UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN • CHICAGO • SPRINGFIELD

Administrative Information Technology Services

AITS Annual Progress Report

FY2008

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Note to the reader

This is the first annual progress report for the University Office of Administrative Information Technology Services (AITS). The document is intended to provide the University of Illinois with information about the role of AITS, the AITS planning process and our progress reaching University goals. Our objective is to publish an informative and relevant document that fosters a collaborative discussion about administrative information technology services throughout the University.

AITS would like to recognize all of the partners and customers throughout the Office of Planning and Administration, University Administration and the four campuses that helped create the content for this document. Our collaborative relationships help us to understand the client's needs and produce the best services possible.

This report focuses on the people of AITS, as well as the progress and planning activities that took place in FY08 (July 1, 2007 to June 30, 2008). Since this is a new document, feedback is an important part of improving the report. If you have suggestions or corrections, please contact Michael Hites at 217 244 4522 or hites@uillinois.edu.

Introduction

The University Office of Administrative Information Technology Services (AITS) provides support for departments throughout University Administration (UA) and the four campuses of the University of Illinois. The University of Illinois has a wide range of departments outside of AITS that provide IT services in support of business operations. To varying degrees, AITS partners with these departments to provide and maintain applications supporting the administrative technology needs of the University.

Each day, hundreds of customer requests for assistance get resolved. Tens of thousands of production jobs are scheduled and executed– on time and accurately. Vendor-supported and locally-written applications, operating systems and the computing environment are kept current and secured. Systems and databases are monitored, tuned and serviced. Valuable disk storage space gets allocated among competing demands. Firewalls successfully keep out intruders, and hundreds of thousands of files are backed up every night to secure the University's information assets.

AITS staff work daily with our key departmental partners and end-users in the analysis, design, development and testing of new applications and enhancements to existing applications, all of which support the business processes of the University. AITS supports and maintains over 160 applications and approximately 1,000 operational reports. AITS and its partner organizations completed 40 new ITPC projects (9 more than last year) and 404 work requests (projects with less than 80 hours of effort). In addition, AITS supports both the server and the workstation environments for many UA and campus units. Desktop computers are upgraded and updated, software distributed, operating systems are kept current, anti-virus and anti-spam capabilities are deployed and make our work more efficient and enjoyable.

Each of these critical tasks requires effort and close attention to detail. Careful engineering, planning and execution by the AITS staff guide these important operations every day. The success of AITS is directly attributable to our collaborative relationships and to the efforts of a talented, dedicated, well-trained and highly focused team working consistently with the best of intentions and interests of the University of Illinois in mind.

In FY08, AITS experienced significant changes in administration and governance / leadership. AITS now reports through Dr. Doug Vinzant, Senior Associate Vice President Planning & Administration, and we have a new Associate Vice President, Dr. Michael Hites, leading AITS. While many significant accomplishments have been made in FY08, we believe that they set the stage for our activities in FY09.

Mission

AITS revisited its mission, vision and values to verify that they still were effective in charting our direction and communicating our purpose. AITS uses the mission and vision statements of its parent organization, Planning and Administration (PA). The statements of mission, vision and values describe our purpose and guide our services to the University community.

Mission statement: To be a source of competitive advantage and value for the University of Illinois by providing a wide range of information solutions and services to the University's campuses, operating units, and external stakeholders.

Vision

We will be recognized and actively sought out as a strategic partner for the University of Illinois' campuses, operating units, and external stakeholders by providing a wide range of information solutions and services that are accessible, timely, accurate, and responsive to customer needs. Our diverse units will collaborate with each other, the campuses, other operating units, and external stakeholders to proactively identify opportunities and threats, mitigate risks, plan future initiatives, and solve problems. We will be known for our integrity and unyielding dedication to customer service.

Values

AITS incorporates all of the PA values and has added two additional value statements that relate to innovation and leadership. Everything we do will be driven by a focus on results and the following values:

People – People are our most important asset. We will recruit, develop, and retain highly skilled staff at all levels in our organization through a wide variety of professional development activities and opportunities. In everything we do, we strive to reinforce the value we place on people in our organization.

Information – Information in all its forms is our currency and the source of underlying value we provide to the University. We view it as an asset to be verified, analyzed, disseminated, and protected appropriately. Information is built on a foundation of data but also includes context, interpretation, and focus. At its foundation, true information is organized around human roles, responsibilities and needs, not management of technology systems.

Customer Satisfaction – We strive to provide the highest level of service possible to our customers based on their needs and our capabilities.

Continuous Improvement – We demonstrate a continual effort to improve job-related knowledge, skills, and performance through both formal training and individual study with the overall intent of enhancing service to our customers. We identify and share lessons learned from both our successes and failures.   We proactively seek and identify ways to improve personal and team performance.

Integrity – We are forthcoming, truthful, ethical, and sincere in our words and actions. We keep our promises.

Accountability – We take responsibility for our individual works as well as the management and stewardship of the University information resources and other assets entrusted to our care.

Transparency with Security – We will provide appropriate levels of both transparency and security in our activities. We recognize that these forces can be competing and we commit to balancing them when necessary. We will continually look for ways to enhance both, challenging old standards and common practices.

Safety – We will create and sustain a safe environment. This includes safety with regard to our stewardship of information and traditional elements of personal safety, as well as the ability to express ideas in a professional and appropriate manner, and in an environment of inclusivity.

Stewardship – We consider both the long-term well-being of the University and the short-term imperatives facing it in the decisions we make, the actions we take, and the advice we offer to other leaders across the University.

Leadership – We anticipate customer needs, provide innovative, cost-effective and sustainable solutions, and deliver reliable systems and infrastructure.

Innovation – We reward innovation and creativity and support continuous learning through training and collaboration. We aspire to be an information technology leader and provide best practice technology solutions and services, balancing the critical need for operational stability with innovation and risk taking.

Status of Strategic Goals

In 2006, AITS created many strategic goals. These goals are summarized below and are based on previous AITS planning exercises. These goals help form the basis for our department and individual IT service goals. Included with the goals are examples of progress related to the goals.

1. Identify opportunities to implement best practices to ensure high value, cost effective administrative IT solutions for our customers

    - ITIL Service Management Essentials, v3 Foundation, and Service Desk, Incident and Problem Management training
    - Foundation level certification achieved by 16 AITS employees
    - OLA agreement and process improvement
    - ITIL Service Catalog Created
    - Service Desk participation in national HDI customer satisfaction survey since April 2007
    - Coordination of the CMMI effort underway
    - UIUC, AITS & CITES data center study
    - Continued UA IT consolidation
    - Unicenter Help Desk tool purchased (for incident, problem and change management workflow)
    - CA Configuration Management Data Base (CMDB) purchased

2. Develop and expand our administrative IT system infrastructure to improve administrative business functions and facilitate access to enterprise data for our departmental partners.

    - Established and continued development of Integration Competency Center (ICC)
    - Developed EAS Web Service and produced an EAS Web Service guide for customers

3. Improve service delivery capabilities, enhance service delivery management, implement improved metrics to demonstrate results and promote organizational transparency, and create new and effective forums for customer communication.

    - Creation of Portfolio Management Office (PMO)
    - Developed standard java application development model
    - Documentation, standards, frameworks, and process improvements
    - Performance tuning
    - Established application vulnerability scan procedures
    - Training of AITS & non-AITS staff to better research & communicate about person identity issues
    - Software Engineering Process Group and Portfolio Management Office co-created the Software Development/Project Management Life Cycle process documentation
    - AITS will train, pilot and roll out the SD/PMLC to the organization
    - Clarity implementation expanded to 400+ users in seven UI organizations (AITS, BIS, HRIS, DS, iCard, Global Campus, Facilities & Services)
    - Oracle back-up file system moved to less expensive disk technology, allowing redistribution of disk
    - New technologies/processes to modify how the reporting copy of Banner is created and ensuring the reporting copy is available at the beginning of the business day
    - EAI Client meeting
    - Customer satisfaction surveys in use or in development for work requests, production support, ITPC projects, deployment, and Service Desk.

4. Leverage talent and develop pools of synergy in order to increase workplace productivity and enhance its ability to deliver high quality solutions to address the administrative computing needs of the University of Illinois.

   - 99+% of performance appraisals/development plans completed (FY07)
   - Participating in the PA performance appraisal process at the conclusion of FY08
   - 18 searches conducted
   - Piloted management development program across the organization
   - Recommended managers for participation in Frye and Harvard Leadership Development programs.

