



## ***The Future of the Campus Portal***

**Jens Haeusser – University of British Columbia**

**Jim Helwig – University of Wisconsin-Madison**

**Jonathan Markow – Jasig**

**Tuesday, March 9, 2010**

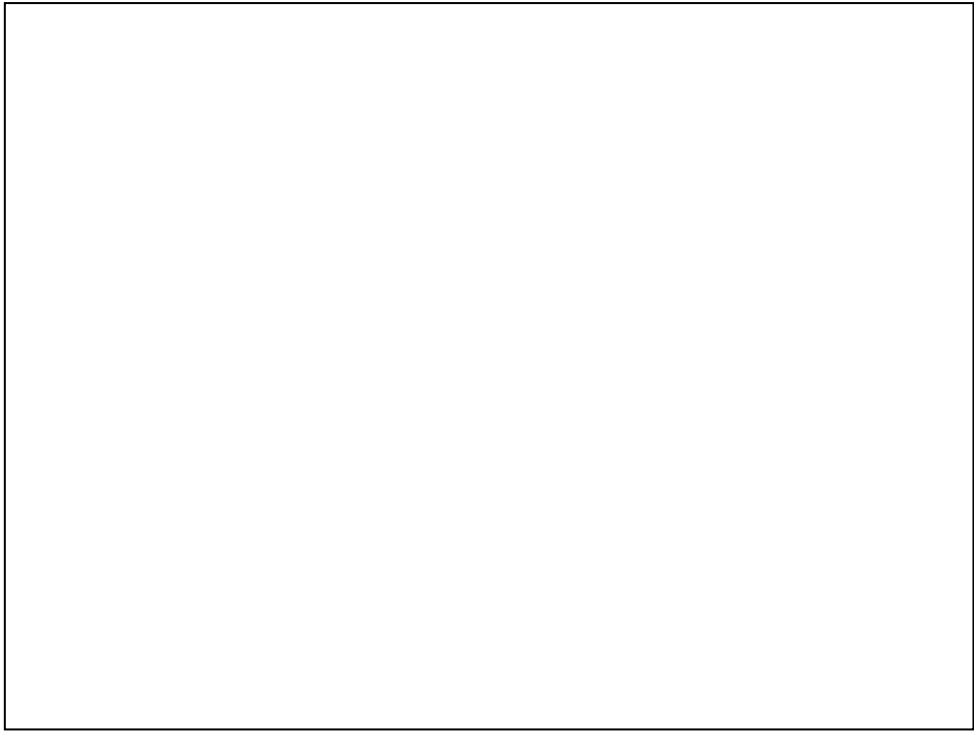
Future of the Portal  
Jasig Spring 2010



Photo attribution: <http://www.flickr.com/photos/vermininc/2337307518>



This presentation is licensed under a Creative Commons Attribution-Share Alike 3.0 License- <http://creativecommons.org/licenses/by-sa/3.0/>





# A Brief History

Jonathan Markow



Future of the Portal  
Jasig Spring 2010



# Why now?



Reason #1: It's time! (A decade of portal history)



**‘Is the enterprise portal thriving, or has the web evolved in such a way that the very concept is now outdated? Has it been helped or swept into oblivion by the successive waves of progress of Web 2.0 and the already-much-ballyhooed Web 3.0?’**

Future of the Portal  
Jasig Spring 2010

5



"In the early days of the Internet, companies sought to give users the benefit of a consistent experience by building portals that integrated multiple activities. **Portals are now mostly a thing of the past**; a few large examples such as Yahoo! and MSN still exist, but by and large they have fallen victim to what must be **the most important law of the Web: a different site is only a click away**. As users sought out the best sites for any given purpose, the browsing experience fractured and became ad hoc. As a result, **disaggregation of Web sites and services is now the norm.**"

- Phillip J. Windley, CTO, Kynetx



Future of the Portal  
 Jasig Spring 2010





# Gartner



Future of the Portal  
Jasig Spring 2010

8





“Higher education institutions are now sometimes turning to products like Sharepoint and Drupal for their enterprise portals.”

-Gartner (loosely quoted)



This raises a basic question:

## What is an enterprise portal?!

Future of the Portal  
Jasig Spring 2010

10



# What is a Portal?

## Drupal – Content Management System



Future of the Portal  
Jasig Spring 2010

11





**BUDGET UPDATES**



**CALENDAR**

**Swine Flu**

Information and Updates

**UpFront Newsletter Summer 2009**

Download the [UpFront Newsletter \(PDF\)](#) which includes:

- Good News for a Change, a message from the Superintendent
- Culinary Arts Cooks Up Skills at Oregon City High School
- Scholarship and Atlanta Trip for Oregon City High School Robotics Team
- King's Outdoor Classroom Takes Shape
- Oregon City Service Learning Students Earn CCC Credits
- Oregon City Foundation Auction a Success

**ADDRESS AND PHONE**

District Office (map)  
 1417 12th St.  
 Oregon City, Oregon  
 97045  
 ☎ 503-785-8000

**NEWS FILTER**

- Athletics
- Elementary School
- High School


Future of the Portal  
 Jasig Spring 2010





Home About Schools Programs Departments Contact  Search

**Oregon City School District**  
Learning to our best.








Students Parents and Guardians Staff and Faculty


Home


**Students**

Quick Links for Students

- [Classroom Wikis](#) 
- [English Language Proficiency Assessment \(ELPA\) Login](#) 
- [Research](#)
- [Robotics](#) 
- [Student Assistant](#) 
- [Teacher Websites](#) 
- [Code of Conduct](#)
- [Dress Code](#)

**ADDRESS AND PHONE**

District Office [\(map\)](#)  
1417 12th St.  
Oregon City, Oregon  
97045  
 503-785-8000

Subscribe to FlashAlert  
School News and  
Emergency Information 

**NAVIGATION**

Future of the Portal  
Jasig Spring 2010



## Sharepoint – Strong collaborative tools, MS Office integration

- Typically departmental, small enterprise; trend is scaling upwards
- Viewed as an alternative to large, complex portals
- Deep integration with Microsoft products
- But may require significant development depending on scope of the project and integration requirements
- Runs exclusively on Microsoft software

## ▪ Vertical Portals

- Narrow content or usage
- Business intelligence
- ERP
- CRM – Customer Relationship Management
- SFA – Sales Force Automation
- E-Business



# We're concerned with the Enterprise!

Future of the Portal  
Jasig Spring 2010

16







Future of the Portal  
Jasig Spring 2010

17





Future of the Portal  
Jasig Spring 2010

18



## The Higher Education “Enterprise”

- Academics
- Student life
- Faculty & Staff
- Research
- Administration
- Institutional web
- Dining
- Clubs
- Etc.

