AITS
annual progress report
FY15
AITS delivers enterprise-wide IT solutions and services in support of the mission critical functions of the University of Illinois. These functions include student services and financial aid, human resources and payroll, facilities, advancement, research administration, and finance. Approximately 33,000 employees and 78,000 students interact with AITS systems as they register for classes, access transcripts, pay tuition, view earning statements, or browse human resource benefits information. These interactions number in the millions each year, and these services rely on an IT infrastructure of over 384 applications, 1,044 servers, 548 TB of raw storage, and > 1 PB of backup media. AITS has a presence at all three campuses and is the University-wide resource for computing, applications support, applications development, and data management in support of University business processes. University staff rely on our systems to maintain and create efficiencies in their business processes as well as the necessary business intelligence needed for good decision-making.

AITS is an engaged partner within the University community with the mission of providing IT systems that are accessible, reliable, accurate, efficient, and responsive to customer needs.

We provide a wide range of information technology solutions and services to the University community that are accessible, reliable, accurate, efficient, and responsive to customer needs. We collaborate to proactively identify opportunities, manage risks, plan future initiatives, and solve problems by leveraging all of our information technology resources and knowledge. We continually measure and evaluate our services in order to optimize them for the University community.

Michael Hites
Senior Associate Vice President for AITS

The goals and initiatives that guided Administrative Information Technology Services (AITS) efforts this past year are outlined in the AITS FY13–FY15 Strategic Plan. Broadly stated, AITS focused its efforts to support the strategic directions of saving time, fostering ease of use, improving the speed of delivery of IT services, delivering targeted and pervasive information for users, and collaborating throughout the University. Many of the goals rely on collaboration with units throughout the University.

This report provides an overview of AITS and activities during the FY15 term. It reflects the continuous hard work by our employees to provide high quality administrative services and technology infrastructure to support the mission of the University of Illinois.
we serve
the students, faculty, and staff of the University of Illinois

students
Over 78,000 students are enrolled at the three University of Illinois campuses and two regional campuses. Thousands more take classes off campus and online.

Students use AITS services as they:
• Register for classes
• Apply for graduation and view expected graduation dates
• Receive financial aid
• Access transcripts
• Check bus schedules or a dining menu
• Pay tuition
• Check grades and class schedules
• View and manage accounts
• Use services such as Box cloud storage and Lynda.com training
• Receive work study and student employment earnings

faculty
Approximately 6,000 faculty are employed by the University of Illinois. Faculty members are world leaders in research and discovery and contribute new knowledge and life-changing breakthroughs to a variety of fields including engineering, agriculture, law, veterinary medicine, the arts, business, liberal arts and sciences, and medicine and the health sciences.

Faculty rely on AITS services to:
• Access class rosters
• Collaborate with peers and students
• Manage grants electronically
• Record and change grades
• Manage and change benefits information
• Hire staff
• Submit and receive reimbursements
• Receive employment earnings

staff
Approximately 8,000 professional staff members and 11,000 support staff work together to support the research and learning business of the University. These services are vital to supporting the primary missions of the institution: instruction, research, public service, and economic development.

AITS services support academic and business offices at the University, which in turn, enable those offices to better serve their end users. Providing efficient services such as those listed below, reduce the administrative burden on faculty and staff so they have more capacity to dedicate to core mission activities and other priorities. AITS enables efficient:
• Accounting and financial reporting
• Travel and expense reimbursements
• Student financial aid processing
• Online purchasing
• Grant management
• Human resource services and payroll services
WE ENABLE

12,343,500 registration record transactions
556,000 financial aid disbursements
157,000 eProcurement transactions
153,000 travel and expense reimbursements
882,000 regular payroll transactions
299,000 student application transactions
473,166 data warehouse sessions
113,000 transcripts processed

**2015 transaction levels**
Count on us

Count on us for reliable and secure large scale systems and services.

