

Annual Progress Report – FY 2011

Administrative Information Technology Services



UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN • CHICAGO • SPRINGFIELD

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Introduction

This report provides an overview of numerous initiatives and tasks that were completed by Administrative Information Technology Services (AITS) during the FY 11 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.

Among the many accomplishments in FY 11 were:

Support the University of Illinois

AITS provides enterprise-level application services and information technology infrastructure for the University of Illinois. In that capacity, AITS currently supports over 475 applications, 785 servers, 367TB of raw storage, 601TB of backup media, approximately 34,800 employees and 71,000 students across all three campuses. In FY 11, AITS completed 39 projects, maintained Banner uptime at 99.7%, closed over 46,053 service desk tickets, and completed 32 weekend production rollouts.

Administrative Network Refresh

AITS and CITES collaborated on an extension to the administrative network to create an enterprise services network shared by all three campuses. The development of this network will cost 50% less than original estimates and support features not provided by a simple refresh of the previous architecture, including support for IPv6, support of an enterprise services network, and support of CITES campus networks located in Chicago.

Support Business Process Improvement through Technology

AITS works on several projects every year with a focus of implementing technology applications that increase process efficiency, reduce costs, and improve customer functionality and service. Via the Information Technology Priorities Committee (ITPC) governance process, 37 projects were completed during the year to support University business processes and operations.

Comments, questions, and other feedback regarding this report are welcome at any time.

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AITS Mission, Vision, and Values

Mission and Vision

AITS supports the mission of the University, which is to “transform lives and serve society by educating, creating knowledge and putting knowledge to work on a large scale and with excellence”. The following 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 Statement

We will be recognized and actively sought out as a strategic partner for the University of Illinois’s 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

Everything AITS does 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.

Leadership

Using the resources available to us as individuals and as a department, we create ways for everyone to contribute to our objectives of anticipating customer needs, providing innovative, cost-effective and sustainable solutions, and delivering 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.

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.

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.

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.

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.

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.

Customer Satisfaction

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

Integrity

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

AITS Organizational Structure

Administrative Information Technology Services (AITS) employs approximately 210 individuals and delivers information technology systems and services that support the University of Illinois's administrative processes across all campuses. AITS is a University-wide resource for administrative computing, applications support, applications development and data management.

AITS currently supports over 475 applications, 785 servers, 367TB of raw storage, 601TB of backup media, approximately 34,800 employees and 71,000 students across all three campuses with their administrative information technology needs.

AITS's mission is to deliver appropriate, cost-effective information technology systems and services that support the administrative processes and strategic goals of the University and its various units; provide leadership on administrative information technology best-practices; and collaborate with the campus-based computing organizations on policies and standards that optimize and secure the University's administrative information technology resources.

Core Functions

To accomplish this mission, AITS is organized around core functions that include:



AITS has developed expertise in these areas through operational management, that is, our managers and directors perform hands-on IT work in addition to their administrative responsibilities. Among the major duties performed by these core functions:

AITS:

- Provides selection, implementation, and maintenance support for packaged and self-developed applications at the University of Illinois
- Creates and maintains internal and external interfaces for University enterprise applications
- Provides data management for University enterprise applications
- Provides data center services, including disaster recovery, for hosted University applications
- Provides 7 day-a-week, 24 hour-a-day Service Desk/Operations support for University enterprise applications
- Facilitates University desktop and enterprise applications training with internal and external service providers
- Collaborates with other UA units and campus-based computing organizations on policies and standards that optimize and secure University information technology resources
- Provide primary support for the SunGard 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.