Future of the Portal  
Jasig Spring 2010

19



## Enterprise characteristics

- Complexity
- Diverse constituents
- Many applications, silos
- Community building
- Multiple brands
- Distributed content development
- Delegated authority/administration
- Collaboration across many boundaries
- Multiple sources of identity information

## Some Enterprise Portal Requirements

- Single sign-on
- Granular access to content, transactions
- Personalization
- Customization(?)
- Flexible layout
- Accessibility
- Scalability
- Open to integration within and outside the enterprise

## Enterprise Portal 1.0

- Simple, stand-alone:
  - e.g., Bookmarks
  - e.g., Ride board
  - e.g., Surveys
- **Single sign-on**
- **Groups & Permissions**
- Aggregated content
- File sharing
- News and announcements
- (in uPortal): WebProxy Channel (a “window on the rest of the web”)



## Enterprise Portal 1.5

- A personalized view of enterprise data
- Transactions
- Facebook interface
- Business Intelligence
- Pull data from disparate sources
- Enterprise mashups
- Application messaging (e.g., Alerts)
- Aggregate campus and personal events
- Aggregate email and calendar





## What's Next?

We asked some basic questions...

Future of the Portal  
Jasig Spring 2010

24





## Questions:

- Is the enterprise portal still important to higher education?
- If so, does the portal meet current expectations for a web-based user experience?
- What new requirements should be addressed by the campus portal?
  - For portal users
  - For portal administrators
  - For portal deployers



## We talked to a lot of people...

- Stakeholder calls
- Conference sessions
- Research
- Campus surveys(?)



# Spoiler Alert: The enterprise portal is still important to higher education



Future of the Portal  
Jasig Spring 2010

27



## Nielsen says...

“Web portals have suffered a highly variable existence. Every few years, they're in, and every few years, they're out, with many of last season's darlings filing for bankruptcy or being snapped up on the cheap. It's a different story inside companies: **enterprise portals know only one way, and it's up.** More and more companies are establishing intranet portals, and they keep improving their features and usability.”

- **Jakob Nielsen**, “Enterprise Portals are Popping”, July, 2008

<http://www.useit.com/alertbox/portals.html>

# University of Wisconsin-Madison Portal Visioning Case Study

Jim Helwig



Future of the Portal  
Jasig Spring 2010



# My UW-Madison

Future of the Portal  
Jasig Spring 2010



My UW-Madison Launched in 2000 as the campus enterprise portal

Serves 80,000+ applicants, students, faculty and staff

Millions of logins a month.

Contains 75+ portlets

Focus has been on personalized information, application aggregation, user customization

# Motivation for Re-visioning

Perception portal had become dated



[http://commons.wikimedia.org/wiki/File:Old\\_Car.JPG](http://commons.wikimedia.org/wiki/File:Old_Car.JPG)

Future of the Portal  
Jasig Spring 2010



Some held the perception the portal had become dated

Partially due to a UI that had not changed since the inception

Some postulated the portal had outlived its usefulness

Web 2.0, social networking, mobile computing more prevalent

# Motivation for Re-visioning

## What goes where? Portal vs. Home Page

my.wisc.edu

www.wisc.edu

Future of the Portal  
Jasig Spring 2010



Original guidelines no longer fit/appropriate

Confusion over what should be in; my.wisc.edu vs. www.wisc.edu



# Motivation for Re-visioning

## Viewed as Unfunded Mandate



cc: <http://www.flickr.com/photos/11138083@N00/6940141>

Photo by Tom Ventura

Future of the Portal  
Jasig Spring 2010



While some service providers enthusiastically added more content and applications

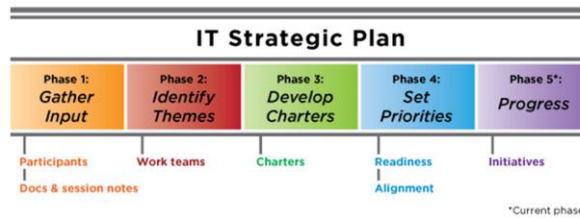
Others complain that portal is a drag on resources w/out clear justification

Governance became less effective

```
<div xmlns:cc="http://creativecommons.org/ns#"
about="http://www.flickr.com/photos/11138083@N00/6940141"><a
rel="cc:attributionURL"
href="http://www.flickr.com/photos/tgv/">http://www.flickr.com/photos/tgv/</a
> / <a rel="license" href="http://creativecommons.org/licenses/by/2.0/">CC BY
2.0</a></div>
```

# Motivation for Re-visioning

## Alignment with campus IT strategic planning effort

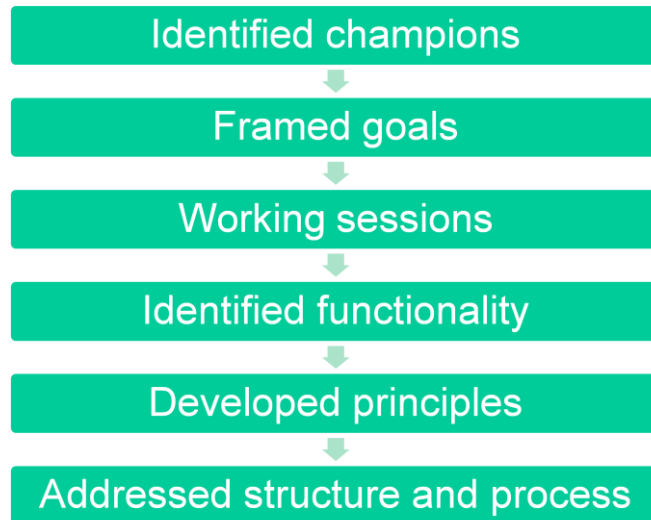


Future of the Portal  
Jasig Spring 2010



We are in the middle of a major campus strategic planning effort for IT. It seemed appropriate that we look at how the portal fits into the campus IT landscape.