99.98% uptime for Banner applications

2 million attacks blocked per day

9 million self service sessions in FY15

Reliability

Banner and related systems provide the backbone for University business processes. It is imperative that these services are highly available. Availability excluding planned outages for Banner and related applications was 99.98%, meaning that unplanned unavailability of these systems was less than 2 hours this year. This availability measurement includes Banner Self Service and the systems and services upon which it depends, such as: apps.illinois.edu site, EAS, brokers, Banner database, the network, the campus backbone, and application servers.

Security

Higher education institutions rely heavily on digital data both for the smooth operating of the institution and for generating complex, valuable, and at times, sensitive digital research data.

AITS protects University resources and reduces vulnerability to security threats and data breaches. It eliminates or mitigates the following risks to the University: 1) loss of credibility, 2) denial of service or access, 3) downtime, 4) loss of revenue, and 5) identity theft risks. It also helps ensure the University is in compliance of state and federal rules and regulations for protected information, such as HIPAA and FERPA.

AITS estimates it blocks approximately 2 million malicious connections per day at its HAB data center.

Scale

The majority of AITS IT services are enterprise in nature, and most serve constituents at all University locations. AITS supports a large number of systems and enables high volume transactions for the entire University:

659 applications | 1,071 servers | 548 TB of raw storage | 1 PB of backup media | 287,994 application transactions | 12,343,500 registration record transactions | 882,000 regular payroll transactions | 473,166 data warehouse sessions | 1410 active databases | 75,000 project hours | 8,523,626 self service usage
Service Desk tickets processed in FY15

52,979

Support

AITS Service Desk is the single point of contact for enterprise IT services including Banner, HR Front End, Decision Support, OBFS Payroll, and iBuy. In addition, AITS provides assistance to faculty and staff with enterprise accounts and desktop support to University Administration clients.

In FY15, AITS processed 52,979 service desk tickets, with the AITS Service Desk resolving the largest number and routing the remaining to the appropriate group or subject matter expert for final resolution.

our services

The work of AITS is rooted in industry best practices and standards-based approaches to ensure the quality and consistency of services. AITS software development, service management, financial management, IT governance, business process improvement, data warehousing, project management, and security compliance all have a foundation in established and industry accepted practices. Core work includes:

- Selecting, implementing, and maintaining packaged and self-developed applications at the University of Illinois
- Creating and maintaining internal and external interfaces for University enterprise applications
- Managing disaster recovery services, data centers, and data for University enterprise applications
- Supporting University enterprise applications with a 24/7 Service Desk and operations support group
- Facilitating University applications training with internal and external service providers
- Supporting the Ellucian Banner Enterprise Resource Planning (ERP) system. This system includes Student Administration, Student Financial Aid, Human Resources / Payroll and Finance modules, along with associated purchased applications, locally developed components and custom vendor developed components
- Primary resource for business intelligence and data warehousing expertise within the University
- Facilitating University IT governance and providing IT project, program, and portfolio management training and consulting services
- Providing high quality, reliable, and timely data that enables good decision making
- Supporting and providing resources for enterprise level IT services being developed or provided by other IT units
It has been demonstrated repeatedly that the most expensive way to manage enterprise information technology is through decentralization. Through IT delivered at the highest scale, AITS moves the University’s business processes from paper, to electronic systems, to web-based services, and to mobile technology as demand for productivity increases and as IT continues to innovate. The projects that AITS works on support cost reductions that are distributed throughout the campuses, colleges, and departments of the University of Illinois.

By implementing recommendations from four administrative reviews over seven years, AITS has saved the University millions of dollars by consolidating employees and services into AITS. Additionally, AITS completes projects that are prioritized by the campuses with our often-imitated governance process that results in millions of dollars of increased labor productivity for the University. AITS has helped dozens of departments increase administrative efficiency. AITS can continue to help colleges and departments consolidate administrative IT services and shrink costs by reducing unnecessary redundancy and providing services at less cost than they are currently being delivered.

AITS has increased efficiency over the past 20 years. Between 1990 and 2015, the number of employees and students supported per AITS staff member increased from 264 to 454. Over that same period, AITS funding per employee and student supported decreased 4%. Also during this time, the Consumer Price Index (CPI) increased 46%. This budgetary weakness reduced agility and service levels; however, it created significant efficiency in AITS.