Standards and Best Practices

AITS practices are rooted in industry best practices and standards-based approaches that are utilized to ensure the quality and consistency of services. Some of these standards include:

Software Development

Software development lifecycle based on standards from the Capability Maturity Model (CMM)

Service Management

Information Technology Service Management based on standards from the Information Technology Infrastructure Library (ITIL)

Financial Management

Financial management standards based on Generally Accepted Accounting Principles (GAAP)

IT Governance

IT Governance practices as recommended by the EDUCAUSE Center for Applied Research (ECAR) and Gartner

Security Compliance

Security compliance based on Control Objectives for Information and Related Technology (COBIT) and ISO/IEC 27001:2005 - Information technology -- Security techniques -- Information security management systems -- Requirements (ISO 27001)

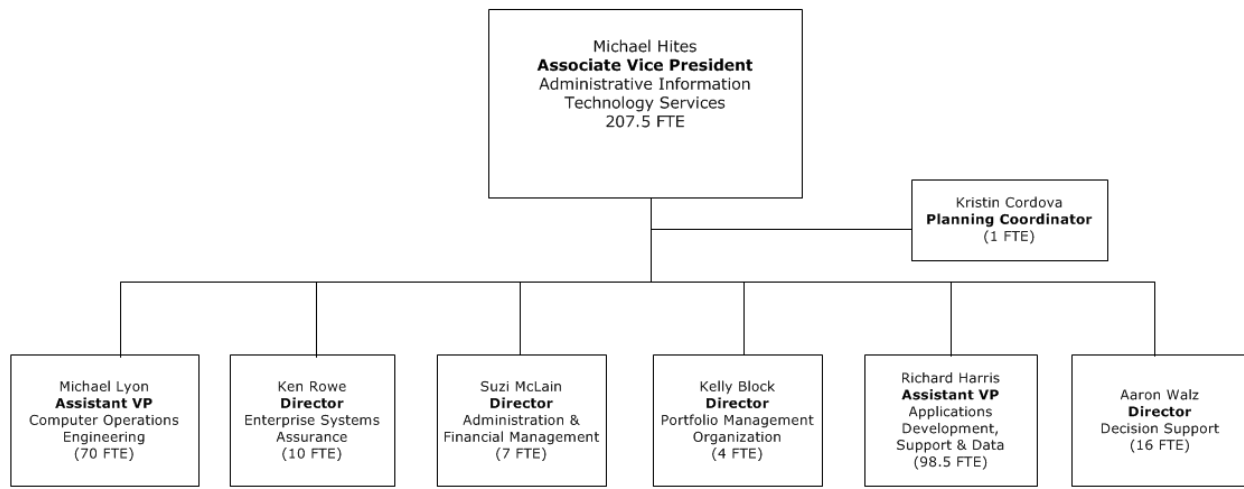
Data Warehousing

Information management and delivery approaches and best practices from The Data Warehouse Institute (TDWI) and Higher Education Data Warehousing (HEDW) organizations

Project Management

Project and portfolio management based on standards from the Project Management Institute (PMI)

ADMINISTRATIVE INFORMATION TECHNOLOGY SERVICES (AITS) ORGANIZATIONAL STRUCTURE



Note: For a full description of the departments please visit our [About AITS](http://www.aitis.uillinois.edu/about_aitis/) website page at http://www.aitis.uillinois.edu/about_aitis/

Finance and Funding

While it is difficult to quantify the effects of funding over time, AITS has certainly increased efficiency over the past decade. Between 2000 and 2011, the number of employees and students supported per AITS staff member increased from 407 to 531. Over that same period, AITS funding has decreased overall by about 17%. Also during this time, the Consumer Price Index (CPI) increased 31%. *(In 2000, the index was 172.2; in May 2011, it is 225.96)* While this budgetary weakness has reduced agility, it has created significant efficiency in AITS.

AITS staffing declined overall over the past decade, with the exception of a brief employment spike during the UI Integrate project. The downward trend continued through FY10, but increased by almost 12% as AITS welcomed Decision Support and UIeRA, the UI Electronic Research Administration help team staff to the organization in FY 11. Even with the blending of these organizations, staffing remains 11% lower than in FY00. This consistent declining trend demonstrates that as the cost of technology components and hardware/software costs continue to increase over time with the CPI (e.g., hardware/software maintenance costs have increased 25% between FY07 and FY 11), AITS has worked diligently and become more efficient to offset the increases in operating costs with staffing decreases. In recent years when there was a flat or decreased funding allocation, AITS has aggressively pursued cost-saving options with software vendors. We have taken advantage of pre-paying support where possible, and we worked with vendors for the upcoming fiscal year to hold costs constant/flat or limit increases in maintenance costs, given our financial situation. The result is that AITS is much more efficient than it was a decade ago; however, additional efficiency gains and cost-saving opportunities will be increasingly difficult to identify in the future.