Throughout the past year, AITS has collaborated with partners throughout the University to accomplish many significant projects, for example:

- History Makers go live
- HR Front End development and testing
- Global Campus implementation and subsequent projects
- EAS 2.0
- ICCN Network completion

- Proof Point implementation
- AppScan implementation
- Rapid shutdown procedure testing
- Student document imaging
- Business Continuance update and annual test

- Intrusion protection pilot
- Bomgar Box deployment
- OBFS eProcurement
- CAS Server consolidation for State of Illinois
- Web vulnerability scanning

Additionally, AITS teams have worked very closely with our departmental partners on many significant upgrades that are in progress or completed, including:

- AppWorx
- Banner 8 beta testing
- Banner 8 upgrade analysis
- Banner financial aid (ongoing)
- Banner Finance Release 7.3
- Banner Java Plug In (JPI)
- BXS 5.3
- Business Objects XI
- CAS v4.0 and Beta Testing

- DARwin
- Domino
- Enterprise messaging brokers to SonicMO 7.5
- ERWin
- FAMIS/FCPWeb
- InfoEd
- jInitiator decommissioning
- jPoint cashier software upgrade

- Microsoft Office 2007
- Oracle 10g
- RightFax
- SiteScope
- Solaris 10
- Storage arrays and DVRs
- Veritas VM
- WhatsUp
- Workflow
- ViewDirect for Networks 4.2

Finally, AITS supports many systems and applications at the University of Illinois. The level of support varies depending on the application and the relationship between our departmental and vendor partners, and the services include:

- AdAstra
- ALAS
- Altiris
- Apply Yourself
- AppScan
- Appworx
- Attribute Maintenance
- Axiom/OCR for Anydoc
- Banner Forms

- Banner Self Service
- Banner Xtender Systems
- Benefits Pended
- BOMGAR
- Business Objects
- Campus Recreation
- CAPS
- CAS
- Change Control

- Charities
- Citrix
- Clarity
- Codebook
- Collections Application
- Contract Documents System (CDS)
- Contractor Annual Prequalification

- Cross Foapal
- CVS (Concurrent Versions System)
- DARS
- DARWin
- Data Beacon
- Desire2Learn
- Drupal
- EAS (Enterprise Authorization System)
- Elluminate
- Evisions
- FABWeb
- Famis
- FCPWeb
- Fringe Benefit Assessment
- Fringe Benefit Encumbrance
- Grant Loader
- History Makers
- HR Pay Adjustment Authorization
- HR Pay Mass Change
- IBM Lotus Domino
- iBuy
- Infinet (UI-Pay)
- InfoEd
- Informatica
- Involuntary Deduction
- ITD Processes
- LDI (Luminis Data Interchange)
- Load Runner
- Luminis Portal
- MAP Calculation Application
- MediEase
- Microsoft Exchange
- Microsoft SQL Server
- Nelnet
- Oracle
- Oracle Streams
- Parameter Editor
- Payroll Accruals
- P-Card
- PEAR (Protected Email Attachment Repository)
- Pending Degree List
- PHD/COS (payroll History Database/Change of Status)
- PITR (Personnel Information Transmission Report)
- PMUTracker
- PNP (Proficiency and Placement)
- PRMS (Personnel Registry Mgt System)
- PRZM
- Quick Test Pro
- REPTPROD
- Retro Pay
- RightFax
- Runner Address Verification
- SACS (State Appropriation Control System)
- Salary Planner
- SalePoint
- SAS
- SciQuest eProcurement
- Security Application
- SharePoint
- SiteScope
- SonicMQ
- State offset
- State Rule Code
- State Salary Encumbrance
- SunGard Workflow
- TBC/TCE (Test Based Credit/Transfer Credit Extract)
- Test Score Loader
- Time Ticketing
- Tomcat
- Tuition Waiver
- Tuition Waiver Eligibility
- Undergrad Guaranteed Tuition
- Unicenter Service Desk
- Unimon
- uPortal
- Upside
- Urchin
- ViewDirect
- Work Study
- Workflow

FY 08 Project Progress

HR Front End

The multiyear HR Front End project work continues and is on schedule for implementation in January 2009. Prior to implementation, the HR Front End application requires a thorough testing process to ensure the application delivered is as specified by the requirements.   The testing scripts have been fully developed and the testing process by the campuses is currently in progress. Once the user testing is complete, the existing list of defects remaining will be prioritized and worked with the campuses to retest to close the defects.

Global Campus

AITS assisted with the implementation of Global Campus, which went live on December 9, 2007. The work was guided by the goals of the Global Campus and was completed through a partnership between Global Campus staff, the vendors that supplied the technology tools and AITS. The Global Campus technology platform is comprised of both vendor-hosted and AITS-hosted solutions including integrations with the vendor-hosted products. The principle products in the current Global Campus technology platform include:

- Global Campus website
- Luminis Portal
- Registration Front End application
- Desire2Learn
- Elluminate
- Enterprise Authentication Services (EAS)
- Nelnet Banner toolkit

Support for the technology platform products is distributed among the Global Campus technology staff, AITS and the product vendors.

Previous work completed in September of 2007 for this event included the segregation of the Banner Web Tailor data to allow for the creation of the Global Campus Admissions module in Banner.

Some of the new technologies introduced with this project include the use of Oracle Real Application Cluster database, high availability for many of the GC applications, and the use of Oracle Streams.

From January through June of 2008, AITS work for Global Campus Online University continued, building on the work done during the first phase. Projects include: enhancements to solutions implemented during phase 1, such as the interface to Elluminate and the Registration Front End; further integration of GC and Traditional Campus processes, such as the Financial Aid reporting project; and projects that were deemed lower priority for the initial launch, such as Registration Front End and Financial Aid Interfaces project. Since January 2008, 2 projects have been completed and 13 projects are in progress as of June 30, 2008.

Banner 8.0 upgrade

AITS, along with the assistance of other campus units, participated in the Banner Beta 8 upgrade and testing project in conjunction with SunGard running from January through March of 2008. This allowed the University of Illinois to get an early look at this major upgrade along with some of the highlights which included a major database conversion to the Unicode multi-character set, an Oracle version upgrade, and additional new functionality in much of the Banner product suite. This also allowed us to identify both functional and technical issues associated with the new release of Banner and to offer critical feedback to the vendor to address these issues prior to the general Banner 8 release being made available to all clients.

Efforts are currently underway working on the Banner 8 Analysis project. Because Banner 8.0 is a major release of Banner with considerable new and enhanced functionality that spans all Banner modules, it is necessary to conduct a thorough analysis of the product to determine the effort, resource requirements, and the approach that will be involved in the actual upgrade to the new release. A complete Banner 8 environment has been setup and testing is underway of the new software release, including testing of the initial release of all of the contracted SunGard modifications to the Banner system. The results of this effort will be used to create a template outlining the requirements for the Banner 8 upgrade project, which is tentatively scheduled to begin in late 2008 and conclude in mid to late 2009. AITS is currently working with representatives from student, finance, and HR/payroll from all four campuses to determine an implementation date for Banner 8.X; this date should be finalized by August 18, 2008. If the negotiated implementation date is earlier than August 1, 2009, Banner 8.0 will be implemented. If the implementation date is August 1, 2009 or later, Banner 8.1 may be implemented.

Information Technology Priorities Committee (ITPC) Project Work

The ITPC Process was formally reviewed this year to determine if changes or enhancements would be necessary to the existing process. The results of the review produced 9 formal findings and recommendations that are in the process of being implemented into the program for next year. The recommendations included revision of charter and scope, providing greater guidance on strategic elements, development of a cross functional prioritization process for functional areas; use of subcommittees to help with management of the queue; the charge of the subcommittee to facilitate cross campus development of templates; conducting face to face meetings to review accomplishments and benefits; the conduct of post project surveys related to project performance (success); development of a communication plan to address question s raised in the review; and to seek AAMT input and approval on these recommendations. ITPC activities for FY08 include the completion of 40 projects (9 greater than in the previous year) with an additional 29 in process at year end. The average project required 2,699 hours of work with an average of 450 days to completion (from submission to completion). During FY08, $1.5M recurring was provided to fund this work, $231K was used for mandatory projects and $1.27M for discretionary project work. AITS used 23.4 base FTE and an additional 17.6 consultant / backfill AITS employees for this work. Additional information and details may be found in the full FY08 ITPC Annual Report.

BXS 5.3 Upgrade

Upgrade of the BXS Application to version 5.3 which included an upgrade of the Documentum software as well as a move to newer more stable hardware and support for redundant load balancing. This release included numerous security fixes as well as needed functional, technical and performance improvements.

Axiom Implementation

The go live of the Axiom/Anydoc Application and interface to Banner was successful. The Axiom/AnyDoc application interface to Banner provided successful support for the Student Services Document Imaging Initiative in response to an expressed need to strengthen University student administrative systems, enhance the efficiency and effectiveness of service to new and continuing students, and reduce the large volume of paper documents processed between and among campus units.

This initiative provides optical character recognition for the University as an automated way to manage student applications in an exclusive on-line venue, creating an electronic environment that facilitates common formats resulting in savings in cost and efficiency while at the same time providing expeditious service with appropriate document security and storage.

