UNIVERSITY INFORMATION TECHNOLOGY SERVICES

Strategic Plan Annual Review and Progress Report

September 2016

University Information Technology Services (UITS) published our five year strategic plan in 2014, and we annually report on our progress meeting the goals outlined in the plan. The five main goals from this plan remain unchanged as they still align our central IT systems, services and capabilities to key institutional constituencies and the overarching university mission. Organizationally, UITS has continued to make significant enhancements at an infrastructure level and also effectively targeted attention towards key areas that substantively impact the success of key communities. We did not pursue IT enhancements for the purpose of pursuing IT enhancements; rather, our activities were driven by the direct and indirect benefits they would provide to our stakeholders.

Below are our five goals and related initiatives that UITS completed this year.

GOAL 1

Pursue IT solutions that empower members of our community to successfully, productively, and securely engage in all of their institutional roles as individuals.

- **Mobile applications:** Additional functionality has been added to the myUConn mobile app:
  - Students can view their grades via the app.
  - The Mobile Maintenance Management mobile was updated to include (1) image upload capability, which allows students, faculty, and staff to send pictures of maintenance issues along with their service requests and (2) ability to display storm calls on maps in real-time.
- **HuskyVision:** The Storrs campus cable television service, HuskyVision, was transitioned from analog to digital. The migration of the university private cable service was a very large initiative that occurred over a six month period and included recertification of all base infrastructure, re-architecture of our head end distribution facility, restructuring of the programming lineup, and a communications initiative to preplace relevant and

helpful information within the customer community. The final conversion that ultimately delivered digital programming to the entire campus, occurred over a two week period in April and involved academic, administrative, and residential buildings.

- **Enhancements to email:**
  - Plus Email Addressing: This feature enables the community to create variations of their institutional email address by adding the plus sign and a descriptor after their username (e.g., jonathan.husky+basketball@uconn.edu). The variant addresses are still delivered to university email accounts. This feature can be useful for managing email and site registrations.
  - Alias creation: UITS modified the process for requesting email aliases to give UConn faculty, staff, and students more flexibility.
  - Email for life: As a first step in the process to enable students to retain their email accounts in perpetuity after graduation, UITS stopped reclaiming Google accounts. Student email as well their information saved in the Google apps will persist, and they retain full access to both. Planning for long-term management and best practical outcomes will continue.

GOAL 2

Pursue IT solutions under the guidance of our academic partners that facilitate effective research, enrich teaching and learning, and enhance institutional competitiveness for extramural funding.

- **High Performance Computing (HPC):**
  - A capital investment from the Academic Strategic Plan enabled UITS to double the total core count of our HPC facility.
  - UITS formed an oversight group, comprised of individual researchers with investments in the infrastructure, to advise on operating policies and practices.
  - In response to investor feedback, UITS restructured the HPC partitions to improve overall HPC usage while maintaining priority access to specific resources for our HPC investors. These changes also introduce better options for how jobs are scheduled and will improve overall access to resources for everybody.
  - UITS is re-purposing the oldest equipment, which is no longer suitable for research use, to support teaching and learning. UITS is collaborating with departments to create an environment for undergraduates using this end-of-life equipment.

- **Expansion of software licensing**:
    - UITS extended all university-wide site licenses to UConn Health.
    - The Schrödinger Small-Molecule Drug Discovery Suite, chemical simulation software with applications in pharmaceutical and biotechnology research, is now available to UConn faculty, staff, and students on all campuses. UITS, Office of the Vice President for Research (OVPR), College of Liberal Arts and Sciences, School of Pharmacy, UConn Health Department of Molecular Biology and Biophysics, Department of Chemistry, and Department of Molecular and Cell Biology have partnered to fund a university-wide site license.
    - Licensing for MathWorks MATLAB software, which integrates computation, visualization, and programming, was expanded to provide access to UConn faculty, staff, and students on all campuses. UITS, the School of Business, the College of Liberal Arts and Sciences, and the School of Engineering partnered to buy an institutional site license that allows unlimited access to the base environment and a broad collection of toolboxes.