AITS will continue to employ disciplined, fact-based decision-making and further a culture of continuous improvement. By enhancing our expertise, maintaining consistently high service levels, increasing collaboration, and investing strategically, AITS will continue to be able to do “more”, with “less.”

FY 11 Strategic Goals, Objectives, and Initiatives

FY 11 Strategic Goals

The AITS strategic goals are broad statements indicating the specific strategic areas that AITS will focus on in supporting the University's mission and our responsibilities as an organization. In the pursuit of realizing these goals, the strategic objectives in the next section serve as actionable broad and specific initiatives that AITS will pursue in order to fulfill these stated strategic goals. AITS's strategic goals for FY 11 were:

The Information Continuum

- Provide beginning to end information delivery to our customers including transactional, historical and analytical information resources to facilitate operations and support decision-making.

Do Work Better, Faster, and Cheaper

- Pursue opportunities to improve and offer new services, increase productivity, and drive out costs wherever possible.

Simplify IT

- Improve the breadth, quality, and access to information technology services.

Trust

- Build and strengthen relationships with people and organizations throughout the University based on mutual trust.

FY 11 Strategic Objectives

The AITS strategic objectives are created through discussions with our customers, and are refined by internal conversation within AITS. In planning our objectives for FY 11, a number of themes emerged to drive their development. The University's revenue has almost equal components of tuition, state funding and sponsored research. These make up about \$700M each, and they are vital to the University. Even though AITS cannot directly influence these important aspects of the University, our strategic objectives can help ensure that our revenue is maximized and our expenses minimized.

To do this, we work on objectives that help departments, colleges and campuses access that information they need to make decisions. Since the U of I is highly decentralized, it is important to provide the infrastructure for accurate and timely information to assist decision makers and managers throughout the University. Students are the source of tuition, and although administrative units are not the reason students attend the U of I, a bad experience with the University can make it less likely for students to continue their attendance. We must help provide transactional services that make it easier for students and faculty to perform their work and gather the information needed to be successful. In regards to sponsored research, the faculty continues to write more proposals and receive more awards each year. Research administration is key to making this process more efficient so that more proposals can be accurately submitted and awarded with the same (or less) administrative support. These are just a few of the examples of why our strategic objectives are chosen and how they are relevant to the success of the University.

Each objective has a different priority, and the priority changes throughout the year depending on environmental factors such as funding, urgency, University needs, vendor partnerships and human resource availability. Below is a summary of significant initiatives AITS pursued in FY 11.

SUPPORT THE ADMINISTRATIVE REVIEW & RESTRUCTURING

Support the implementation of the Administrative Review & Restructuring (ARR)

recommendations: AITS will implement projects specified in the UA IT Council review of the ARR recommendations including:

Grants Management Software

AITS is working with the Vice Chancellors Research on their evaluation and assessment of the Grants Management software.

Workflow Project

AITS will implement and support workflow tools, software and standards.

Expense Trends Analysis

AITS will provide a new Expense Trends Analysis cube.

Shared Services

Involvement in increasing support of shared services for Data Center, Desktop Support, Server Support, Storage, and Service Desk.

Banner Modification Maintenance

AITS will in-source Banner modifications.

Reduce Power Consumption for Desktop Computing

AITS will reduce the power consumption for desktop computing.

Reduce Application Portfolio

AITS will reduce the application portfolio to reduce support costs.

Disclosure Portal

AITS will implement and support the disclosure portal.

Outsource Where Beneficial

AITS will look for opportunities to outsource where cost effective.

Note: A number of the items below also support the ARR Implementation

INFORMATION MANAGEMENT

Departmental Planning and Information Provisioning

Analyze and deliver beginning to end information delivery to the customer.

Decision Support Function

AITS will work with Institutional Research (IR) and the University Technology Management Team (UTMT) Business Intelligence/ Performance Management (BI/PM) group to optimize data utilization across the enterprise.

Document Management

Create University standards for document imaging, storage, use, retention and disposal.

Information Management

Create a roadmap for the future state of obtaining, storing, validating, moving, using and disposing of data.