Banner Upgrades

Three regulatory Financial Aid upgrade were implemented to the Banner system as well as an upgrade to Banner Finance version 7.3.

Java Plug In for Banner

The need for the JInitiator client software to connect to the Banner Administrative Forms was eliminated by the implementation of the Java Plug In. In conjunction, two large patch set upgrades were also applied to the Oracle Application Servers which allowed for increased support of the Banner Application for use with Internet Explorer 7 and the Microsoft Vista operating system as well as a decrease in overall user support tickets for Banner connectivity issues.

Bomgar Implementation

A remote desktop assistance tool was researched, selected and implemented. The Bomgar tool was implemented to improve AITS customer service to remote distributed clients to more efficiently assist with resolving customer issues. This tool also provides the ability to do presentations across different locations.

History Makers

AITS, in partnership with the department of Library and Information Sciences and various campus organizations, implemented the HistoryMakers project across the three campuses of the University of Illinois. This project focuses on the preservation of African American history through the presentation of

thousands of oral and video recordings of influential African Americans. As the IT partner in this pilot project, AITS focused on determining the best way to implement the Informedia Digital Video Library retrieval system (IDVL) developed by Carnegie Mellon University which is used as the electronic delivery and catalog system for the recordings. AITS was instrumental in redesigning the implementation architecture to allow the client to be installed on over 900 machines across the campuses so that they can all utilize a single central media repository. The IDVL client was incorporated in numerous History and African American Studies courses across the University.

Enterprise Application Service (EAS) 2.0

Enterprise Application Service (EAS) was enhanced significantly. The enhancements provided the ability for users to change or reset their Enterprise passwords from the login screen. Users were notified via email when a password has been changed or reset. The enhancements also included extra security for Global Campus students by requiring students to answer security questions they established for verification of identity prior to resetting their password if it is forgotten.

uPortal

The University of Illinois initiated a project to implement a University-wide Portal using uPortal. This project is being coordinated by CITES, with support from AITS and IT organizations from each campus. AITS provides support of the uPortal database and servers. AITS developed a solution to supply real-time Banner data for the student course list portlet. We will continue to work with CITES to supply real-time Banner data and help them identify where real-time Banner data could be used.

Miscellaneous Upgrades

Numerous required application or hardware upgrades were completed for but not limited to PCard, AdAstra, InfoEd, Altiris, Workflow, and View Direct.

Web Content Management Project (WCMS)

AITS is working with various UA departments (OBFS, Planning and Budgeting, Decision Support, University Relations, HRIS, and VPTED) to implement a centralized multi-site Web Content Management System (WCMS). This system will allow for an efficient management of various internet web sites with thousands of pages, multiple content types, varied audiences, and numerous content owners. A successful WCMS will provide the tools to automate much of the process—including content input, organization, storage, coordination, review, and publishing—in a timely fashion using a consistent method and format. Such system will remove most of the day-to-day burden of site content management from IT staff and empower functional content owners, fostering a greater sense of ownership and buy-in. The WCMS will also facilitate more rapid and concurrent creation and management of content-centric sites.

Actional for Service Oriented Architecture (SOA) Operations

Actional is a monitoring software that provides end-to-end visibility across the entire EAI infrastructure. This software will accelerate problem resolution and mitigate the risk of the increased usage of the infrastructure. The EAI infrastructure provides critical services for managing communication among the enterprise applications across the three campuses. It facilitates authentication to Banner and related systems, handles interaction with the iBuy system, supports NESSIE, services Global Campus applications, and provides other critical services such as the support of critical administrative processes. The unique feature about Actional is its Flow Mapping technology, which relates business process execution to the underlying SOA IT activity without manual modeling. This technology captures service levels, process metrics like admission, and key business indicators and presents them for simultaneous viewing and analysis.

Enterprise Architecture Committee (EAC)

Established the AITS Enterprise Architecture Committee. This committee's role is to assist in the development, articulation and adoption of the IT Enterprise Architecture framework and processes. The purpose of the architecture framework is to direct or guide architecture initiatives, ensure that organizational performance aligns with the strategic intent of the business, ensure IT resources are engaged to reflect priorities and architecture-related risks are managed appropriately. As the committee reviews and recommends architectural changes it will consider the role of Administrative IT at the university. The Administrative IT role is to enable the implementation of the University's mission, goals, objectives and strategies.

Committee Chair
• Interim co-chairs - Amin Kassem and Scott Harden

Committee Members:
• Nyle Bolliger
• Jeff Heckel
• Brian Schoudel
• Tod Jackson
• Marla McKinney
• Chris Barton
• Troye Kauffman
• Marty McLain
• Alice Jones
• Linda Fletcher
• Nick Riordan

Vulnerability Scans for Web Applications

AITS implemented a tool ("Watchfire") to scan purchased applications for security vulnerabilities. Several issues have been identified, and have been corrected by implementing server configuration changes or by working with the vendors to resolve the issues.

Incident Management, Notification and Forensic Procedures

AITS serves as a primary resource for resolving security incidents in the business information environment. Some operational procedures have been implemented which address issues with workstations compromised by viruses and/or are determined to be the source of anomalous network traffic. Procedures are being developed to provide guidelines to staff in order to meet legal and HR-related requirements. A UA procedure for reporting incidents by end users has been developed and published.

RFP /Contract Preparation and Review

AITS staff have served on several projects with other Planning and Administration units to prepare and evaluate RFPs (Request For Proposals). There is also a project currently underway by the Architecture committee to create standard technical and security sections for writers of RFPs to include in their document and to modify as needed.

UA Acceptable Use Policy

AITS implemented processes to support the UA Acceptable Use Policy to help ensure only approved users have the ability to remotely connect to University resources.

Unit Security Contact (USC) User Access Reports

AITS Security Administration published the following User Access reports in ViewDirect.
- The USC Summary report
- The USC Finance access report
- The USC HR/Payroll access report
- The USC Student access report

These reports provide all USCs a good foundation of the Banner access granted to users in the USC departments/units including access to Social Security Numbers (SSN). USCs can use the reports to periodically verify Banner access granted to users is appropriate and approved. In the future, AITS Security Administration will work with Decision Support to combine our reports to assist the USCs. Additionally, a View Direct User Access report will be created.

Work with Vendors to Improve Their Products

AITS makes extensive use of vended products, the most significant being SunGard Banner. AITS, in conjunction with user departments, actively works with all these vendors in an effort to insure they continue to make enhancements to meet the University's needs. Examples of such efforts include:

- Design of the new Banner Enrollment Management System
- Design of the Multi Year Encumbrances, Labor Distribution and Effort Reporting functionality that will be included in one or more Banner 8.x releases
- Design of the Financial Aid Electronic Award letter enhancement
- Design of the security enhancements that are being implemented with Banner 8
- Membership on the Ad Astra advisory board to provide guidance on product improvement and direction
- Leadership role on the Banner Large School Consortium that provides guidance for product enhancements of interest to large schools
- Membership on the SunGard Pillar committee which is a forum for CIOs to provide input and guidance to SunGard on product direction
- Participation in Banner 8 beta testing
- Participated in beta test of the RedLantern (formerly DARS) course applicability system (CAS) version 4.0.

Participation in the Higher Education IT Community

AITS encourages staff members to actively participate in vendor and industry activities that enable us to describe the important projects we are performing and to share knowledge and insight we've gained with others. Examples of this include:

- A total of seven presentations were made by four individuals at the SunGard Summit Conference. Summit is the major conference for users of Banner. The presentation topics included:
  - Data base conversion techniques for Banner 8
  - Managing Banner data base performance (2 unique presentations)
  - Use of Banner's document imaging technology in a shared environment
  - Implementing Complex Minimum Wage Increases
  - Use of the Banner Common Matching functionality
  - Use of Postal Quality Software with Banner
  - Panel member at a Gartner conference on our use of the Sonic messing system
  - Participant in the CIC applications directors' group
  - Participant in the CIC Administrative Information Systems Directors/Deputy CIOs group
  - Participants in many conferences and organizations such as Educause, SCUP, PESC, IMS and JA-Sig

Awards

The University of Illinois was awarded a $50,000 Mellon Award for Technology Collaboration (MATC) for the contributions made by AITS to the OpenEAI Project. The mission of the Andrew W. Mellon Foundation's Program in Research in Information Technology is to encourage collaborative, open source

software development within traditional Mellon constituencies. The MATC program recognizes not-for-profit organizations that are making substantial contributions of their own resources toward the development of open source software and the fostering of collaborative communities to sustain open source development.

The University will use the award to establish graduate fellowships for qualified students in appropriate programs to work for one year in the AITS Integration Competency Center (ICC). The students will be assigned to integration projects with the ICC team.

