Update on the Seven Opportunities from the 2011 IT Assessment

In 2011, Penn State conducted a University-wide assessment of information technology.[1] The assessment, which was led by the University and facilitated by an outside consultant, originated from goal six[2] of the Penn State Strategic Plan and focused on three broad objectives:

1) To quantify and understand Penn State's current level of investment in technology

2) To recommend changes to improve the efficiency and effectiveness of IT services, with particular focus on optimizing the balance between distributed and common services

3) To recommend changes to IT governance (planning, prioritization, assessment, and decision making) to improve the University's collective ability to manage its investment in technology

Through the assessment, seven opportunities were identified as being key factors in improving the effectiveness of technology and the ability to balance common and distributed IT services at Penn State. This document outlines the status of those seven opportunities as of October 2013.

OPPORTUNITY

Deploy a common email and calendaring solution for faculty and staff.

STATUS

The **University Collaboration Suite**[3] (UCS) was centrally funded in 2011 and now has 10,115 UCS email users (9,610 faculty and staff members and 505 student workers) and approximately 3,000 UCS calendar users (the calendar users migrated to UCS but forward email elsewhere). Currently, an Information Technology Leadership Council (ITLC) task force is examining future directions for email and calendaring services and will present their recommendations in December 2013.

University Collaboration Suite primary contact: **Karen Mitchell**

Service owner: **Administrative Information Services**

OPPORTUNITY

Create a new University service to meet the shared needs for long-term data storage and archiving.

STATUS

Management, archiving, and preservation of research data is now supported by **ScholarSphere**,[4] a joint initiative of ITS and the University Libraries. ScholarSphere is a secure repository service that enables the Penn State community to share its research and scholarly work with a worldwide audience. Faculty, staff, and students can use ScholarSphere to collect their work in one location and create a durable record of their papers, presentations, publications, data sets, or other scholarly creations. Through this service, Penn State researchers can also comply with grant-funding agency requirements for sharing and managing research data.

ScholarSphere primary contact: **Mairéad Martin**

Service owner: **Digital Library Technologies,**
            Consulting and Support Services

OPPORTUNITY (CONTINUED)

Create a new University service to meet the shared needs for long-term data storage and archiving.

STATUS

ArchiveSphere,[5] currently under development, will support the long-term management of University electronic records and archival materials. There are four phases in ArchiveSphere development: 1) ingest and preservation services for archive staff, 2) administrative tools for managing, arranging, and describing submissions for public access and discovery interfaces, 3) integration with ArchivesSpace for holistic management of archival context around repository materials, and 4) alternative submission tools, including self-deposit options for institutional records. ArchiveSphere is also a joint development between ITS and the University Libraries.

ArchiveSphere primary contact: **Mairéad Martin**

Service owner: **Digital Library Technologies, Consulting and Support Services**

The **Box** contract was signed on October 2, 2013. Since then, ITS has established weekly meetings with the implementation manager assigned by Box. The Penn State support team has access to Box's administrative, service desk, and end-user training and is currently reviewing the documentation. The team has established an internal workflow for support calls handled by the service desk. The team addressed the implementation of single sign-on (SSO) on October 24, 2013. Members of ITS Identity Services and a Box SSO expert will discuss implementation with the intention of having SSO available soon. Until then the support team will continue to add new users upon request. There are currently 252 user accounts in the system; most had accounts during the pilot phase. Following SSO completion, the next major action will be "repatriating" Penn State users who have Box accounts not associated with the Penn State Box enterprise space, this includes those with commercial accounts, Office of Physical Plant users (who were under a separate contract), and those who had accounts with other institutions. The intention is to continue with the "soft" rollout (no mass communications, no marketing) through the end of 2013, followed by announcements to the University population in January 2014.

Box primary contact: **Kurt Baker**

Service owner: **Digital Library Technologies, Consulting and Support Services**

OPPORTUNITY

Expand ITS' server colocation and virtualization services in a manner that is cost competitive with units providing the service on their own. Commit first to increasing use of this service for administrative applications that require high availability and redundancy.

STATUS

Adoption of **VM Hosting**[6] throughout the University has increased more than 100 percent since its implementation.