Proactively Expose Banner Data

Provide consistent and straightforward methods for departmental applications and third-party applications to utilize authoritative Banner data.

Data Quality

Provide consistent policies, procedures, and data entry standards.

LOWER COSTS / STEWARDSHIP OF RESOURCES

Equipment and Server Space

Determine the most efficient locations and configurations for primary and secondary (BCP) data centers. Consolidate any applicable equipment, including by equipment of others throughout the University.

University of Illinois Community Source Solution Development

Work with departmental, college and central IT organizations and individuals to develop a process for sharing solutions across organizations to leverage and reuse IT resources. Where appropriate, extend local solutions to a broader audience to be maintained and offered at centralized points (college, campus, UI).

PC Thin Client and Application Server

Create a plan to provide the following: Moving people to thin clients and mini PCs and configuring a Terminal Services and Citrix environment to host applications and clients.

People

Preserve employment to the highest extent possible. Discussions related to the reallocation or reduction of staff should focus on impact analysis for services provided by AITS.

Green IT

Create our statement of environmental sustainability.

Administrative IT Consolidation

Continually search for opportunities to consolidate administrative services and functions where doing so can reduce costs while improving the quality and access to services and information.

Use What We Own

Increase functionality of enterprise systems by specifically using more of Banner delivered functionality and eliminating as many costly modifications as possible. Be a Leader in the SunGard Community Source Initiative to enhance baseline product functionality at nominal cost to the UI and partner institutions.

Support the Unified Communications Project

Participate and provide support for the UCP initiative to converge email, calendar, voice, conferencing and instant messaging services.

Vendor Interaction

Leverage partnerships with our vendors to maximize benefit to the University and minimize costs.

PROCESS IMPROVEMENT / INDUSTRY BEST PRACTICES

Policy Documentation and Ownership

Organize all policies and create clear rules for establishing, maintaining, and owning policies. Ensure that every policy relevant to AITS has a champion and a caretaker.

Measuring Progress

Document all relevant AITS metrics and provide regular updates and analysis of the metrics.

Business Process Analysis

Identify avenues to create a more common and standardized BPA.

Coordinated Administrative IT Governance

Evolve the ITPC into a more complete solution. Work with the campuses to integrate with their governance processes.

Project Management

Coordinate all projects for consistency, communication, and standardization.

RELATIONSHIPS WITH OUR CUSTOMERS

Communication and Expectation Management

Complete and publish a communication plan including publications, media, schedule and constituents served.

Get Students Involved

Provide opportunities for students to assist AITS through direct involvement or through college faculty.

Administrative Services Training

Partner with other organizations to increase the consistency and access to IT training.

Consolidated AITS Website

Create a one-stop shopping for services, standards, processes, pricing, policies, news, assistance, and contacts both internally and externally.

Business Relationship/Development Management

Coordinate the customer needs to the delivery and modification of AITS services.

SECURITY AND COMPLIANCE

Comprehensive Compliance Monitoring

Create an ongoing coordination plan to ensure we continue to assign responsibility for implementation and track maintenance.

Security Compliance

Review, revise and ensure compliance with all AITS and University security policies and procedures.

PCI Compliance

Review and revise PCI-related policy and assist the University with compliance for PCI policies and procedures.

Identity Management and Login Credentials

Unify identity management into a single logical and effective infrastructure.

FY 11 Results

In this section, we look specifically at how AITS executed in fulfilling the FY 11 strategic objectives. It should be noted that the objectives differ in their scope and nature. Some of the objectives will be ongoing pursuits, such as Green IT, where the organization will incrementally progress over time, but will never be complete in this area as this is a perpetual objective. Other objectives are finite and can be addressed as deliverables or initiatives are satisfactorily completed, such as project-based items. Another stipulation is that most of the objectives will roll over fiscal years and incremental initiatives and progress will be pursued and reported upon year to year. Later in this report, there is a detailed look at the continuing and new initiatives for the next fiscal year, which will continue to support new organization strategic objectives. Below is a detailed review of the activities in FY 11 that support our strategic objectives.

SUPPORT THE ADMINISTRATIVE REVIEW & RESTRUCTURING RECOMMENDATIONS

Grants Management Software

AITS is working with the Vice Chancellors Research on their evaluation and assessment of the Grants Management software.