Key Metrics

AITS has been establishing and collecting baseline metrics during FY08 in order to better measure the effects to trend performance and validate intended improvement as we implement our strategic initiatives.

A sampling of high level metrics or measurement includes:

- Banner accounts login statistics
- Banner modifications in test, in production, retired
- Banner patches in test, in production, retired
- Banner self service availability
- Change control number, rate, severity, status, by system, and success
- Clarify (trouble ticket) ticket statistics, average time to respond, closure, aging, severity.
- Daily number of terminated Banner sessions and number of users
- Equipment age, workstation, laptop, server, disk, switches, etc.
- Financial budget to actual performance
- Firewall alerts and associated statistics
- Global Campus availability
- ITPC projects; start and finish status, overall project status, budget status, schedule status, &barrier status.
- Proof point (anti spam) statistics of rejected or restricted email.
- Server demographics for 561 physical servers and 81 virtual servers
- Server operational reports (risk status)
- Critical server uptime (and corresponding outage time)
- Service Desk statistics, time to answer, abandon rate, call length, average wait time, customer satisfaction
- Actual staffing to staffing authorization
- Tipping Point intrusion detection top 10 attacks, sources, and severity.
- Unplanned unavailability of system services by system
- AppScan web application scanning statistic / severity

Figure 1 describes the availability of Banner Self Service. The percentages are obtained through monitoring software by Sitescope that mimics the user experience through the self-service product. Although uptime statistics can be produced for any component within the service (e.g. server, operating system, web application), AITS measures availability based on the user experience.

Similar to Figure 1, Figure 2 measures the availability of the Global Campus services. Because the GC services require a different service level than other administrative applications, AITS measures these separately.
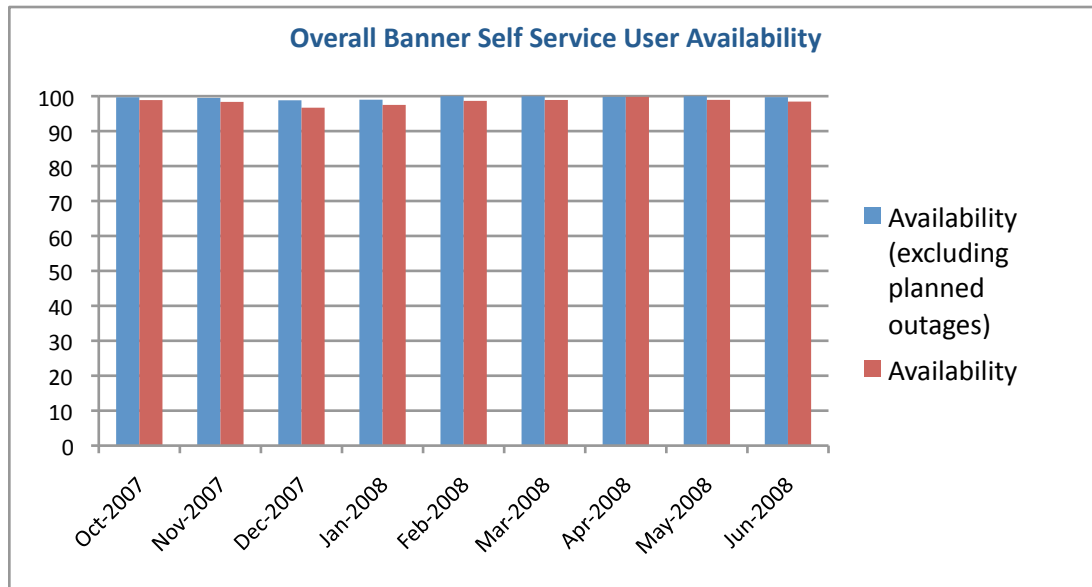
Figure 1 - Banner Services Overall Availability

Overall Banner Self Service User Availability

Figure 2 - Global Campus Services Overall Availability

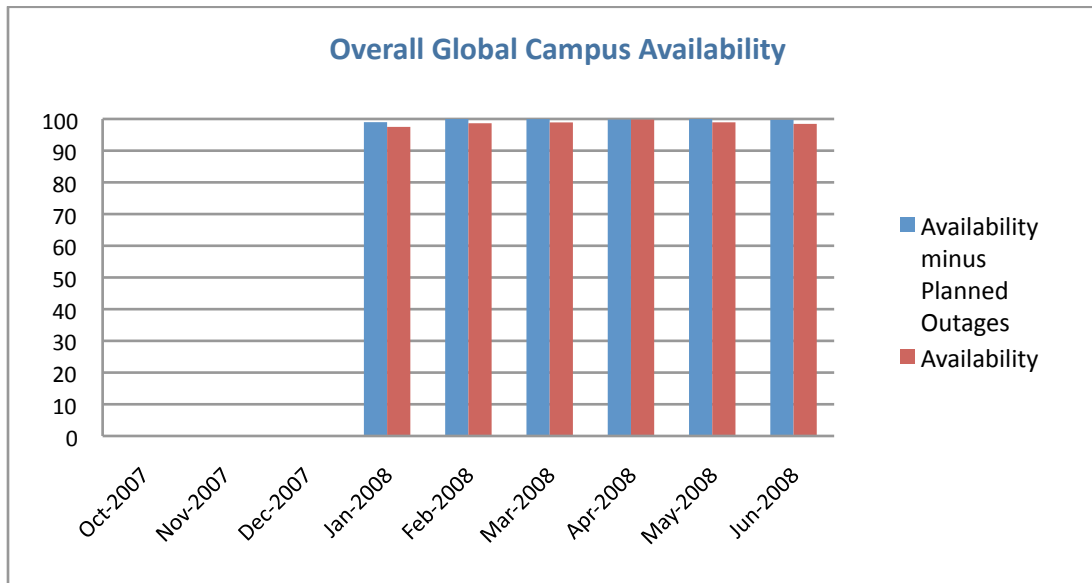**Overall Global Campus Availability**

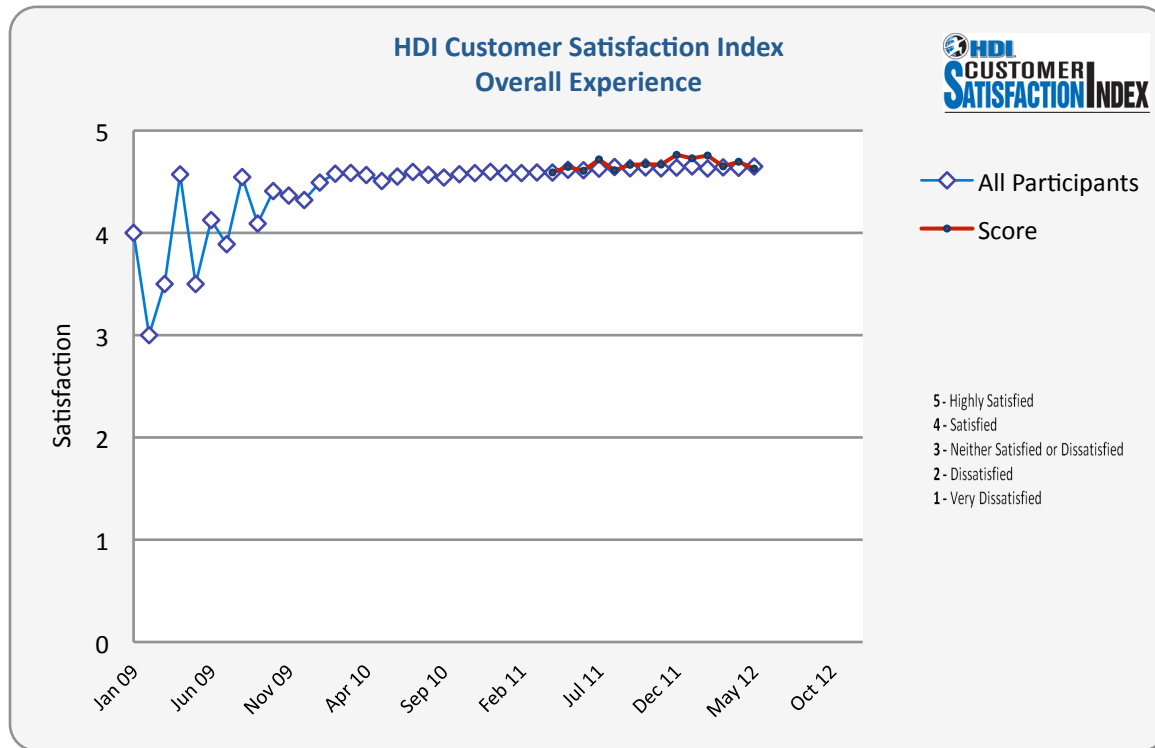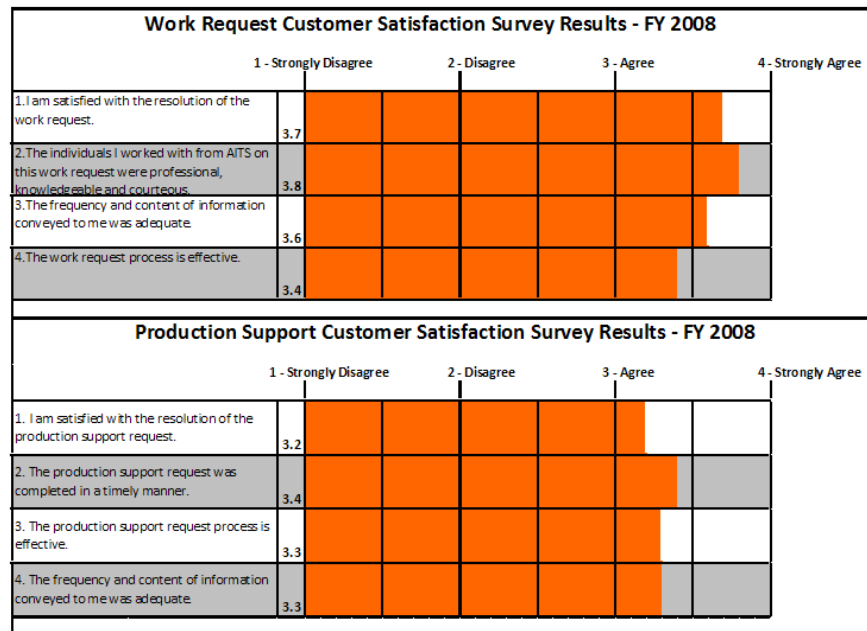Figure 3 - Customer Satisfaction Index