# Process



Future of the Portal  
Jasig Spring 2010



- Identified champions – key visionary stakeholders
- Framed goals - principles, vision, governance
- Held several multi-hour working sessions – with representatives from across campus. Need to have collaborative attitude.
- Identified new functionality – what will the new portal look like? helped frame and verify the guidelines and principles.
- Developed principles – guidelines on what is appropriate for the portal
- Addressed structure and process – how are we going to effectively execute our vision?

## Visioning Champions

- Associate Vice Chancellor from Enrollment Management
- Associate Director of University Communications
- Graduate School CIO
- Director of Cross College Advising
- Director of Academic Technology
- Director of Enterprise Internet Services

The portal visioning processes was guided by trusted champions. These were key leaders from several campus offices that came together with an open mind and a supportive attitude. They included

- Associate Vice Chancellor from Enrollment Management
- Associate Director of University Communications
- Graduate School CIO
- Director of Cross College Advising
- Director of Academic Technology
- Director of Enterprise Internet Services

# Goals

Principles and requirements  
Process and structure  
Active portal champions

Future of the Portal  
Jasig Spring 2010



We aimed to achieve the following:

- Identify principles and requirements to help guide portal development
- Create new process and structure that can help execute the portal vision
- Encourage active portal champions who can provide leadership

# Visioning Sessions

Representatives from across campus  
Service providers and end users



Future of the Portal  
Jasig Spring 2010

38



We held a series of working sessions to solicit input from across campus. The attendees included service provider representatives from various administrative offices as well as faculty, staff and student representatives. They were instructed to be open minded and visionary. We started with a pair of half-day sessions that had a mixed group of about 25 participants. We later held two additional student-only sessions focused with 10 participants in each session.

# Visioning Sessions

## What is NOT visioning



[http://commons.wikimedia.org/wiki/File:Old\\_Car.JPG](http://commons.wikimedia.org/wiki/File:Old_Car.JPG)

Future of the Portal  
Jasig Spring 2010



Ten Years of  
Open Source Innovation  
San Diego, California, USA



It was important to clarify what was NOT visioning.

Avoid using “no”, “we can’t”, “costs too much”, “bad idea”

Had one flip chart where we stuck non-visioning comments

# Visioning Sessions

## Personal vision: portal of the future



[http://commons.wikimedia.org/wiki/File:Gelehrter\\_in\\_Bibliothek\\_18\\_Jh.jpg](http://commons.wikimedia.org/wiki/File:Gelehrter_in_Bibliothek_18_Jh.jpg)

Future of the Portal  
Jasig Spring 2010



Participants were asked to close their eyes and imagine logging on to the portal five years from now.

What would be in the portal?

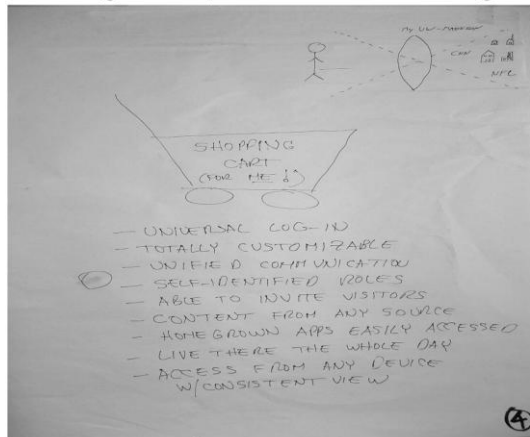
What would it look like?

What kind of experience would it be?



# Visioning Sessions

## Small group visual diagrams



Future of the Portal  
Jasig Spring 2010



Each group (i.e., table) was asked to come up with a vision of the portal and how it should function with respect to the array of information and services provided both on and off campus. They were asked to represent this vision as a drawing. At the end of the session, each table summarized the important features. The image and the summaries are presented below.

# Visioning Sessions

## Identify wants



Future of the Portal  
Jasig Spring 2010



Between sessions, we looked at the different visual representations and developed what we called our Wants Map. This template contained areas of interest around “me”, “presentation” and “services”.

Participants were asked to use stick notes to identify individual wants or requirements and place them on the wants map.

# Visioning Sessions

## Develop and share guidelines

### **Providing campus services in portal:**

*Campus infrastructure and applications need to share common standards and APIs*

### **Internal/External:**

*The portal should provide access to personal information from campus*

### **Ease of Use:**

*All portal content should be tag-able and searchable*

Future of the Portal  
Jasig Spring 2010



In small working groups, the wants were used to generate guidelines that would support the wants.

For example

Providing campus services in portal: Campus infrastructure and applications need to share common standards and APIs

Internal/External: The portal should access to personal, internal info

Ease of use: All portal content should be tag-able and searchable

# Visioning Sessions

## Identify consensus and priorities



cc <http://www.flickr.com/photos/thomashawk/2249064379/>

Future of the Portal  
Jasig Spring 2010



The individual groups then shared the guidelines with the large group.

In retrospect, we would have done this in round-robin fashion and focused on the top priorities and had discussions looking for general agreement.

We ended up with 60 “guidelines” in nine areas, although some of these were more like specific wants or requirements, not general guidelines.