Central IT is the greatest cost reduction engine in the university, and it helps create and preserve high quality business functions throughout the University.

### Service improvements

- Internal cloud services deployed for storage, virtual servers, web hosting, and enterprise videoconferencing
- Workflow tools and services made available
- Partnered with nine campus units to produce 84 process improvement recommendations
- Improved information security and threat management to safeguard data/users
- Mobile-friendly services deployed for student dining, registration information, and student access to accounts
- Unit Review dashboard deployed for university, campus, college and department use
- Knowledge base deployed to provide improved self-service help for customers
- Principal investigator portal deployed to provide improved functionality and usability for research administration
- Completed 17 process improvement and analysis projects with 26 units at UIC, UIUC, and University Administration.

The potential cost savings of these recommendations, if implemented by the units, is $820,000.

### Cost savings

- $471,430 Moved Banner modification maintenance in house – budget returned to University (FY11)
- $135,914 Labor savings from retiring services – budget returned to University (FY11)
- $45,000 Energy savings from desktop computing configuration (FY11)
- $461,156 Diminish services through labor reduction – budget returned to University (FY11)
- $230,000 Reduction in transportation, travel, and training and education – budget returned to University (FY13)
- $658,694 Diminish services through labor reduction – budget returned to University (FY13)
- $239,500 Reduction of leased space, printing services, and separation expenses – budget returned to University (FY13)
- Negotiated $100,000 savings on on-line training shared service contract – cost savings for campuses (FY15)
Between 1990 and 2015, the number employees and students supported per AITS staff member increased from 264 to 454.

For every dollar of investment in enterprise projects, three dollars of benefit is obtained after 5 years. This includes labor and money savings that are reallocated by our clients.

From 2007-2015, AITS returned over $2.2M to the University, including permanent budget reductions of approximately $1M each, in FY11 and FY13.

83% of the AITS budget directly supports campus business processes.

For every hour invested in business process improvement efforts, 2.3 hours were saved through the elimination of steps, improved communications, and better defined processes.
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New and improved enterprise applications and services provided to our customers in FY15

**New hire**

The University of Illinois new hire system is likely the first interaction new staff have with the University's IT infrastructure. A positive onboarding experience sets a better tone for future interactions. This project enhanced the New Hire system to be improve usability of the applications, ensure ADA compliance, and reduce the departmental, HR, and UPB work load.

This redesign will improve new staff perception of the University and reducing routine technical support work.

**myResearch**

The START myResearch project is on its 3rd release and will continue releasing enhancements and integrations with new and existing systems. The myResearch Portal (aka PI Portal) is designed to enable faculty to view their proposals, negotiations and awards; provide summary financial data using standard grant formats; and provide access for Business Managers to see all grants associated with their department.

More information is available at [http://web.uillinois.edu/start_myresearch](http://web.uillinois.edu/start_myresearch).
Tableau

Tableau provides quick-to-develop visual dashboards that allows decision makers to ask questions and make better decisions. The Tableau hosting service provided by AITS, allows campus units to host and share dashboard/data visualizations on a secure and University managed environment.

For information, please visit http://www.ait.s.uisninois.edu/services/reports_and_data/tableau_server_service/

Identity

The One ID and Password phase of the Identity and Access Management (IAM) project was implemented at Springfield in April. This project will establish one University credential (i.e. ID and password) and reduce the number of times that a user is prompted to authenticate when accessing various systems. All UIS students and employees now have three self-service options to maintain their passwords: text, email, and voice.

For more information, visit http://web.uisninois.edu/iam

Answers

This self-service tool will assist faculty, staff and students in locating help with enterprise-level applications. This knowledge base tool allows multiple units to contribute information to a central location and is expected to reduce duplicate content and provide access to content authored by other knowledge base partners.

To access the knowledge base go to http://answers.uisninois.edu
Throughout FY15, AITS made significant progress toward targeted strategic initiatives, while maintaining past levels of system availability, project performance, and support.