Figure 4 – Work Request Satisfaction

Figures 3 and 4 describe the overall satisfaction with our response to help desk questions and service requests.

AITS 100-Day Review and FY09 Strategy Preparations – by Michael Hites

"Campuses Initiate, University Administration Facilitates"

This section is the next step of completing the strategic planning process within AITS. The following is written informally and sometimes in the first person. This is not typical business writing, but I believe it is effective for this document since many of the views are personal and have not been fully vetted with all AITS employees.

I have heard the quote above several times since arriving at the University of Illinois. Although the quote in not mine, I believe that it accurately describes the role of administration at the University. If you read through the strategic planning documents for the University of Illinois, it is evident that the leadership of each campus is trying to identify areas of strength to make the campuses better, which simultaneous makes the University of Illinois system better. Our job in AITS is to assist in the implementation of the planning process by implementing administrative information technology services that meet the operational business needs of the University.

This section represents a summary of step two in a three-step process. The first involved the Associate Vice President (me) learning about the AITS organization. The second was a review of the constituent needs through personal meetings with leadership and management throughout the University. The third will be to work directly with AITS employees and our departmental partners to review, discuss, develop and complete the action items within this document.

There are many ways to approach strategic planning. Some methods involve large-scale collaboration like an annual conference or a retreat while others are more hierarchical with specific strategy coming from executive leadership. For this year, the strategies described here are more like generalized action items generated through discussions with AITS employees and our customers over the past 100 days. I expect that this process will be different next year, but I think this is a good way to continue the discussion.

The Original AVP Job Description

The job description for the Associate Vice President for AITS described the basic function: "The Associate Vice-President for Administrative Information Technology Services (AITS) will provide the leadership, vision, strategy, overall management and accountability for enterprise-wide administrative information technology services for the University of Illinois' three campuses. As a strategic leader, the Associate Vice-President will direct and manage the AITS units and ensure that the infrastructure and applications provide an environment that is responsive to customer needs. The position is strongly focused on ensuring a high quality, transparent, and customer service oriented AITS organization." This seems to be consistent with the past 100 days.

In addition to the position description, there was a list of goals for the first 12-18 months, namely the AVP will be expected to:

- Develop and gain approval on a strategic plan and vision for AITS that will be consistent with the organization's goals and objectives.
- Become fully integrated into the management team and be perceived as a solid team player who has credibility and integrity. Will be a regular contributor to the discussions at management meetings.
- Maximize systems' capabilities and develop a very service oriented team.
- Evaluate all direct reports and made any necessary changes in staff, establishing a stable organization that is supportive of staff and offers career growth and development opportunities to aid in retention.

Since this was the first set of goals given, they are important to finish by the end of FY09 (June 30, 2009).

Information Management

According to Wikipedia, "Information Management is the collection and management of information from one or more sources and the distribution of that information to one or more audiences. This sometimes involves those who have a stake in, or a right to that information. Management means the organization of and control over the structure, processing and delivery of information."

At the University of Illinois, four campuses (Urbana, Chicago, Springfield and Global) share many administrative systems and services, but the individual campuses also have their own systems and data sets. Furthermore, partnerships are sometimes formed between two or more departments or campuses to build or purchase information systems. This creates an environment where it may be confusing to identify the data custodians and what the roles are for the various departments throughout the data chain.

AITS is responsible for many administrative information technology services throughout the University. Not every administrative system at U of I is maintained by AITS, and AITS is rarely the data owner for the system. In reality, there are many departments that provide critical, authoritative data, which adds to the complexity of the information management. Because data used in campus-based systems and within other offices throughout University Administration typically touches a service maintained by AITS at some point in the data lifecycle, it is important that information management be a shared responsibility.

AITS has several responsibilities, and also shares many responsibilities, in managing information technology services. For many enterprise systems (usually defined as an authoritative system used by multiple campuses) AITS installs and maintains the infrastructure to run the service in a secure environment. For campus-based systems, AITS often provides data sets and connectivity to the core enterprise systems for departments to build localized services with enterprise data. In addition, other UA offices such as Decision Support, Human Resources Information Systems and the Office of Business and Financial Services, provide critically important information systems and services. The University of Illinois will continue to have many responsible offices throughout the University, and the information management structure must recognize this reality and be constructed around it.

AITS and Decision Support (DS) are jointly working with departments throughout U of Ito formalize the information management framework with the goal to *document the information infrastructure and work together to develop a process for meeting the needs of each constituent in using the information. The resulting document will be used to create the information management strategy. Finally, an architecture consisting for hardware, software, security and policies will be created based on the needs of the University.* There will be a collaborative, written plan to create and/or modify the security and process infrastructure to ensure that the University knows how to find and use its data and information. This architecture likely will be the basis for the next decade of work.

In the end, it must be easier to work with the data needed to do your job. There needs to be alignment between AITS and its partners and constituents to make sure that 1) end users have the right tools to work efficiently and effectively, 2) information accuracy and security are a shared priority, 3) the number of authoritative data systems and applications remains small and 4) everyone throughout the University can get the help they need when they need it.

Equipment and Server Space

Server rooms require expensive infrastructure to ensure reliability maintain performance. At present, both AITS and CITES (Urbana campus central IT) have nearly reached capacity in their respective server rooms. The AITS Urbana server room is in the basement of HAB, and the production server room in Chicago is in RRB. Neither of the spaces is state of the art, and only RRB has room for growth. The exterior physical features of RRB have not been well maintained over the years, but the building is in a desirable area of the UIC campus. It is likely that over the next five years, both AITS and CITES will have reached capacity, and additionally, there will be a plan for somehow changing the appearance of the RRB area at the corner of Roosevelt and Halsted in Chicago. The demand for AITS to host servers from both Urbana and Chicago continues to increase. This means that AITS needs a long-term plan for physical space.

AITS will continue to partner with other IT organizations throughout the University to develop a 10-year plan for space management. Unless there is a sudden change in policy or priority, the Chicago campus will continue to host the production administrative systems and Urbana will house the development servers. AITS will continue to provide hosting services for administrative systems that do not have sufficient cooling, power or systems management capability.

People

People are the greatest asset of AITS. AITS has reviewed the leadership and management teams and has made modifications to improve these committees with the goal of increasing participation and collaboration. Also, AITS is making a conscious effort to improve the work environment in Urbana and Chicago.

The AITS employees are known throughout higher education as leaders in administrative computing. We are consistently known as "the largest university installation of our product" by several vendors. Additionally, U of I is a frequent reference for vendors and a respected presenter at national meetings.

Often, new procedures and solutions are known at as the "U of I method", and we have won awards for innovation, such as our work with Oracle, SunGard and OpenEAI. This leadership will continue into the future, and *we will make sure that our expertise is known throughout the University as well as throughout the country.*

AITS Progress Report

It is important to use data to measure performance. Action items are as important to strategy as metrics are to performance. Without strategy, we don't know what the best course of action is and without metrics we cannot ensure high performance. *AITS will publish an annual report to describe the current administrative information technology strategies and document our performance over the past year.* This document is important in our continuous discussion of future systems and services based on the needs of our constituents.