# Post-session Work

## Develop draft principles

**My UW-Madison : Portal Principles**

View this document on 02/21/2010 at 10:46am

version 02/9/10/09 for review by sponsors and champions.

A note on the principles

These principles are derived from the [Guidelines](#) provided in Day 3 of the [My UW-Madison Visioning Session](#) that took place in the summer of 2009. For a good understanding of principles, we refer you to [this explanation](#).

A good set of principles will be founded in the beliefs and values of the organization and expressed in language that the business understands and uses. Principles should be few in number, future oriented, and understood and championed by senior management. They provide a firm foundation for making architecture and planning decisions, setting policies, procedures, and standards, and supporting resolution of contradictory situations. A poor set of principles will quickly become disused, and the resulting architecture, policies, and standards will appear arbitrary or self-serving, and thus lack credibility. Essentially, principles drive behavior.

There are five criteria that distinguish a good set of principles:

- **Understandable:** the underlying tenets can be quickly grasped and understood by individuals throughout the organization. The essence of the principle is clear and unambiguous to the audience, whether intentional or not, and recognized.
- **Relevant:** enables good senior decisions about architecture and plans to be made, and enforceable policies and standards to be created. Each principle should be sufficiently definite and precise to support consistent decision-making in complex, potentially controversial situations.
- **Complete:** every potentially important principle governing the management of information and technology for the organization is defined. The principles cover every situation perceived.
- **Consistent:** good adherence to one principle may require a large interpretation of another principle. The set of principles must be organized in a way that does not allow contradictory principles should not be contradictory to the point where adhering to one principle would violate the spirit of another.
- **Modifiable:** principles should be evolving, yet able to accommodate change. An amendment process should be established for adding, removing, or altering principles after they are ratified initially.

A. The role of the portal

A1	Portal is a strategic platform
Statement	The portal is one of the essential UW resources supporting the work of UW community members
Rationale	This guideline stresses enterprise scope and end-user focus. The portal provides a common platform cutting across many sectors of the campus, delivering services and information that transcend organizational boundaries. It reduces barriers to information and services needed by members of the university community.
Implications	The portal should be highly available (needs evaluation)
Related visioning items	Vision Session Guidelines: V0-A2

Document generated by Confluence on Nov 03, 2009 18:11 Page 1

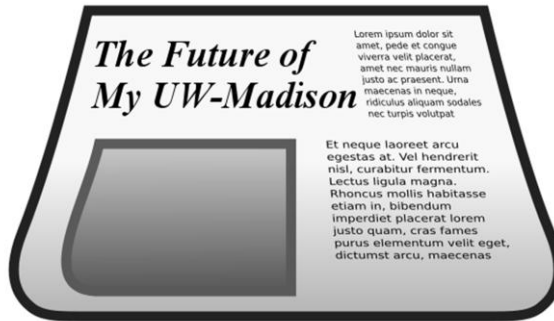
Future of the Portal  
Jasig Spring 2010



All of our work was collected and posted on the wiki.  
The core team then developed draft principles  
(show principles)

# Post-session Work

Develop narrative of axioms,  
requirements, principles



Future of the Portal  
Jasig Spring 2010



The detailed principles to develop a narrative of axioms, requirements,  
principles to make them more easily digestible for a broader audience

# Vetting

- Champions and sponsors
- Session participants
- Strategic planning project leads
- Campus Communications
- User groups
- Service providers

Future of the Portal  
Jasig Spring 2010



We are in the process of vetting these principles with groups across campus.

# Vetting

Vetting will help us:

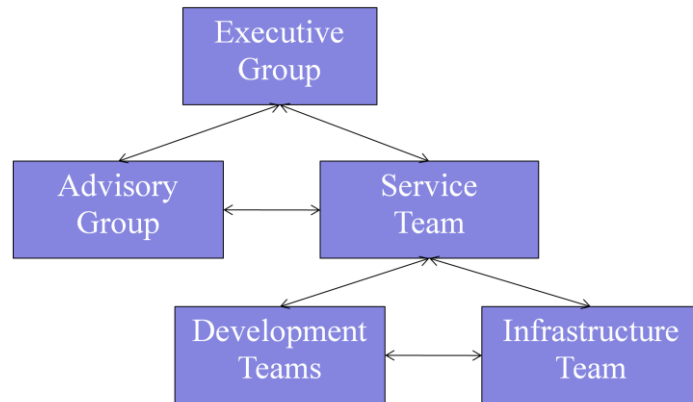
- Feedback on the principles
- Show support
- Establish a dialog

Our goals for the vetting process are to

- Receive general feedback on the principles
- Indicate that there is support for portal integration from the highest levels and from across campus
- Help establish a dialog with campus groups, departments and administrative offices



# Structure and Process



(proposed)

Future of the Portal  
Jasig Spring 2010

49



A core group of visioning champions and portal sponsors have developed a new structure to support continued growth and development of the portal.

The executive group will consist of 6-8 high level representatives that will oversee vision, strategic direction and policy for the portal. They will also help with resource procurement, advocacy and fostering collaboration. They will rely on input from the Advisory Group and Service Team.

The Advisory Group will be a larger group with representatives from across campus. This will include representatives from campus departments, administrative service areas and end users. They will help develop functional requirements, provide feedback for improvement.

The Service Team is responsible for the day to day operation of the portal. They help ensure that development is consistent with the portal principles and the advisory group desires.

The development groups are funded through the budgets of service providers, departments, or the central budget. They are not directed by the service team but are expected to work loosely with it.

The Infrastructure team maintains the portal infrastructure and develops general purpose portlets. They serve both the service team and the developer teams.

## Highlights

- Portal is essential
- All important services available
- Enterprise and ad hoc groups and roles
- Public, group-specific, private
- Internal and external

Future of the Portal  
Jasig Spring 2010



I'll leave you with a few of the insights we have distilled so far. These point to a noticeable shift in the role the portal will play on campus. It is clear that our participants still feel the portal continues to be a critical campus resource.