AITS has worked with units of the Vice Chancellors for Research to evaluate the suitability of the current Sponsored Research Administration software going forward. The participants unanimously decided that we should evaluate and update our requirements for this software and issue a Request for Proposal (RFP) that reflects those requirements. The participants also decided that a review and assessment of the current sponsored research business processes should be conducted in order to define requirements in terms of our desired future processes rather than our existing processes. Accordingly, the Huron Consulting Group was engaged to conduct a Business Process Analysis (BPA) of the University's sponsored research administrative functions. The results of the BPA and the desired future state business processes will be used to create an RFP for sponsored research administration software.

Workflow Project

AITS will implement and support workflow tools, software and standards.

In FY 11, AITS focused on Workflow products currently available to the University of Illinois through existing agreements with SunGard Higher Ed. These tools, Banner WorkFlow, and Infinity Process Platform (IPP), are cornerstone products in the existing Banner product suite as well as important components in the future Banner architecture. AITS determined that significant enhancements have been made with Banner WorkFlow, which makes it a viable option for Banner related workflow solutions. In-house IPP training was provided for a number of AITS analysts, project managers, and developers. Projects that will leverage these products are currently in the planning stages.

Expense Trends Analysis

AITS will provide a new Expense Trends Analysis cube.

The Expense Trends Analysis cube was completed. This product provides decision makers and analysts with an easy to use interface for slicing and dicing their expense data on the fly, providing much better support for analysis and trending as well as eliminating (or at least reducing) the need to involve technical staff in creating a series of ad-hoc reports or queries.

Shared Services

Involvement in increasing support of shared services for Desktop Support, Server Support, Storage, and Service Desk.

SVN Service: AITS created the proper business processes and procedures to expand the use of the UA-Subversion (SVN) service. AITS worked with various departments in both UA and the campuses to use SVN for their versioning needs and successfully completed implementation of repositories for AITS, UOPS and OBFS. At this time, SVN is not only used for versioning, but also can be tailored to meet the needs of various departments.

Fully Document the Change Management Process: AITS improved the change management processes and procedures and expanded the use of this process to other UA and campus units. AITS has fully documented the change processes, procedures, and user manuals and published these in the internal documentation repository. AITS is currently working with additional departments to make the new processes available to them.

End-to-End Incident/Request Process: AITS modified the Incident, Work Request, and some ITPC processes to provide the ability to track client requests from inception to deployment in the CA Service Desk Management System (SDM) and Configuration Management Database (CMDB) System, which provides full accounting of the AITS infrastructure components. A full integration between Clarity (where ITPC projects are tracked) and CA SDM (where change management and incidents are managed) will be available after upgrading both products to the next major release.

Web Content Management System (WCMS), Phase II Implementation: The Intrafinity SitePublish WCMS automates the process of web content management, including content input, organization, storage, coordination, review, and publishing. After a site has been converted to the SitePublish framework, site owners may update their site content without intervention from IT staff. Interest in SitePublish is strong within the University community. Several sites have been converted to the SitePublish framework, and several are in the process of being converted. Intrafinity staff has provided SitePublish training, and more training is planned to increase knowledge of the many features of the product. The reaction of University customers who use SitePublish to update site content frequently has been positive.

UA Portal: The goal of this project is to redeploy the Enterprise Applications site (<https://apps.uillinois.edu/>) to a portal technology, which is more suitable for the purposes of this website. The goal of the Enterprise Applications site is to serve as a portal or gateway for all enterprise

applications. Currently this site is deployed using static web pages, inflexible architecture, and does not support personalization. This project began in May of 2011 and will be completed in four phases.

Phase One – includes the installation and configuration of the SunGard Luminis portal technology.

Phase Two – transitioning the Apps web site to the Luminis platform.

Phase Three – includes the deployment of the Prospective Students Portal as part of the Enrollment Management project.

Phase Four – review the campus portal technology and decided whether to migrate to Luminis.

Banner Modification Maintenance

AITS will in-source Banner modifications.