Supporting Research

Academic research is not in the realm of administrative computing, however there are two aspects of research administration that might need additional resources. First is the administration of research, from the proposal stage, to the accounting, and until the closeout of the grant. U of I needs better tools to ensure that researchers can spend less time with administration and more time with research. Second is the use of administrative data in research, for example in the medical field. At the UIC Medical Center, there is a tremendous quantity of patient information that is protected by privacy regulations (this is a good thing). Within the UIC medical colleges, there is a growing need to use clinical information in research. Although this is a specific example, it is similar to the generic administrative IT challenge, that is, how can you securely and reliably share information between an authoritative data source and the constituents that needs to use the data? *Within the scope of its mission, AITS should participate in enabling research at U of I.*

Supporting Teaching

Each of the campuses has an IT infrastructure to meet the needs of teaching and learning. The learning management systems and technology-based classrooms are managed by the campuses. In addition, the newest campus, the Global Campus, can be considered "disruptive innovation" at the University of Illinois (this is a good thing). It has a different teaching process and clientele than the other campuses, but it still needs to be integrated with the online learning that already takes place on each of the physical campuses. *AITS will help support the Global Campus, and each physical campus, as we create new administrative tools for teaching and learning.*

The Pappas Report and Other External Advice

More often than not, consultants get the advantage of entering and exiting an organization without the typical battle scars of long-term employment. They leave recommendations that some people believe and others do not. The Pappas report is no different. *AITS will extract the relevant items that will be addressed and provide a progress update on the items.*

The Pappas report, internal audit reports, customer satisfaction surveys and Gartner reports all help us to do our job, but they don't do the job for us. We need to continuously evaluate external advice and plan accordingly. *AITS will use internal and external studies to determine the best course of action and plan for the future.*

Login Credentials

First and foremost, AITS needs to understand what the university needs to do with authentication and authorization and then design the architecture around it. It is evident that there are too many credentials needed to access the University systems. The solution is not just a matter of picking one service, it is picking the right architecture for consolidation and/or synchronization and ensuring that there is a commitment to use it. *AITS will examine ID management and work towards a single, collaborative solution.*

Funding Administration

Administration is performing or managing the business operations of the organization. With about 100,000 customers, the enterprise IT services are an important component of administration at the University. While the academic mission of the university rests with the faculty, the administrative needs of the teaching, research, service and extension are the responsibility of every employee. The IT systems and services are spread throughout the University, but many of core services are managed by AITS. It is important for AITS to be a partner in meeting the strategic and operational needs of the administrative units throughout the University. These needs are increasing, which means that funding should increase as well; however, this is not always possible. *AITS will work to maximize current funding and seek additional funding as required by the documented needs.*

Vendor Interaction

Some vendors realize that it is more effective for them to sell products to the campuses rather than the University. While this makes sense for many products, it can be a detriment when the University overbuys or does not make the best use of collaboration as possible. Part of the purchasing process is the "10-point letter". The 10-point letter process helps to keep AITS involved in the purchasing aspect, but the 10 point letter usually occurs late in the process and may not allow for thoughtful collaboration. It is important not to add bureaucracy and extra delay to a campus project, but it is equally important to minimize IT expense and maximize benefit for the university. *AITS will continue to coordinate vendor relationship for administrative IT services that are used by multiple campuses and will continue to assist campuses that have unique vendor relationships.*

The Varied Opinions of Banner

This section could be used to describe what happened during the UI Integrate project and compare it to what is happening now. Regardless of the path that we took to get here, there are a few general statements that can be made about the present. The University of Illinois is the largest SunGard Banner university client. Just like each of us, Banner has strengths and weaknesses, and in some instances,

SunGard is not addressing the weaknesses as rapidly as the University expects. AITS will continue to enhance Banner, but in addition, we need to analyze each request to make sure that we are buying and building the best University systems. Furthermore, we should also feel comfortable making suggestions on policy changes that might have positive impact on overall University capability and productivity.

It is important not to simply upgrade Banner each time a new release is available. Each new release has additional functionality, and since the University has made several modifications to Banner over the years, it is important to investigate whether SunGard has made changes to the systems that can help us reduce the number and complexity of modifications while still improving functionality. *It is important to fully analyze upgrades with the constituents to ensure we are installing systems that result in a productivity increase. AITS will continue to use Banner as the core ERP product and work to maximize the current functionality and the future enhancement. AITS will thoughtfully modify the system to meet the strategic goals of the university and will collaborate with the administrative units to minimize modifications whenever possible.*

Commercialization of AITS Software

Some of the systems and services that AITS designs can be commercialized and sold to other universities. This is not the primary mission of AITS, but it is a reasonable outcome because high-quality products are developed. AITS will commercialize products where it makes sense for the University to do so. *AITS supports innovation and will follow university policy to provide opportunities for employees to participate in the commercialization process when possible.*

Strategy, Business Strategy and Information Technology

AITS is an enabler of university strategy, business strategy and operations. University strategy comes from the campus strategic plans, business strategy results from administrative offices creating business processes to support the university goals. *AITS helps makes sure that the systems and services are in place to support each of these planning processes.*

ITPC process

The recommendations and implementation plans for the ITPC are available at itpc.uillinois.edu. These recommendations foster improved collaboration between the student, finance and HR subcommittees and better management of the process. *AITS will lead the adoption of the ITPC process recommendations.*

AITS is not ITPC

Part of the work performed by AITS is reviewed and approved through the ITPC. At present the ITPC budget represents a contribution of $1.5M to the approximately $15M AITS budget. Part of ITPC's consideration is the "free" use of the AITS developers and other UA resources that are not paid for by the $1.5M, but are considered when discussing the priorities. *AITS will clearly distinguish ITPC work from other development work, namely maintenance and mandatory projects.*

AITS Influences Campus IT and Vice Versa

Each campus has its own CIO and its own needs.

The following are brief and incomplete comments on AITS' relationship with campus IT. The comments are meant to be a starting point and not an inclusive list.

Springfield Campus IT

Being a smaller campus, Springfield generally has less IT resources than Chicago or Urbana. There are AITS staff members at Urbana and at Chicago, but not at Springfield. Since there are UA employees at Springfield, there is a need for network, server and PC support at Springfield. *AITS will work with Springfield to increase efficiency of the support that AITS supplies.* Although each campus has processes that don't quite fit with Banner, Springfield seems to have the least amount of resources to work on these administrative IT issues. During discussions, members of the UIS faculty and administration specifically mentioned the student experience, prerequisite checking, better data for advising, abundance of paper forms, workflow, security, data warehousing, DARS, rogue FOAPALs, and course evaluation. *AITS will work with Springfield campus to better understand these challenges and the best people to address them.*

Chicago Medical Center IT

The medical center tends to have more regulation and compliance requirements than the purely academic enterprise, and the resulting IT services need more structure and security. This has some similarity to the AITS enterprise applications, and *AITS will continue to collaborate with the Medical Center on best practices such as ITIL.*

Chicago Campus IT

The Chicago campus supports a wide range of customers because of its broad academic programs and the presence of the Medical Center. AITS has a smaller human resource presence at the Chicago campus, but the needs of the campus are similar to Urbana. *AITS will work with the Chicago campus to better understand the IT needs and to determine if we have the correct resource allocation model to meet the needs.*

Urbana Campus IT

The majority of the AITS employees are at the Urbana campus. This means that there is a great opportunity for collaboration with the campus (AITS must make sure that we are also collaborating with Chicago, Springfield and Global Campus). *AITS will continue to partner with CITES to increase efficiency and collaboration in regards to administrative information technology, including shared facilities, green IT, and discovering the needs of the end users.*

Measuring Progress

CA Unicenter, PMO metrics, budget spreadsheets, and customer service surveys all help to measure progress. There are two important reasons to measure progress. The first is to know if you are on track or need to make a change. The second is so that others outside of AITS realize that we are evaluating our services and also so that they can participate in the planning process. *AITS will continue to measure our progress and service levels to foster continuous improvement and collaboration.*

Emergency Preparedness

Each IT department has a continuity (disaster) plan, and they will probably work well in isolation. AITS also has a comprehensive continuity plan and test plan. It is in the best interest of the University to ensure that the continuity plans are coordinated across the campuses when possible. In addition, AITS should have a short version of the plan to increase awareness of the basic steps in the plan and to make sure that initiating the plan is a simple as possible. To these ends, the UTMT should ensure that all campuses have business continuity plans for the electronic systems and that these plans are tested. *AITS will ensure that a short version, for example a 48-hour tear-out plan, is readily available.*