**FY15 highlights**

A major update of the reporting and data analysis suite was made available to the University. Over 3000 individuals use the SAP Business Objects set of tools and reports to complete their daily business and academic operations. New functionality with the upgrade included: much improved usability, look, and feel; tabbed menus for easier document navigation; a more useful home page showing recent and unread documents; ability to pin frequently opened documents; and a dynamic search function. The upgrade also required our user base to convert their own reports from the Deski format to the new Webi format bringing new functionality to their existing reports.

Faculty gained improved access to grant information in FY15 with the release of the myResearch (PI) Portal. This system integrates and provides access to administrative and financial grant information for principle investigators and business managers. This release was the first of many in a project designed to minimize the administrative burdens of managing faculty research and increasing the productivity and value of the University’s portfolio.

Led efforts to improve customer service and reduce total cost. These business process improvement efforts included such things as helping:

- UIC Human Resources improve the efficiency and accuracy of new hire appointment processing
- University of Illinois Hospital and Health Sciences System create a consistently exceptional, patient-centered experience across the care continuum
- UIUC Illinois Master of Science in Finance and Master of Science in Technology Management Programs streamline the annual application review process
- UIC College of Dentistry reduce patient accounts receivable by increasing the accuracy of claims submissions and collections
- UIUC Department of Business Administration improve the quality, accuracy, and transparency of the non-personnel expense tracking process

Services to students and faculty were improved with the addition of two new Banner XE modules. The Events Management module allows for easy sign-up, communication and check-in for events, and eliminates the tracking and manual intervention for signing students up for events like Daily Visits, Preview Days, Orientation, and Convocation. The Student Advising Profile module is available to students and advisors. It brings together registration time tickets, holds, academic and registration information into one profile.

High availability for the systems critical to University business processes continued throughout FY15. Availability excluding planned outages for Banner and related applications was 99.98%, meaning that unplanned unavailability of these systems was less than 2 hours this year.
OUR STRATEGY

Planning is a continual and integral function at AITS. AITS utilizes the strategies and plans of campus and University Administration customers as well as trends in new and emerging technologies to guide the development of unit strategies and priorities for defining work. IT governance groups select and prioritize project work for AITS as well as target business processes for improvement through information technology services. Using this guidance from customers, AITS develops strategic and operational plans to meet the administrative IT needs of faculty, students, and staff at the University.

The AITS Strategic Plan outlines the information technology strategies and initiatives of AITS. It is designed to be a three-year IT plan that evolves with collaborative input alongside other strategic plans throughout the University. The planning process that produced this document relied on the University of Illinois IT Strategic Planning Process Framework developed in FY12 as a primary input to planning.

The plan has been developed to outline the pursuit of goals and initiatives that support the strategic directions of saving time, fostering ease of use, improving the speed of delivery of IT services, delivering targeted and pervasive information for users, and collaborating throughout the University. Many of the goals rely on collaboration with units throughout the University.

In pursuing these strategic directions, AITS developed and managed to a set of specific initiatives. For a complete accounting of these initiatives and our progress against them, please see the The AITS Strategic Plan page on the AITS web site.

**strategic directions**

**Save time:** Improve and add services that increase productivity for faculty, students, and staff.

**Improve ease of use:** Improve the usability of AITS services.

**Improve speed to service:** Improve the time to delivery of AITS services.

**Deliver targeted and pervasive information:** Provide for strategic, widespread use of our data.

**Collaborate:** Build and strengthen relationship throughout the University based on mutual trust.

**Progress toward FY13-15 strategic goals and initiatives**

- **94** ACHIEVED
- **60** ON TRACK
- **28** DEFERRED
- **1** OFF TRACK
- **3** CRITICAL
MORE INFO

https://www.aits.uillinois.edu/
AITS web site for strategic plan, budget reviews, AITS services, and help resources.

https://www.uillinois.edu/cio
UA CIO web site for business process improvement, governance information (including ITPC), records and information management, and portfolio and project management.

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