## Highlights

- Use for notifications
- Search and Browse
- Flexible, customizable
- Access for all
- Access for life

Future of the Portal  
Jasig Spring 2010



I'll leave you with a few of the insights we have distilled so far. These point to a noticeable shift in the role the portal will play on campus. It is clear that our participants still feel the portal continues to be a critical campus resource.

## More Information


<http://bit.ly/MyUW-Visioning>

[Jim.Helwig@doit.wisc.edu](mailto:Jim.Helwig@doit.wisc.edu)

Future of the Portal  
Jasig Spring 2010



More details about our process and the results are available here:  
<http://bit.ly/MyUW-Visioning>



# Evolving the Vision: New Directions for Campus Portals

Jens Haeusser



Future of the Portal  
Jasig Spring 2010



I'm the Director of Strategy within the Office of the Vice Provost IT at the University of British Columbia. In addition, I'm the Vice Chair of the Jasig board.

Full bio:

<http://www.educause.edu/Community/MemDir/Profiles/JensHaeusser/50001>

# Evolving the Vision

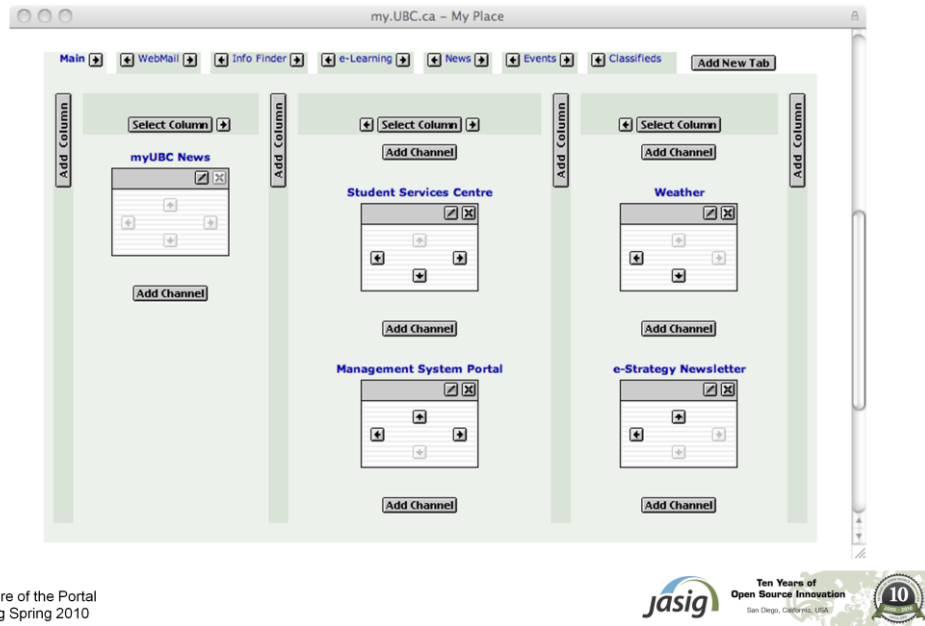
- From customization to personalization
- From content aggregation to dashboards
- What about...

Future of the Portal  
Jasig Spring 2010



10 years later, our vision for the campus portal has grown and changed. Our original ideas, while still important, have been modified and supplemented with additional requirements.

# From Customization



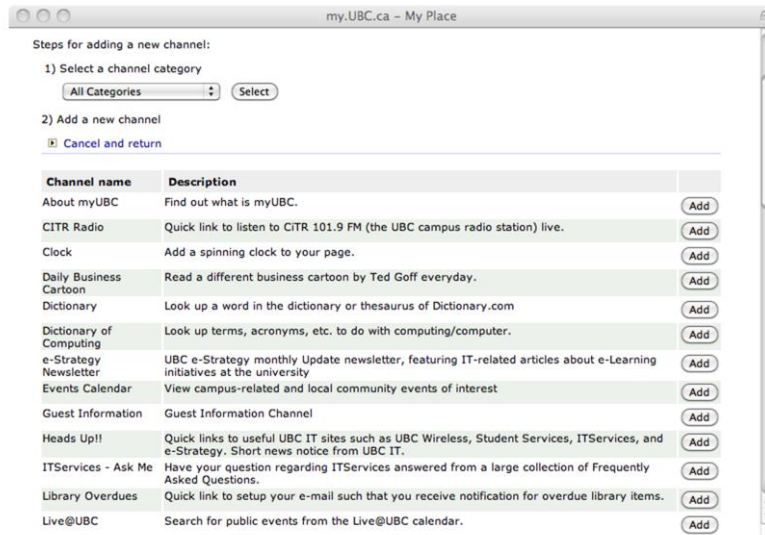
Future of the Portal  
Jasig Spring 2010



One of our original focuses was on customization. We thought a key feature of portals was to allow students, faculty and staff to customize the layout and the portlets they saw. Unfortunately many of the customization interfaces were clunky and hard to use, leading to very few people actually customizing their portal view, or only at a superficial level.

This screenshot comes from the current UBC portal running uPortal 2.5.3-  
<https://my.ubc.ca>

# From Customization



Future of the Portal  
Jasig Spring 2010



Adding new content was similarly clunky- unless provided in the default view, it was very hard for people to find additional content that was relevant to what they were wanting to do.

This screenshot comes from the current UBC portal uPortal 2.5-  
<https://my.ubc.ca>



# From Customization

Why?

Future of the Portal  
Jasig Spring 2010



While customization is important, why are we forcing our users through these complicated and non-intuitive customization interfaces, when we already know so much about them? What we've been told is that people want personalized content that is relevant to who they are and what they can do at our institutions.

## To Personalization

We know-

- Your affiliations (faculty, staff, student)
- Your department (Chemistry, English)
- Your classes (Physic 101, Spanish Tapas)
- Your roles (TA, Tenure Committee)
- Your demographics (age, gender, address)
- Your likes (club memberships, advising)
- Your preferences (colour blind, large text)
- Your device (laptop, iPhone, screen reader)

Future of the Portal  
Jasig Spring 2010



We already know so much about people who connect with the portal- their institutional affiliations and roles, and a wide range of additional information that should allow us to personalize the portal to their particular requirements, without pushing customization off onto them.