Communication and Expectation Management

Our work is based on the needs of the customers. It is important that we know what our constituents need, but we also must ensure that they know what we are doing, when we are doing it, how it affects them, and how we can better collaboration with them. *AITS will provide more information about our services, projects and progress. AITS will examine communication effectiveness and enhance current web and email communication internally and externally. AITS will meet regularly with our constituents and document action items and outcomes of these interactions.*

Production Level Services

AITS has many strict processes and procedures to ensure that the change control and security policies are adhered to at all time. While this is feels more "corporate" as opposed to "academic", it is a requirement for our production services. Our auditors expect the enterprise computing standards to be as stringent as possible. While this reduces flexibility, it increases security. *AITS will provide applications that meet the needs of the university while still providing production-quality services.*

Better Change Management

Some go-live events have been perceived as failures while others are celebrated or hardly noticed. While the technical implementation of such events is managed successfully, there is not enough emphasis on managing change as it relates to people. During a go-live event, training and expectation management are just as important as the product itself. *AITS will improve communication, training and help desk services to ensure that new services are well understood before the go-live date. The HR Front End is our opportunity to set a new standard.*

Every Person Matters, but Not Everyone Is In Charge

Every AITS employee should feel comfortable challenging the status quo, and each person should engage in honest, polite conversation. Once a decision is made, we need to stick to the goals and make sure that we are not continuing to re-assess the situation at every juncture. Although this is not an absolute rule, it helps to maintain progress because each of us spends more time planning and doing and less time iterating. *AITS will use open, participatory planning whenever possible while maintaining a traditional management hierarchy.*

Availability

How much availability is enough? Obviously, no one wants the enterprise systems be down at any time, but it is inevitable. Credit card companies and banks all go down for maintenance, but we still need to minimize it. *AITS will document the cost to maintain our current infrastructure and the cost to enhance the availability so that we can discuss the options with our key stakeholders. AITS will review how the maintenance schedule is created to ensure all campus leaders are informed and can participate.*

Security

IT security governance, security implementation and security compliance are priorities for AITS and each campus. In general, each campus is responsible for their own security implementation and campus-level compliance. However, there is still a need to ensure that the University as a whole has some security policies and compliance procedures that are universal. The UTMT and General Counsel should be responsible to make the policy for AITS (and others) to follow. *AITS will continue to improve the security metrics, in particular for end user breeches and portable data devices. AITS will help analyze and/or create data retention and discovery policies. AITS will participate in University-wide policy making for security.*

Who's in Charge of Policies?

From business hours to acceptable use policy, there does not appear to be a universally accepted policy process at the University. Each major unit creates policies and the University has different policies between campuses. If AITS collaborates on the development of administrative IT policies, it would be good to know the extent of the policies that are already out there. *AITS will create a single aggregated website of IT policies if it does not already exist. AITS will find out if there is a policy on policies.*

Getting Students Involved

As shown by the mission statement, the University of Illinois will transform lives and serve society by educating, creating knowledge and putting knowledge to work on a large scale and with excellence. AITS has many opportunities for student to both learn and help the University, and we should examine the possibilities for including students in AITS. *AITS has hired students and will continue to employ students in the future. AITS will work with academic units to provide opportunities for students.*

Green IT

Although the terms "green" and "sustainability" are overused, the concepts are correct, that is, be as efficient as possible with the least possible impact to the environment. There are many sustainability initiatives throughout U of I addressing collocation, virtualization and consolidation. In order to help promote discussion about green IT throughout U of I, *AITS will help set up a University-wide meeting for IT departments to collaborate on green IT planning and projects.*

IT Governance

By the people, for the people is not a bad model. Our IT governance must include the constituents that we support as well as the employees with AITS and UA. The other IT departments throughout the University have their own governance models and the can introduce AITS to new student, faculty and staff groups that can help AITS be more effective in planning. *AITS will refine the external governance model through wide-scale collaboration with other IT departments and administrative IT constituents.*

AITS Leadership and Management Teams

These teams provide the leadership for the Office of AITS. The intent is to create the correct size group for the discussion and the decision that needs to be made. These groups are an initial starting point, and they can be modified to accommodate the needs of AITS.

Leadership Team (LT) (meets bi-weekly). This group approves overarching policy and sets departmental direction.

- Kelly Block
- Dick Harris
- Michael Hites
- Michael Lyon
- Suzi McLain
- Director, Information Security
- Director, Enterprise Architecture

Management Group (MG) (meets monthly before or after LT). This group provides a discussion forum for specific items that have broad importance for AITS and the University and require additional technical and management expertise.

- Kelly Block
- Dick Harris
- Michael Hites
- Michael Lyon
- Suzi McLain
- Director, Info Security
- Director, Ent Architecture
- Peggy Ball
- Chris Barton
- Nyle Bolliger
- Deb Coggins
- Stephanie Dable
- Joe DeBarr
- Susan Flanagin
- Scott Harden
- Marla McKinney
- Marty McLain
- Brian Metzger
- Brian Schoudel
- Cheryl Parrett
- Alice Jones
- Amin Kassem

AITS Council (Council) (meets bi-monthly). This group represents all of the employees within AITS and provides a venue for widespread discussion and dissemination of policies, procedures, strategies, goals and other technical and administrative items.

- Kelly Block
- Dick Harris
- Michael Hites
- Michael Lyon
- Suzi McLain
- Director, Info Security
- Director, Ent Arch
- Peggy Ball
- Chris Barton
- Rita Bates
- Nyle Bolliger
- Steve Briney
- Deb Coggins
- Carla Corzine
- Stephanie Dable
- Joe DeBarr
- Susan Flanagin
- Scott Harden
- Jason Heimbaugh
- Alice Jones
- Mary Jones
- Amin Kassem
- Troye Kauffman
- Marla McKinney
- Marty McLain
- Brian Metzger
- Cheryl Parrett
- Brian Schoudel
- John Twork
- Wayne Buswell
- David D'Urso
- Jeff Fletcher
- Linda Fletcher
- Jeff Heckel
- Ben Martinez
- Paul Masters
- Mike Nevill
- Debbie Peterson
- Alan Schuele
- Charles Schultz
- Carole Stephenson
- Jeanie Thomas
- Robyn Velazquez
- Dave Wells
- John Zuckerman

Finance and Funding

Adequate finance and funding are critically important in maintaining adequate staff levels, computing facilities material condition, hardware and software refresh – all of which come to play in overall system availability for the University.

AITS receives funding primarily in the form of state funds along with a administrative allowance; additionally, AITS is able to generate some additional revenue in the form of self supporting funds from those services that it provides as part of the consolidation of IT services to other UA and campus units to assist in offsetting demanding labor requirements.

State and institutional funding sources have had little variance over the last three years, however the development of an annual (recurring) refresh fund in FY07, intended to be used to acquire, consistently refresh and grow the equipment base supported by AITS, has been critical to ensuring AITS enterprise hardware remains up to date. Funds allocated for ITPC, refresh gift/donor or grants & contracts are strictly administered (segregated) to ensure expenditures remain transparent and align to the intention of the fund type. AITS has been able to construct a 'reserve' fund to help offset the anticipated crushing cost of highly specialized and expensive hardware refresh (such as large Sun servers and overall EMC storage systems) that falls outside of the traditional refresh structure, this expenditure will occur in FY09 and then again in approximately 7 years.

The internal 'reserve' will also be called upon to help maintain the material condition of our two respective data center facilities and their infrastructure, with ~$1.3M[1] in capital improvements such as UPS and battery replacements, roof cooling unit replacement, fire suppression and detection, diesel generator and building elevator.

	All figures reported in thousands (1,000s)				% change	% change FY05 -
Beginning Budget Sources	**FY05**	**FY06**	**FY07**	**FY08**	**Prior Year**	**FY08**
State	$11,956.4	$12,206.7	$12,381.3	$12,937.2	4%	8%
Institutional	$4,077.5	$4,078.7	$4,108.4	$4,133.8	1%	1%
Subtotal Unrestricted Funds	$16,033.9	$16,285.4	$16,489.7	$17,071.0	4%	6%
Self Supporting	$817.4	$934.0	$898.5	$1,039.0	16%	21%
Grants & Contracts	$0.0	$0.0	$0.0	$0.0		
Gifts/Donor	$0.0	$0.0	$0.0	$0.0		
ITPC funding	$300.0	$6,521.1	$1,431.9	$2,000.4	40%	85%
State Refresh budget	$0.0	$0.0	$2,000.0	$2,000.0		
Subtotal Restricted Funds	$1,117.4	$7,455.1	$4,330.4	$5,039.4		

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[1] Capital improvements include: HAB fire protection $100K, UPS $225K, Diesel Generator $350K; RRB Battery string $70K, UPS replacement $300, Roof dry coolers $120K and elevator $175.

