An Open Source Strategy

Adopting An Open Source Software Strategy at Youngstown State University (YSU)

YSU has decided to transition to open source software in situations where it can save the university software licensing costs, and either match proprietary package functionality or automate current manual/paper-bound processes. This strategy has the potential of saving YSU $1,290,000 in software licensing per year.

With the success of bringing up the eBulletin under the open source Drupal content management system:

- ITS was given the authority to convert the YSU website to Drupal
- ITS was authorized to bring up a pair of low-risk Kuali systems (FAR & eDossier) to reduce faculty paperwork
- The Information Technology Advisory Committee (ITAC) recommended (and the University approved) that YSU begin a transition to the Sakai learning management system.

This website expands on the considerations that led to the general adoption of open source software strategy, the packages currently being installed, and the potential of future packages.

In general, YSU will still buy proprietary systems when it makes good business sense, and transition to open source systems when it makes good business sense.

Current Open Source Software Usage at YSU:

Open Source software is not new at YSU, as the university already utilizes a number of open source packages for point solutions:

- **Drupal** has been the Maag library website: content management system since 2007: http://www.maag.ysu.edu/
- **Drupal** is being used for the new eBulletin – which went live on January 17, 2014: http://www.ysu.edu/ebulletin.
- **ResourceSpace** is used by Marketing & Communications to store photos and finished videos: http://photos.ysu.edu

- **OwnCloud** is available to the campus for secure large file transfers, https://files.ysu.edu/.

Open Source Projects Underway at YSU for FY14-15:

- The **Sakai** learning management system is being installed with hopes that it will be ready for a **pilot testing during Spring-15 and a general pilot test during Fall-15**.

- The **Drupal** content management system is being installed. YSU has engaged the Longsight consulting firm to help with establishing standard templates and conversion of content from ContentM to Drupal.

- As of December 2014, FAR & eDossier are on hold due to staffing limitations.

  o Faculty Annual Reporting (**FAR**) – a package developed at Indiana University to automate the annual reporting faculty have to submit to chairs to record teaching, conference, and publishing activities during the year.

  o **eDossier** – This **Kuali** module automates the Tenure and Promotion process including the approval workflow –

  o YSU's Department of Information Technology Services (ITS) in collaboration with Que Solutions are working to install FAR before the Spring semester of 2015. Currently the academic departments of **Economics, Mathematics & Statistics, and Physical Therapy** have volunteered to test the software during the school year (FY14-15). eDossier availability is dependent on the Kuali Foundation adoption and general release of the system.

    ▪ Note that:

      ▪ FAR and eDossier are "cousins" and due to a common database definition, will eventually be merged under the Kuali umbrella. A demonstration of both (but primarily eDossier) can be seen at: https://www.fuzemeeting.com/replay_meeting/a15d7a94/5612699

      ▪ *Neither FAR nor eDossier are intended to become an electronic personnel filing system to replace the paper files kept in Human Resources. They were developed solely to reduce faculty paperwork associated with Annual Activity Reporting and the Tenure and Promotion process.*

Looking forward (Or what's in it for YSU?):

The following is a summary of the potential cost savings for YSU, and the limitations in the rate of change that ITS and YSU can successfully manage.

In general:

- In 3 years we will replace Blackboard with Sakai [1] and save ~$190,000/year.

- In a 12 to18 month period we will replace ContentM and save $39,000/year

- In a year we could replace PeopleAdmin and save $60,000/year (not currently scheduled)

- In a year we could replace SciQuest and save $38,000/year (not currently scheduled)

- In a year we could replace Concur and save ~$48,000/year (not currently scheduled)

- In a year we could replace Starfish & Insight and save ~$66,000/year (not currently scheduled)

- In time, we could replace the NEC PBX with an open source system and save ~$40,000 (not currently scheduled)

- In 3 to 5 years moving to Kuali and replacing Banner could save an additional ~$800,000/year; these costs are modular and some savings could be realized quickly, for example:

  - Simply shutting down the MyYSU portal could save ~$50,000/year (tentatively scheduled by July 1, 2015)

  - Moving to Kuali Financial Systems (KFS could save ~$40,000/year   (not currently scheduled)

- Additional Kuali modules such as Kuali Enterprise Workflow (KEW) and the Kuali Curriculum Management System (KCMS) have the potential to reduce paperwork.

Clearly this is a non-trivial strategy and needs to be well thought out and planned. Simultaneous conversions can be accomplished but there are practical limits on the rate that YSU staff (both ITS and user staff) can absorb systemic business process changes. A significant requirement in a successful transition is the training of faculty and staff in the use of the new systems.

- Replacing ContentM will take ITS and staff time in all departments. YSU staff time will be augmented by a consulting company. This would be a good time to remove unneeded content from departmental/college web pages and what is extraneous or ill advised (such as degree requirement which should only be in the eCatalog due to the contractual nature of degree requirements.) Website conversions at comparable universities usually take 12 to 18 months.

- Replacing Blackboard, while considered a "business decision" by some faculty, would affect the entire student body and almost all faculty. However, having led this same conversion at a university seven years ago, this is not an impossible task with proper underlying support and communications. A conversion of this type can gracefully be completed in 18 months. The Information Technology Advisory Committee (ITAC) has recommended, and YSU administration has accepted the ITAC recommendation as follows:

- ITS and volunteer faculty will pilot Sakai during the FY14-15 school year.

- If the pilot is successful, YSU will begin a two year migration/transition to Sakai.

- Deploying Kuali would be done in modules over 3 to 5 years once the decision is made to convert to the **major** Kuali modules.

  o Installing FAR, and eDossier provide practical, low risk, entry into the Kuali technology during the FY15 school year.

  o Once Sakai, FAR & eDossier are successfully piloted, planning could begin for a number of modules/options:

    - The Kuali Enterprise Workflow (KEW)

    - The Kuali Curriculum Management System

    - The Kuali Purchasing System

    - The Kuali Travel Management System

    - The most common first, **major** module is Finance (KFS).

Before YSU moves into Kuali modules for core enterprise modules like finance or student registration/records a serious look needs to be taken at the viability of the Kuali Foundation and their recent for-profit spin off KualiCo. In addition, the current guarantee that Kuali modules will remain open source needs confirmation and validation thru proof.

Staffing and training within ITS to develop an Open Source Software team needs to be carefully planned and sufficiently staffed to meet the transition plans of the university. We have already experienced delays in the Sakai & FAR pilots. With continued staffing delays the portal replacement may already be in jeopardy.

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[1] A somewhat dated Sakai user map can be found at: http://www.sakaiproject.org/adopt