In addition, the **vLearning**[7] pilot began during fall semester 2013 and includes two College of Information Sciences and Technology (IST) classes at Penn State Harrisburg.

The pilot provides the following:

- A safe, consistent environment where every student can run the necessary software using a web browser
- A virtual classroom where students can do their work wherever they have an Internet connection
- Data safety and consistency for students—viruses, malware, or hardware issues no longer cause students issues in relation to educational work

There is currently a survey to determine needs at all Penn State campuses (the survey has had more than forty responses, with requests to use the service in more than fifty classes). The pilot will expand to more classes in spring 2014, with the intention to move to a full production service in fall 2014.

Virtualization, VM Hosting, and vLearning primary contact: John Schubert

Service owner: Consulting and Support Services, Data Centers

OPPORTUNITY

Extend the ITS computer lab management service to all campuses and colleges and begin to develop a similar solution to manage administrative desktops.

STATUS

Virtual Desktop Infrastructure[8] (VDI) is closer to launching thanks to a successful pilot of 100 employees from twenty University groups. To give stakeholders the opportunity to ask questions about the service, bi-weekly open sessions are being held through the end of 2013.

Virtual Desktop Infrastructure primary contact: **John Schubert**

Service owner: **Consulting and Support Services**

OPPORTUNITY

Reduce the cost of software purchases by extending the use of shared, server-based software licenses instead of licensing software for every individual computer.

STATUS

Launched on July 1, 2013, **Software at Penn State**[9] evolved from the former Computer Store. Current initiatives include:

- Collaborating with Penn State campuses on a project to expand software titles at shared costs
- Working closely with the ITLC on a new distribution/cost sharing model with the Adobe contract
- Building a software catalog to increase the breadth of offerings to large- and small-volume customers
- Creating communities of practice around software
- Creating a University-wide software repository to better coordinate software license usage
- Focusing on software compliance

As a result of leveraged discounts, the University saved $21 million during the last fiscal year. In addition, streamlining internal processes has increased overall efficiencies.

Software at Penn State primary contact: **Sue Gavazzi**

Service owner: **Consulting and Support Services**

OPPORTUNITY

Implement a common help desk system and knowledge base to improve the productivity of IT staff and the quality of user support services.

STATUS

As the **Shared Service Desk** project continues to develop and make progress, the ITS Service Desk has opened its implementation of JIRA to areas beyond ITS. Currently, there are twelve external units using JIRA. There are a total of 866 active users (ITS and non-ITS) on JIRA, supporting more than 300 services/business processes. Currently, there are twelve projects waiting to get onto JIRA.

On the larger Information Technology Server Management (ITSM) project, a contract has been made with a consultant named Third Sky,[10] a full-service ITSM provider with core competencies in the areas of education, process consulting, and technology solutions. We are securing ITSM expert help for the development of a tier 1 shared service desk and evaluation/selection of a service desk software solution. Development of a service catalog was also within scope in our request for proposal, since that is critical to a fully functional service desk.

Shared Service Desk System primary contact: **John Williams**

Service owner: **Consulting and Support Services, Digital Library Technologies**

OPPORTUNITY

Make wireless networking at University Park campus a common service to achieve greater network coverage and a more consistent experience for faculty, students, and staff as they move about campus.

STATUS

On May 3, 2013, the Penn State Board of Trustees approved a **wireless networking**[11] effort expected to be complete by 2016. A survey of present coverage areas undertaken earlier in the year has provided a basis for vendor selection, negotiation, and projection of near-term product, labor, and facility needs, and processes and arrangements were established during the higher priority residence hall project, itself now largely in suspension until November. The initial focus is on replacing the outdated wireless equipment that some departments use. Areas used by the College of Engineering and of IST are foremost among those being addressed this fall.

Wireless Networking primary contact: **Chuck Enfield**

Service owner: **Telecommunications and Networking Services**

Related Projects

Although the following are not part of the seven opportunities from the 2011 IT Assessment, they have resulted from those initiatives and/or are closely related to the seven opportunities.

