (using the "Big Blue Button" tool) is 0.8 Mbps. (Upload and download) The experience is improved as more bandwidth is available; 1.0 Mbps is ample.