



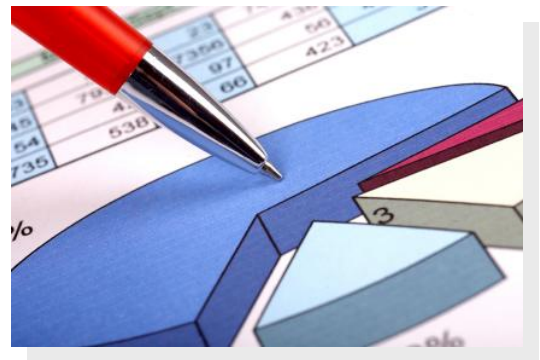
Portal Basics: A Primer for Higher Education

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This article discusses the challenges faced when making higher education portal decisions. It defines what portal technology is, identifies the typical benefits of portal and web technologies, and presents various options and directions institutions can pursue.

One of the most difficult questions facing higher education institutions is where to invest limited information technology resources for the maximum benefit. Add the current market conditions of decreased budgets with increased technology requests and performance expectations, and this difficulty exponentially increases. Information Technology (IT) executives are in impossible positions having to turn down project requests from customers while simultaneously promoting the value of IT.



IT project investment decisions have three primary considerations:

1. Cost of the technology or solution
2. Value of the solution's intended outcomes in terms that matter to the institution, its mission, its customers, its constituencies, etc.
3. Probability of success and the elements of risk associated with ensuring that investment solution delivers as promised

With both open source and off-the-shelf options available today, portal implementations offer a glimmer of hope to IT executives. They can provide quick wins relative to other lengthy technology projects and they provide direct benefits to many different stakeholders across campus. This article discusses this IT decision challenge as it is applied to higher education portals and how it can be overcome by listening to campus constituents, delivering on function, and communicating ROI.

What is a Portal?

While this may seem like a basic question, the question generates a wide variety of answers. For a textbook answer, try this:

An enterprise portal creates a common gateway to access data and services that campus constituents use to effectively share information, efficiently deliver services, and foster collaboration.

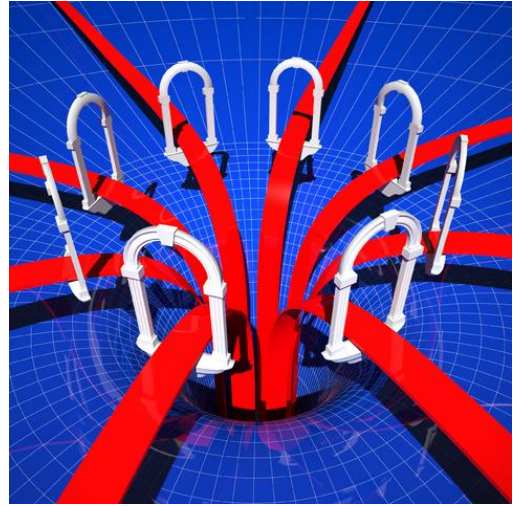
From a more technical perspective, an enterprise portal is a web technology that presents an integration and/or presentation platform using standards-based portlet specifications, web services, and diverse, accessible presentation technologies.

For campus developers and information providers, the portal provides a standard way to combine information and to offer applications and information to end users via a variety of platforms.

For end users, the portal provides a secure, central point for accessing, personalizing, and configuring information and applications according to their role(s) at the institution.

Portals can be built on technologies already present on campuses such as a content management system or database system. Or institutions may acquire technologies built specifically for an enterprise portal environment. Most portals should deliver basic functionality out-of-the-box, especially if the portal is to be integrated with institutions' student information systems or other enterprise systems. Examples of basic portal functionality include the following:

- Facilitating outreach and handholding of prospective students as they first investigate and then enroll and ultimately register for courses working their way through a student lifecycle
- Recording and sharing grades with students electronically
- Creating online communities for students, faculty, administrators, and alumni to collaborate
- Facilitating sharing of best practices among faculty and administrators
- Enabling students, faculty, administrators, and alumni to access institutional resources anytime from any connected device
- Posting lesson plans, coursework, research content, and more to online document libraries
- Providing web-based class registration, tuition and financial aid payments, and other services
- Creating dashboards that show up-to-date student performance data to inform instruction and decisions
- Sharing information with your board of directors and community members



Popularity of Portals

Portals have become popular among higher education institutions for various reasons. Many institutions believe that portal technology will provide a positive “first impression” and illustrate they are on the cutting edge of technology. Institutions may also rely on portal features to deliver high-touch services and to give them a competitive edge. Institutions also perceive a portal to be instrumental in helping employees work more efficiently and be more productive by centralizing access to needed services and information.