# To Personalization

The portal should reflect  
who you are,  
what you need, and  
what you can do

Future of the Portal  
Jasig Spring 2010



Given the rich amount of information we do know, the portal needs to reflect this, and provide that personalized experience.

# To Personalization

The portal should reflect  
**who you are,**  
what you need, and  
what you can do

Future of the Portal  
Jasig Spring 2010



# To Personalization

The portal should reflect  
**who you are,**  
**what you need,** and  
what you can do

Future of the Portal  
Jasig Spring 2010



# To Personalization

The portal should reflect  
**who you are,**  
**what you need, and**  
**what you can do**

Future of the Portal  
Jasig Spring 2010



## To Personalization

The portal should be your one-stop-shop that highlights your available resources, and provides a sense of a unified institution

Future of the Portal  
Jasig Spring 2010



Our investigation has also found that, with often hundreds of different websites on online applications that could be potentially useful and accessible to students, faculty, and staff, the portal could be a critical resource for showing them all of the varied content available to them. In addition, the portal can go a long way toward providing a seamless experience of navigating our campuses, blurring and obscuring the various departmental and political boundaries that often frustrate our participants, providing that sense of a single institution rather than a fractured, independent landscape.

# To Personalization

The portal should be your **one-stop-shop** that highlights your available resources, and provides a sense of a unified institution

Future of the Portal  
Jasig Spring 2010





# To Personalization

The portal should be your **one-stop-shop** that highlights your **available resources**, and provides a sense of a unified institution

Future of the Portal  
Jasig Spring 2010



# To Personalization

The portal should be your **one-stop-shop** that highlights your **available resources**, and provides a sense of a **unified institution**

Future of the Portal  
Jasig Spring 2010



# From Content Aggregation

The original vision-

- Provide as much content as possible inside the portal
- Provide single sign-on links to content you can't aggregate

Future of the Portal  
Jasig Spring 2010



When first designing the portal, we thought that the portal should be the place not just to find content, but to interact with it.

# From Content Aggregation

The challenge-

- Not all content fits nicely in little boxes
- Not all content plays nicely in a portal
- So many SSO sites, so many links...

Future of the Portal  
Jasig Spring 2010



The drive to pull content into the portal hasn't worked in many cases- complex web applications don't integrate well, and the sheer range and complexity of potential information has led to bewildering choices for users.

# From Content Aggregation

How can we provide access to the information you need, when you need it?

Future of the Portal  
Jasig Spring 2010



How do we help users choose where to focus? When faced with hundreds of potential resources, and daily workflows that can involve moving between a range of enterprise systems (LMS, SIS, CMS, etc), how can we assist users in choosing what to do next?

# To Dashboards

## One solution: Dashboards

- Provide summary information about a range of content and services
- Provide up-to-date information that allows you to choose when and where to dive deeper

Future of the Portal  
Jasig Spring 2010



Interactive dashboards that summarize content from a range of enterprise services can give people the information and tools they need to help them choose where to go and what to do next.

# To Dashboards



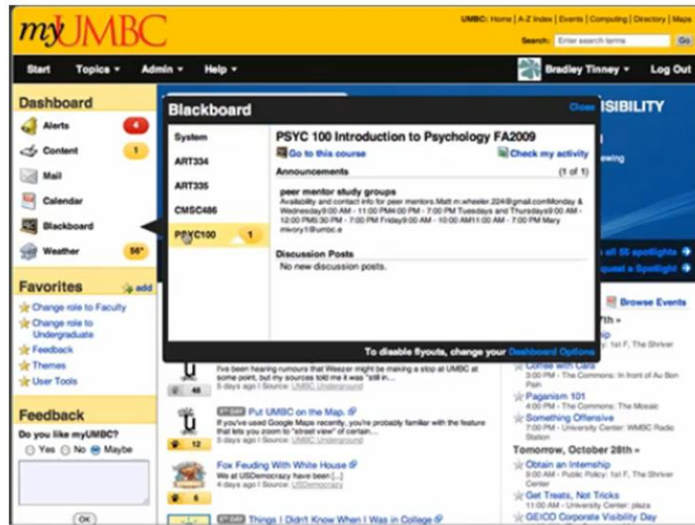
Future of the Portal  
Jasig Spring 2010



The portal at the University of Maryland, Baltimore Campus is a good example. The dashboard on the top left summarizes information across their enterprise notification system, CMS, email, calendar, and LMS.

This screenshot comes from the current custom developed UMBC portal, <https://my.umbc.edu/>

# To Dashboards



Future of the Portal  
Jasig Spring 2010



If you hover over one of the notifications, it brings up a popup showing more information (subject of the alert, course that has new content, etc), and provides a single click deep link into the system the content comes from, letting people move seamlessly directly to the content that has changed.

This screenshot comes from the current custom developed UMBC portal,  
<https://my.umbc.edu/>



# What About...

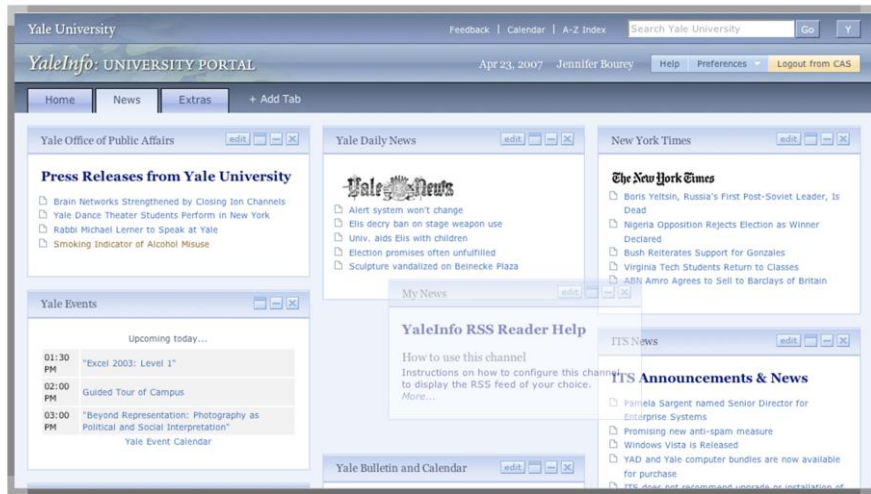
## Web 2.0?