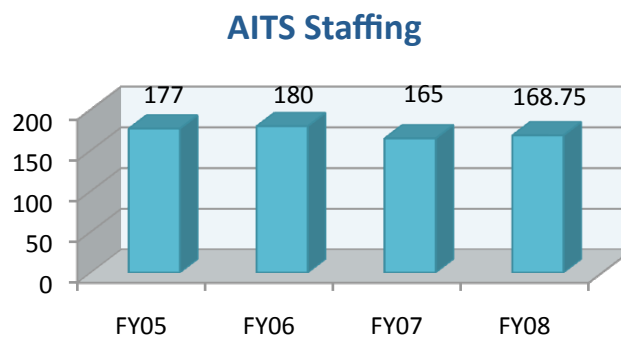|				
FY Total	$17,151.3	$23,740.5	$20,820.1	$22,110.4
Expenditures				
State (inc. refresh spend)	$12,207.5	$12,643.9	$14,782.3	$14,985.3
Institutional	$1,549.7	$4,682.9	$2,350.6	$3,139.9
Gifts / Donors	$4.6	($12.7)	$0.9	$0.0
Self Supporting	$1,153.2	$572.4	$1,260.1	$1,064.2
ITPC	$27.7	$2,159.6	$3,273.0	$3,172.8
	$14,942.7	$20,046.1	$21,666.9	$0.0
Carry Forward Balances				
Self Supporting	$1,181.9	($28.7)	$820.4	$648.5
Grants & Contracts	$0.0	$0.0	$0.0	$0.0
Gift / Donor	($7.2)	($11.8)	$0.9	$0.0
Institutional (AITS)	$3,432.2	$5,918.0	$5,876.1	$6,502.9
Institutional (ITPC)	$0.0	$272.3	$4,604.1	$3,068.7
Institutional (refresh)	$0.0	$0.0	$0.0	$1,100.5
Total Carryover	$4,606.9	$6,149.8	$11,301.5	$11,320.6

In FY08 AITS management made a concerted effort to proactively increase funding and our commitment to training of staff, sending a cohort group of eight (8) to university sponsored supervisor / manager training, as well as several others to discipline specific technical courses and conferences. Consistent with our first value, we have resolved to preserve funding for continuing education, training and development of staff to ensure their success in performing their duties.

Staffing

You're only as good as your staff[2] – acquiring and retaining the right people is crucial to running a successful IT department. We have taken time this year for the management team to get to know each of our staff and their teams that make up our department, better; to understand their background, their experience set, their education, their goals and the concerns and challenges that each team faces.

AITS regular staffing levels have been decreasing over the last 4 years (FY05 to FY08) following a 38% reduction at the end of FY04 that rocked the organization[3]. Today's staffing level of 168.75 FTE has been augmented through the ongoing use of consultant and contractor personnel to help us meet post Banner ERP implementation backlog work requests and critical ITPC projects that support University strategic initiatives. We are examining this staffing model to better leverage our funding and human capital.

Staff turn-over rates (10.6%) are slightly higher than expected IT norms (4.63% for staff[4]); senior management attrition in FY08 was also higher than national norms (6.27% for management), with the transition of the interim Associate Vice President to Global Campus, the resignation of the Assistant Vice President Enterprise Systems Assurance / CSO, and the Enterprise Architect all occurring this fiscal year. The search for the Associate Vice President was concluded successfully in March of this year with the naming of Dr. Michael Hites to that position; the national search for the Security and Architect positions are currently in-progress, with interviews expected to occur within the next 30 days. AITS refilled 18 vacancies with new personnel in FY08.

AITS Staffing

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[2] You're only as good as your staff, an interview with David Korn, May 30, 2007
http://www.denverchase.com/sites/insideout/200501/3/Staff/Your%20only%20as%20good%20as%20your%20staff.pdf .
[3] Note AITS staffing levels peaked in 1992 at 287
[4] Turnover of Information Technology Professionals; ACM SIGMIS Database, Volume 35, Issue 3). Soon Ang and Sandra Slaughter.

AITS has offices in both Urbana-Champaign and the Chicago campuses, maintaining the production data center in the latter and the disaster recovery (used for test and development) site on the former. Staff are distributed asymmetrically with 116 in Urbana Champaign and 24 in Chicago; at this time, AITS does not have a presence on the Springfield campus.

AITS staff bring considerable diversity in background and education, having attending 70 different Institutions of higher education, with 66 different majors; just under 20% have advanced degrees. Two employees[5] completed their advanced degree this year, with five[6] more enrolled in an advanced degree program.

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[5] B. Schoudel and J. Hart.
[6] K. Block, L. Gibson, M. Vandenplas, J. Twork and S. Muftee

AITS Employee Alumni Institutions

Our employees are part of prestigious institutions from all over the world.

- Amravati University
- Arizona State
- Auazhong University of Science and Technology
- Belarusian State University
- California Polytechnic State University
- Carl Sandberg College
- Carleton University
- Chicago State University
- DeVry Institute of Technology
- Drake University
- Eastern Illinois University
- Eastern Michigan University
- Elgin College
- Elmhurst College
- Fox Valley Technical Institute
- Foundation University, Pakistan Goshen College
- Governors State
- Grand Valley State
- Harbin Institute of Technology
- Illinois College
- Illinois Institute of Technology
- Illinois State University
- Indian Statistical Institute Calcutta
- Israel Institute of Technology
- Kakatiya University
- Michigan State University
- Michigan Technological University
- Milliken University
- MIT
- Monmouth College
- Montana State University
- Moraine Valley Community College
- Mount San Antonio College
- Nagarjuna University
- Northeastern University
- Northern Illinois University
- Northwestern University
- Northwood University
- Oakton Community College
- Parkland College of Technology
- Purdue University
- RMIT
- Rutgers University
- Saint Mary's University
- Seattle University
- Southeastern Missouri State
- Southern Illinois University – Edwardsville
- Southern Illinois University
- Southwest Junior College
- Sri Venkateswara University
- St. Louis Community College
- State University of Buffalo
- State University of New York
- Texas A&M
- Tsinghua University
- Universidad de Simon Bolivar
- University de Barcelona
- University of Akron
- University of Arizona
- University of California – Irvine
- University of California – LA
- University of Chicago
- University of Colorado – Boulder
- University of Illinois Chicago
- University of Illinois Springfield
- University of Illinois Urbana-Champaign
- University of Missouri
- University of Montana
- University of Padva
- University of Phoenix
- University of the State of New York
- University of Toronto
- University of Wisconsin
- Wartburg College
- Washburn University
- Wayne State University
- Webster University
- Western Illinois University
- Wright State University
- Xidian University

AITS Employee Academic Concentration

Our employees majored in much more than information technology.

- Accounting
- Administrative Information Systems
- Aeronautical & Astronautical Engineering
- Aerospace Engineering
- Anthropology
- Applied Computer Science
- Applied Mathematics
- Architecture
- Art – Visual Communications
- Bio Chemistry
- Biology
- Botany
- Broadcast Technology
- Business & e-Business
- Business & Organizational Communications
- Business Administration
- Business Data
- Business Information Systems
- Career Organizational Studies
- Cartography
- Civil Engineering
- Communications
- Community & Theatre
- Computer Applications
- Computer Engineering
- Computer Management
- Computer Programming
- Computer Resources & information Management
- Computer Science
- Data Processing
- Economics
- Education
- Electrical Engineering
- Engineering
- Engineering – General
- Environmental Biology
- Finance
- Fine Arts
- Geography
- Geology
- Graphic Design
- History
- Industrial Manager
- Industrial Engineering
- Information Processing
- Information Service
- Information Systems Technology
- Information Technology
- Liberal Arts
- Liberal Arts and Sciences
- Management I information Systems
- Marketing
- Mathematics
- Mechanical Engineering
- Microcomputer Specialist
- Music Education
- Nuclear Physics
- Physics
- Psychology
- Public Affairs
- Recreation & Park Administration
- Sociology
- Software Engineering
- Soil Chemistry
- Spanish
- Statistics
- Studio Art
- Urban Planning

AITS Employee Demographics

An assessment of AITS demographics in FY08 shows it made slight progress with regard to national origin; however the majority remains largely a white, non-Hispanic population. Staff longevity has shifted with length of service years; 66% of the staff have 9 or fewer years with the University, while 18% have attained a milestone of 20 years or greater. AITS also helps support employees that would like to become U.S. citizens. Over the years, about a half dozen of our staff members have completed the requirements or citizenship while working at AITS.

AITS Ethnicity

- Asian or Pacific Islander — 5%
- Black/African Am/Non Hispanic — 2%
- Hispanic or Latino
- White, Non Hispanic — 85%
- Indian or Pakistani
- Race/Ethnicity Unknown

(2%, 1%, 5%)

AITS Service Time

- Less than 5 years — 22%
- 5 to 9 years — 44%
- 10 to 19 years — 16%
- 20 to 29 years — 16%
- 30 years or more — 2%