However, an enterprise portal can offer more than just impressions or centralization of data or access.

- Portals also eliminate the headache of multiple logins to various applications, websites and repositories.
- Portals provide an easily navigable environment to self-service business processes freeing up employees and reducing lines for service.
- Portals can create personalized environments letting an organization target users for individualized services and information.
- Portals appeal to college and university administrators, technologists, faculty, staff, and students alike because they consolidate information and services and allow university constituents secure, quick, and convenient access to personal data.

To reap the full benefits of portal applications, institutions need to plan carefully, understand the limits of the portal options available, have access to the right skill sets, and most importantly, comprehend and meet users’ requirements. That means paying as much attention to users’ feedback as to the technology and vendor selection process.

Benefits of a Portal

Most institutions today whether public or private, are facing the same scenario: rising enrollments, lagging state or private funding, constant or increasing IT budget demands, and increased student and administration expectations. Legacy systems and procedures begin to show their age very quickly when IT tries to integrate new systems or stretch existing systems to do things not originally envisioned.

Finding solutions to these challenges often leads to discussions about integrated web campus portal technology.

An enterprise portal solution can help institutions to:

- **Save time.** Users can activate their own accounts, reset or retrieve their own passwords, and readily resolve most account issues using a robust FAQ area, contextual help, and training.
- **Increase student engagement.** Give students easy ways to connect with their professors and their peers to engage students in their classes.



- **Facilitate anytime, anywhere learning.** Create a virtual campus that never closes. Provide students with single sign-on access to learning materials and campus resources—from library content to complete online courses—at any time, from virtually anywhere, and from any type of connected device.
- **Make better decisions.** Facilitate long-range strategic planning across all business functions and disciplines with accurate, readily-available data presented in intuitive and familiar formats.
- **Help faculty focus on research and instruction.** Make it easier for faculty to find instructional resources; assess students; record and track grades; and communicate with their colleagues and students. Allow them more time and energy to focus on important research and to facilitate meaningful learning experiences that meet the unique needs of individual students.
- **Streamline administrative tasks.** Make it easy for students to register for classes, access financial aid information, pay their tuition, sign-up for meal programs, report absences, and more from any computer.
- **Connect with your community.** Reap the benefits of strong connections with alumni and other members of the broader community by providing simple and customized ways to access information and connect them with the institution.

Strategic Advantages of a Portal

An enterprise portal can help institutions save time and money while providing an opportunity to redesign many of their business processes. By redesigning business processes, institutions may gain substantial savings through more efficient business practices, cost avoidances, and measureable increases in constituent satisfaction.

Integrated technology environments break down barriers between departments and campuses and encourage staff to become more customer-service focused, process and function driven, and cross-functional. For instance, newly found self-service capabilities in admissions can lead to improving enrollment processes. Because enrollment and student financial services provide a student-centered approach, the portal implementation process can enable change including using digital imaging to scan and index, and permit easy retrieval and tracking of paper documents for admissions and financial aid decisions.

A portal integrated to a central directory system frees faculty and student centric administrators by ensuring constantly up-to-date rosters, one-click access to accurate student contact info, collaborative tools for communicating with students on their preferred medium, and secure access to previously disparate and dispersed sources of information and applications.

Cost Savings and Cost Avoidance Examples

Portal investments typically include hardware, software, third party software, maintenance, security, staff time, and training. The more integrated the approach, the better the Return on Investment (ROI) or value on investment for the institution. Below are a few examples of cost savings and cost avoidance that are attributed to or enabled by the presence of a portal. Each one represents ways to directly affect the level of service institutions deliver to constituents or to directly save money.