AITS reduced the annual expenditure for Banner modification maintenance costs by approximately \$500,000 annually by employing a strategy to maintain these modifications internally. The reduction in costs associated with this change far outweigh the increased internal labor required for this support.

Reduce Power Consumption for Desktop Computing

AITS will reduce the power consumption for desktop computing.

The University of Illinois is committed to reducing energy usage and has several ongoing initiatives at each of the campuses. One of the cost saving methods identified in the Administrative Review and Restructuring (ARR) working group was to implement a method of reducing power consumption for personal computers (recommendation 23e).

The goal of the UA Power Management Project is to maximize the reduction of energy used (and associated costs) with no negative impact to users. The intent is to use tools to implement rules that will enforce a 60-minute time-to-sleep setting, which will result in saving energy in a manner that will not interfere with daily activities or come at the expense of end user productivity. Recognizing that some tasks require that computers remain on at all times, a process for users to opt out of having their power settings managed for valid business reasons with appropriate approval from their manager has been established.

University Administration conducted pilots to validate both the processes and benefits for a formal Power Management program including the tools necessary to manage and report on power consumption for personal. Early results in actual monitoring and exercising the computer power management settings resulted in a reduction of average power consumed by 67% when compared to unmanaged use. AITS is finalizing the process for distribution of the settings and the proposal for University Administration adoption this summer.

Reduce Application Portfolio

AITS will reduce the application portfolio to reduce support costs.

The PMO worked with individuals across the organization in late FY 10 to put into place a process for the periodic, systematic evaluation of all applications in the portfolio to identify items for retirement, replacement or a change in maintenance sourcing. This effort continues on an annual basis.

Disclosure Portal

AITS will implement and support the disclosure portal.

An RFP was issued for the purchase of a conflict of interest disclosure portal tool and from the results it was determined that the best solutions were part of sponsored research software suites. As a result, it was decided to select the conflict of interest tool as part of a search for a sponsored research software suite that is discussed above under the heading Grants Management Software.

Outsource Where Beneficial

AITS will look for opportunities to outsource where cost effective.

The University in the process of completing a contract for IT consulting services makes available consulting resources as needed in a wide variety of specialties. The goal of this initiative is to provide the University with a group of qualified firms selected through the RFP process to provide services on an as-needed basis.

INFORMATION MANAGEMENT

Departmental Planning and Information Provisioning

Analyze and deliver beginning to end information delivery to the customer.

Improve Beginning to End Information Delivery: AITS is improving information delivery to customers by evaluating the current mix of BI/DW capabilities and services provided and the existing architecture that supports them. AITS completed initial architecture planning related to deploying information solutions using portal technology and conducted proof-of-concept efforts for deploying Business Objects and Tableau via a portal. AITS also purchased Tableau Server software to support improved data visualization and is continuing to conduct proof-of-concept work on push technology as part of the UI Report ITPC project

Centralizing Business Intelligence (BI) Development: AITS is working to provide a more integrated set of information solutions to customers by centralizing BI development. AITS combined the teams that perform BI development and standard report development as well as incorporated standard reports into the BI Product Planning, BI Governance, and BI Development and Maintenance processes. Cognos training will continue into FY 12 to support the new Banner BRM/RAP products.

Tool for Loading Sonic and LDAP Objects: AITS investigated automation of the process for provisioning new EAI messages for both internal and non-AITS applications. In January 2011, AITS completed proof of concept of this tool to use during Sonic upgrades. With the new version of Sonic MQ, we have a

license for the Deployment Manager, which may eliminate the need for a Sonic object loader. Work will continue in FY 12 including investigation of creating an LDAP object loader.

Improved SSH Key Management for Batch Processes: AITS investigated improvement of the provisioning process for creating and managing SSH keys, which is used to secure data transfer between AITS, vendors, and other departments. This project will continue into FY 12.

Complete Actional Implementation: AITS completed the implementation of Actional. This software provides the ability to analyze data flow through the Service Oriented Architecture and identify data use trends. Actional is also capable of controlling the data flow, securing access to data, and implement data service level agreements. AITS will be working on developing business metrics based on data monitored by Actional in FY 12.

Decision Support Function

AITS will work with IR and UTMT BI/PM to optimize data utilization across the enterprise.