- **Classroom technology:**
    - Room upgrades: Academic IT redefined the standard classroom AV systems with the goal of simplifying the user experience, adding academically appropriate functionality, and improving the reliability and serviceability of the systems. UITS upgraded a total of 53 classrooms this past year: 10 lecture halls; 15 Hi-Tech classrooms; 27 Tech-Ready classrooms; and one non-standard classroom.
    - New instructional technology: "Tech from" video conference and lecture capture capability was added to the lecture hall design. In iTV classrooms, UITS added the following camera technologies to enhance the teaching and learning experience:
        - SpeakerTrack cameras, which use audio mapping and facial recognition to focus the camera on students asking questions.
        - PresenterTrack cameras, which uses facial recognition to zoom in and follow instructors in the front of the room.
- **Blackboard's Portfolio:** To support content reuse in the HuskyCT environment, UITS enabled the Portfolio tool, which allows instructors and students to collect, organize, and share completed work.
- **Web applications:** The following were created to support the academic practices of the University:
    - Minor Protection Program
    - Thesis Plans for Honors students

- Chemistry 244 recitation sign-up

GOAL 3

Pursue IT solutions in concert with functional partners that support the business of the University and increase operational effectiveness.

- **Data analysis and reporting:** UITS has organized around three distinct software products to meet the range of different use cases.
  - The university WebFocus environment was upgraded to the latest version this year to ensure full vendor support as well as the best practical community experience.
  - A server-based SAS was deployed and maintained to meet the high-end statistical needs of the University. UITS coupled this addition with significant extract and support work to enable OIRE to deliver on their analysis tools and reporting dashboards.
  - UITS selected Oracle OBIEE to meet the University's high-end Business Intelligence (BI) needs. We worked with Finance to ensure that this was part of our Core-CT implementation.
- **Student Administration:**
  - UITS collaborated with the Office of the Registrar, the Dean of Students Office, and our software vendors to build an interface from the scheduling environment to the Student Administration system that will give students and instructors direct access to their personal exam information. By associating class exam schedules with data about enrolled students, queries can be created that can identify student specific conflicts and aid in the construction of better schedules.
  - The online training program, Not Anymore, was integrated into the Student Administration System. This establishes a workflow that allows graduate students to enroll once they have completed the required training.
- **Launch of web based electronic signature product:** eSignLive was made available for use by university departments, schools, and colleges. The eSignLive service streamlines processes and facilitates one-time or repeat processes through simple or template-based workflows. Once configured, eSignLive can securely route documents/forms via email, gather signatures, and save the results locally or within the product's cloud storage.
- **Web applications:** The following were created to support the business practices of the University:
  - Center for Career Development Presentation sign-up

- The Dean's Books, a dashboard in FAMIS that provides access to real-time space data

GOAL 4

Pursue IT solutions that assist technical partners at all UConn locations to successfully provide for the specific needs of their respective communities.

- **New relationship model:** UITS developed a third relationship model for our Managed Workstation service customers in response to feedback. The new model, Business-to-Department (B2D), incorporates elements from the existing Business-to-Business (B2B) and Business-to-Customer (B2C) models. Functioning more like a franchise, the B2D model enables IT professionals to serve as the front line support for their customers while still having a higher level of structural support from UITS (e.g., software and security updates).

GOAL 5

Pursue IT solutions that can best be provided centrally and deliver them securely, efficiently, and robustly at scale.

- **Infrastructure:**
  - Replaced the central controller infrastructure with a current generation carrier class gear. This controller infrastructure can support 10x the university's current and future need and will do so with far greater reliability and performance.
  - Refreshed 600 wireless access points on campus. The oldest access points in service were replaced with contemporary units that deliver greater performance and capacity.
- **Disaster Recovery:**
  - Essential IT services: UITS completed the second test run at the selected disaster recovery site, an IBM facility in upstate New York. During the test, UITS was able to establish full network connectivity and stand up all key administrative and academic applications.
  - Email: The university email environment operates in the cloud but is currently architected so that virus scanning and alias resolution is done locally. To provide for high availability, the local activity was rebuilt to load balance between Storrs (local) and Azure (the Microsoft cloud environment). We will continue to test our cloud capability to ensure continuity of service if local activity is disrupted.
- **Services:** UITS performed updates and upgrades to the following systems and services to ensure secure and efficient performance:

    - Aurora Web Content Management
    - HuskyCT
    - Hyperion
    - Kuali Financial
    - Student Administration
    - Recruiting Solutions
- **Voicemail:** The Storrs campus voicemail system was at the end of its useful life. UITS upgraded to the Cisco Unity System, which uses technology that aligns with our evolving video conferencing infrastructure.
- **UITS Core service centralization:**
    - UITS migrated University Libraries email to the Microsoft Office 365 infrastructure
    - The School of Engineering's email was migrated to the central email service
    - All Foundation servers are now housed in the UITS Data Center