- Reduced back-office support for basic administrative functions
- Consolidated help desk
- Earlier registration for returning and new students
- Enrollment and retention increases
- Easily accessible and targeted messages for reminders to access online web admissions
- Web recruitment with targeted email plans—email leads to new accounts, new accounts lead to informed prospective students, which in turn lead to a larger pool of applicants.
- Non-credit student services integrated into the portal
- Faculty class rosters, scheduled, and grade assignments online
- Advising online with what-if scenarios available to students and advisors
- Integrated and more efficient Learning Management System (LMS) support
- Dynamic account generation with single sign-on
- In-house, 24x7 services and consolidated help system
- Course resource areas automatically created and available for every course
- Personal web space dynamically available to support curriculum, web projects, and course resource areas
- Intranet with many online services and paperless processes
- Mailing of student schedules and grades no longer needed
- Online handling of financial aid awards and book vouchers through the portal
- Significantly reduced paper mail due to portal, e-mail, and web services



While a portal solution is not a panacea for all higher education needs, it can address many of the challenges facing institutions – reduced funding, increased accountability of performance and outcomes, increased

expectations for personalized interactions and convenience, and the need to remain competitive. A portal can lead to scalability benefits with easier administration, centralized identity administration, consistent interface, single sign-on access, ease of use, and maximum effectiveness of integrated applications.

Portal Options – Making the Choice

Each school that has gone down the road of choosing and implementing a campus portal solution has chosen from one of these technology categories:

- **Portal Development Partner – Commercial Platform (e.g. SharePoint, WebSphere)**
In this approach a software company is hired to build a custom portal using a proprietary licensed development platform such as Microsoft SharePoint or IBM’s WebSphere.
- **Portal Development Partner – Open Source (e.g. Drupal, Liferay, uPortal)**
A software company is hired to build a custom portal, but in this case an open source development platform is used, such as Drupal, Liferay, or uPortal.
- **Turnkey¹ COTS Portal (e.g. Oracle, SunGard, PeopleSoft)**
With a turnkey commercial off-the-shelf approach, a predesigned and built portal geared toward higher education is implemented.
- **Turnkey COTS SaaS (e.g. CampusCloud)**
With commercial software-as-a-service (SaaS) offerings, a predesigned and built portal for higher education is implemented in a hosted environment in the “cloud.”
- **Turnkey Non-Profit Consortium (e.g. CampusEAI - Liferay)**
Consortium delivering, a predesigned and built portal is geared toward higher education which can be either campus based or hosted.

Regardless of the path or technology choice an institution makes, each path has its pros and cons and risks and benefits. Institutions and systems should carefully assess short and long term goals, budget, skills sets, ROI measures, and total cost of ownership.

One way institutions can make the best portal technology decisions is by reaching out to their constituents first to clearly understand what they want and need. Institutions can then determine not only if a portal is an appropriate addition to the technology portfolio, but more importantly, what services and functions the portal needs to deliver.

Once an inventory of features, services, and functions is complete, the next step is to determine what technology approach or option will yield the best match to the requirements. Lastly, with a technology direction determined, institutions need to carefully assess their own business processes and staff.

¹ We define a “turnkey” portal solution as one that delivers comprehensive functionality and integration capability and its deployment is largely a configuration activity and limited programming. This solution is in contrast to portal solutions that provide basic frameworks, with integration, branding, security, and other capabilities and involve heavy programming efforts.

A Focus on Users' Needs and Requirements

Focus on needs, not the technology. Needs are determined by reaching out to users, understanding the status quo, and learning from the process. One of the most common mistakes made by institutions hoping to apply a technology solution to “improve” or modernize the way they operate is to rely on the technology alone to solve the issues. Instead, institutions should be evaluating the business processes that the new technology will facilitate, interact with, or enhance. The most notorious examples of this are enterprise workflow or customer relationship management implementations. Implementation teams often do not focus on the inefficient or outdated institutional policies and procedures. The new systems are then built to mimic the legacy processes rather than making them more streamlined and more effective at meeting constituent needs.

Focus on needs, rather than existing staff or resources. To implement a successful technology change, institutions should assess their staffing and leadership. However, many institutions make decisions based on their current IT bench or IT skill sets rather than focusing on the needs and requirements of the users, finding the best solution to address those needs, and then acquiring the talent to deploy and manage the solution.

Focus on needs, to ensure alignment with the institution. Portals and related technology when deployed properly with end-user driven functionality and service have proven to save time and enhance the implementing institutions reputation of delivering great customer service. While the costs of technology investments need to be in line with budgets, their value is determined by how well the solution meets the needs of the institution including its mission, its customers, its constituencies, etc.

By assessing and preparing effectively for the implementation of portal solutions, institutions dramatically increase their probability of success and reduce risk to ensure their technology investments deliver as promised.

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