Future of the Portal  
Jasig Spring 2010



The modern portal must also play well in a web 2.0 world- bringing the full range of modern technologies (AJAX, JSON, etc) into the portal.

# Web 2.0



Future of the Portal  
Jasig Spring 2010

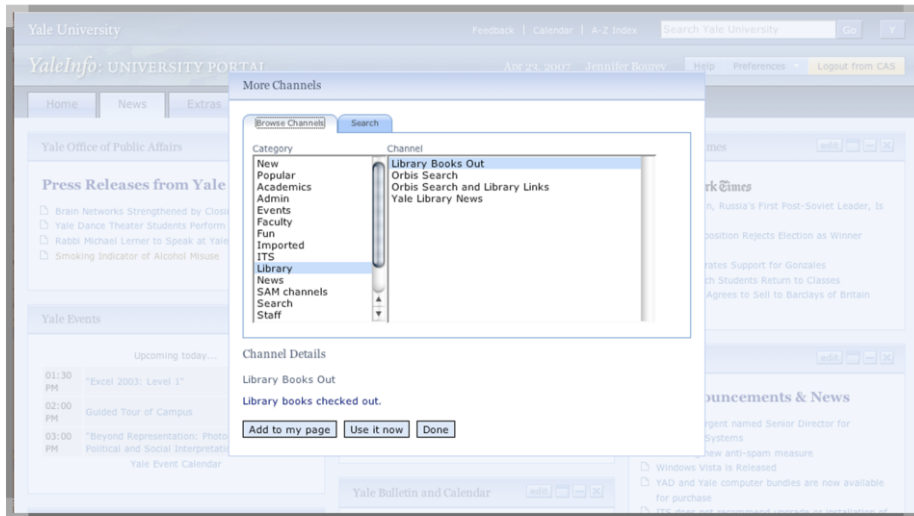


The interactivity of Web 2.0 has been used to help deal with the customization problem- dramatically improving customization through AJAX tools such as drag and drop and live previews.

This screenshot comes from the current Yale portal running uPortal 3.1,  
<https://portal.yale.edu>

uPortal: <http://www.jasig.org/uportal>

# Web 2.0



Future of the Portal  
Jasig Spring 2010



AJAX has also simplified the addition of new portlets, using inline search and customized portlet display based on roles.

This screenshot comes from the current Yale portal running uPortal 3.1,  
<https://portal.yale.edu>

uPortal: <http://www.jasig.org/uportal>

# What About...

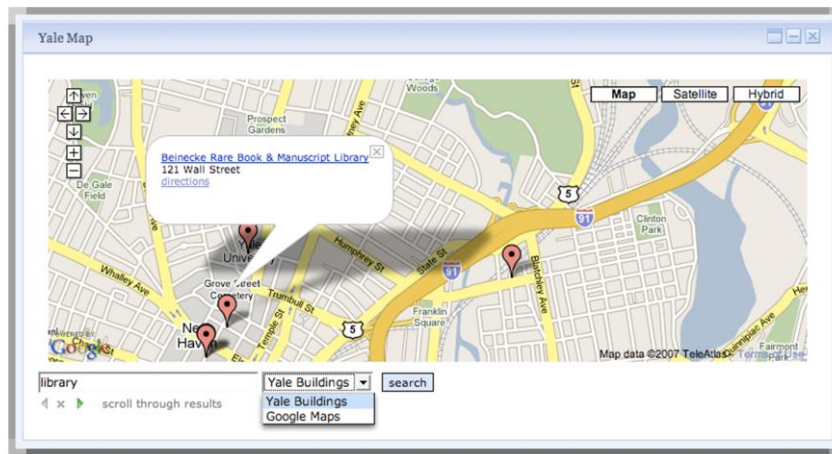
## Mashups?

Future of the Portal  
Jasig Spring 2010



Combining content inside the portal is also a key feature. However, as important as it is to be able to bring content into the portal, it's also very important to work with content providers to allow their content to be leveraged by students, faculty, and staff outside of the portal as well- allow users to create their own mashups and aggregation in the tools that work for them.

# Mashups



Future of the Portal  
Jasig Spring 2010

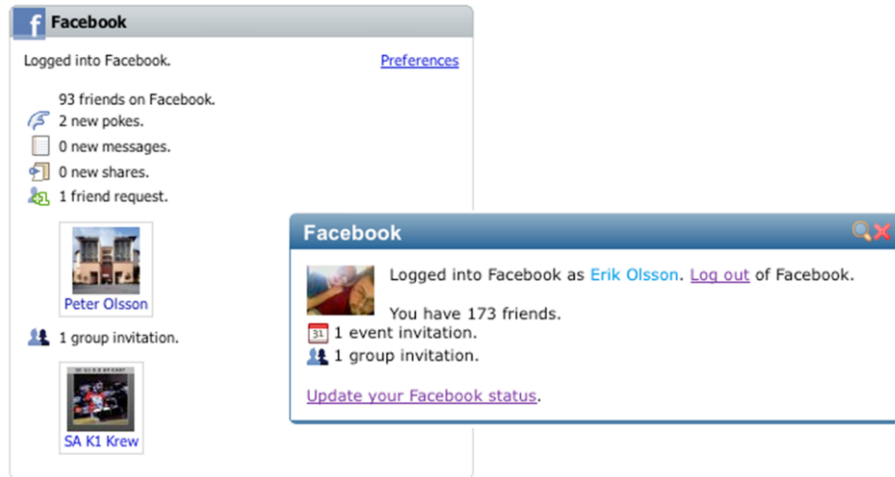


Yale uses AJAX and JSON to combine information from Google Maps and a Yale database to present a searchable campus map within the portal.