Data Centers

As part of the ITS server colocation and virtualization services opportunity, Penn State **Data Centers**[12] has been working with the Virtualization and Colocation Task Force since its inception. The growth in hosting machines in the Colocation Center is up more than 100 percent in the past year and demand is increasing. Those requesting Colocation space for physical servers are asked to first consider, when applicable, the ITS Virtual Colocation service (VM Hosting). If they cannot move to VM Hosting, rack space is provisioned in the Colocation Center. In addition to the physical space, networking, power, and cooling offered in the Colocation Center, the Data Centers team works directly with each customer to help them transition from their current location.

Data Centers primary contact: **Mark Saussure**

ITSCollab Project Groups

The work being pursued by **ITSCollab**—namely service portfolio management, project portfolio management, and talent portfolio management (competencies assessment)—will be incorporated into the shared service desk opportunity. The ITSCollab projects, which were chosen for their potential to transform how ITS approaches its work, will be beneficial beyond ITS since Third Sky's[10] expertise in how to implement these ITSM components and how to integrate them effectively will be accessible to all. Third Sky now has ITSCollab documentation on the additional areas and we are discussing the expanded scope, timeline, and budget. After that, the next steps are as follows:

1. October 29, 2013, Project Kickoff: Third Sky, Shared Service Management core team, ITSCollab project co-leads

2. Weeks of November 11 and 18, 2013: Third Sky on site for meetings with stakeholders

ITSCollab primary contact: **Christy Long**

Visitor Wireless

Visitor wireless[13] (directly connected to the wireless networking opportunity) addresses financial aspects and associated service provision changes with a commercial service provider, AT&T Wireless, to make Wi-Fi connectivity accessible to anyone within the service area. This project also modifies the underlying historical financial and current technical arrangements that already enabled such access, albeit with individual costs having to be recovered.

Visitor Wireless primary contact: **Chuck Enfield**

Service owner: **Telecommunications and Networking Services**

Penn State Voice Advocacy Working Group

As part of creating a common email and calendaring solution for the University, the Penn State Voice Advocacy Working Group (Penn State VAWG) has developed the following goals and objectives:

- Provide flexibility and options in the provisioning of voice services to University units and campuses that meet the University's requirements and educational needs in a cost effective manner
- Reduce the cost of voice services by 25–50 percent in five years
- Encourage and establish a similar/standard user experience from campus to campus
- Leverage University resources to the greatest extent possible

Penn State VAWG, which is composed of representatives from throughout Penn State, has completed an analysis of vendor service offerings and has gathered various stakeholder requirements. This has resulted in the release of a request for proposal, which is currently under evaluation. Future activities include the following:

- Completion of proposal evaluations
- Selected vendor presentations
- Final selection and award
- Development of a shared service support model
- Development and approval of a new University policy allowing the removal of desk telephones and use of soft-client telephones on computers and mobile devices
- Communications and acceptance by key stakeholders and campus executives
- Pilot/acceptance testing
- Integration with ITS email and calendaring system to support the UCS environment
- University-wide deployment

Voice Advocacy Working Group primary contact: **Jerry Krawczyk**

Service owner: **Telecommunications and Networking Services**

Related Web Links

1. 2011 IT Assessment
   http://it.psu.edu/strategies/pdf/IT%20Assessment%20Executive%20Summary.pdf

2. Goal Six of the Penn State Strategic Plan
   http://strategicplan.psu.edu/technology

3. University Collaboration Suite (UCS)
   http://ait.its.psu.edu/services/ucs/

4. ScholarSphere
   https://scholarsphere.psu.edu/

5. ArchiveSphere
   http://stewardship.psu.edu/

6. VM Hosting Server Virtualization
   https://www.vmhost.psu.edu

7. vLearning
   https://vlearning.psu.edu/

8. Virtual Desktop Infrastructure (VDI)
   http://desktop.psu.edu

9. Software at Penn State
   http://software.psu.edu/

10. Third Sky
    http://www.thirdsky.com/

11. Wireless Networking
    http://wireless.psu.edu/
    Detailed plans of deployment sequences and schedules
    https://wikispaces.psu.edu/display/PSWP/Penn+State+Wireless+Projects+Home

12. Data Centers
    http://dc.psu.edu/

13. Visitor Wireless
    http://wireless.psu.edu/visitorwireless.html

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