This screenshot comes from the current Yale portal running uPortal 3.1,  
<https://portal.yale.edu>

uPortal: <http://www.jasig.org/uportal>

# Mashups



Future of the Portal  
Jasig Spring 2010



A number of schools have also integrated social networking into their portal, often with rich interaction- the two Facebook portlets don't just show summary information, they allow portal users to update Facebook information without leaving the portal.

This screenshot comes from the current Yale portal running uPortal 3.0.1, <https://portal.uci.edu>

The Facebook portlet is available in the Jasig Portlet collection, <http://www.jasig.org/wiki/display/PLT/Home>

# What About...

SOA?

Future of the Portal  
Jasig Spring 2010



The portal has also been positioned as a potential frontend for a Service Oriented Architecture- the place to coordinate and display information from a range of headless business services.

# SOA



Future of the Portal  
Jasig Spring 2010



Complex applications such as Kualistudent (<http://student.kuali.org/>) are now being built using SOA, and have worked on the potential integration with portals. While an early vision was to provide all of the content of these applications within the portal, the need for high level of usability in these complex, enterprise systems has led to a change in direction. While an entire enterprise SOA app may not lend itself well to being presented entirely within the portal, there is still a need for dashboarding of a number of the underlying services, which display well in the portal. In addition, smaller services that are not part of an enterprise application display very well within the portal.



# What About...

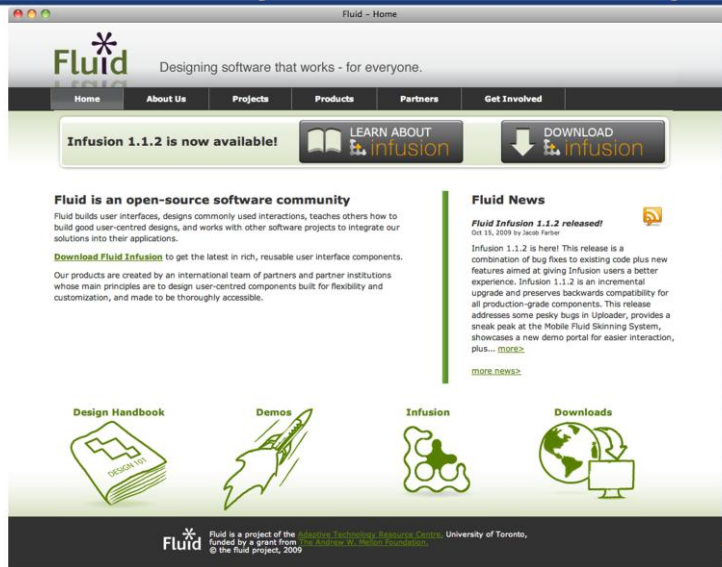
## Usability and Accessibility?

Future of the Portal  
Jasig Spring 2010



One of the key challenges with earlier portals has been around usability and accessibility. Older portal frameworks have often been clunky, and difficult to adapt for users with a wide range of needs.

# Usability and Accessibility

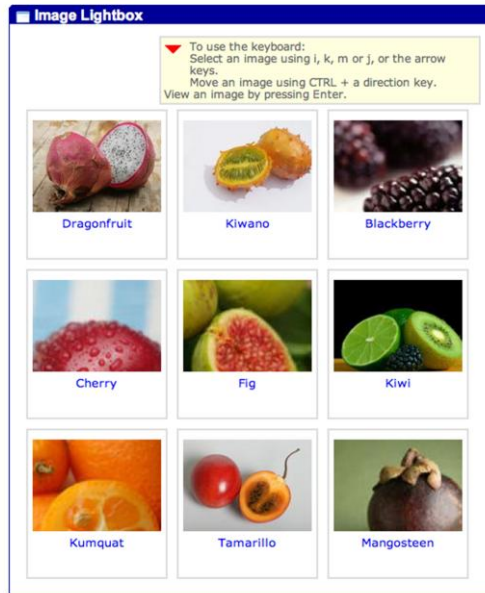


Future of the Portal  
Jasig Spring 2010



One project that has tackled the problem of usability and accessibility for web applications in general, and portals specifically, is the Fluid project (<http://www.fluidproject.org/>). Fluid has come out with both a range of AJAX based software components that can integrate well with portals, but also a range of resources for designers and developers (UI walkthrough protocols, higher education personas, design patterns, and a designer handbook) .

# Usability and Accessibility



Future of the Portal  
Jasig Spring 2010



Fluid has also worked directly with uPortal, and the Fluid skinning system and framework, as well as several accessible components, are now imbedded with the latest uPortal release.

Fluid Infusion: <http://fluidproject.org/products/infusion/>

uPortal: <http://www.ja-sig.org/wiki/display/UPC/Home>

# Your Turn

## Questions and Discussion

Future of the Portal  
Jasig Spring 2010



### Additional comments:

We need to break down the barriers between what has traditionally been seen as two different things- the campus website, and the campus portal. People should be able to seamlessly flow between the two- starting at the campus website, being prompted to log into the portal without a massive context shift if they want to access personalized or secure content, and never having a jarring transition as they move back and forth between the two. We need to end the separation between teams- too many campuses have a web team, and a different portal team.

The portal can be the primary fall back source for messages and notification. As we build workflow and notification systems, those should display, at least at a dashboard level, within the portal. And as we provide more options for our users to engage with these messages, we need to provide them with multiple ways to get and be notified of this changing information (subscribe via RSS, get a text message on your cell phone, forward your email to Gmail or Live@edu, etc), but also provide a single definitive place to go to see all that information- the portal.