Improve Enterprise Data Warehouse (EDW) Query Performance: AITS identified and improved areas of the EDW that are negatively affecting users with slow query performance. These improvements to system configuration, index design and view design have resulted in query performance improvement in multiple subject areas.

Provide OLAP Cube Solutions: AITS continues to enable decision makers to perform data-driven analysis by providing OLAP cube solutions that are targeted to critical areas of their business. The goal of this effort was to scope, build, and deploy one OLAP cube solution relevant to the current fiscal crisis for each subject area: Expense Trends Analysis (Finance), Employee Headcount/FTE Analysis (HR), and Student Enrollment Analysis (Student). In FY 11, AITS successfully completed and deployed the Expense Trends Analysis product (ITPC 0333). Employee Headcount/FTE Analysis project (ITPC 0351) is underway with expected to complete in August of 2011. The Student Enrollment Analysis project (renamed Course Trend and Grade Distribution Analysis, ITPC 0369) was reviewed and approved by the ITPC, and is currently being scheduled. The BI/PM Subcommittee also identified another potential project related to Enrollment Analysis, which is under investigation now and expected to result in an ITPC project proposal in Q1 of FY 12.

UTMT Business Intelligence/Performance Management (BI/PM) Subcommittee: This group, which evaluates BI/PM strategy and projects across the enterprise, expanded its role to also serve as a subcommittee for the ITPC process.

Document Management

Create University standards for document imaging, storage, use, retention and disposal.

Creation of Xtender Virtual Team: A team was established to ensure that Xtender/BDMS activities are

coordinated across all of the AITS departments. Xtender affects many areas and cannot be supported by just one or two individuals; therefore, by implementing a virtual team, each area can have a voice and understanding into the projects that will impact them. The first project implemented by the team was the BDMS 8.2/Xtender 6.5 Upgrade, which went into production in April of 2011.

Information Management

Create a roadmap for the future state of obtaining, storing, validating, moving, using and disposing of data.

Tuition Waiver Calculator Rewrite Project: This project included the rewrite of the existing application to utilize Banner delivered assessment calculation logic, and will greatly reduce the manual labor-intensive work in the form of maintaining Financial Aid assessment type rules and adjusting incorrect tuition and fee waivers. Utilizing the assessment rules will also greatly improve the accuracy of waivers. The successful implementation of this project will allow the decommissioning of three existing tuition waiver applications (existing tuition waiver calculator application, tuition waiver calculator front-end and tuition waiver calculator front-end loader utility). The first phase of this project was implemented in March of 2011 with the Assessment Rule Rolling process, the Tuition Waiver Calculator, the Pre-Registration Audit Assessment API and Waiver Table Loader going into production. The final pieces will be implemented later in FY 12.

Batch Application Migration: The goal of this effort was to move batch applications that run on database servers to dedicated batch application servers in the development, test, and production environments. Several key batch applications have been migrated to new application servers with the remaining batch applications to be moved in the course of routine maintenance.

Unit Security Coordinator (USC) Portal: This project has been integrated with the Identity and Access Management (IAM) project to save time and resources by eliminating project overlap and duplication of effort. The combined IAM and USC Portal project will improve the management of user access requests for University administrative computer applications by the development of a web application for security access requests, by providing automated capabilities for the audit, reconciliation and annual review of access granted, and by facilitating USC training.

FY 11 HR Front-End Application Support: This effort provides application maintenance, enhancements and service desk support for the HR Front-End (HRFE) application. Over the past year, there has been one major HRFE release and eight HRFE patches, which have included nearly 250 application enhancements and application issue resolutions. Another HRFE release is scheduled for mid-July, with over 80 enhancements and issue resolutions. More HRFE enhancements are being planned for FY 12, including integration with the Tracker I-9 system.

Academic Notice of Appointment (NOA) Rewrite Implementation: AITS is working with HR Offices to replace the current Academic Notice of Appointment (NOA) with a version that would provide a more concise and accurate information regarding the employee's position(s) and reduce the number of

erroneously generated NOAs. The project team is performing various testing cycles with the anticipation that the project will go-live in August of 2011.

Enterprise Application Security (EAS) Enhancements: In the past year, AITS has implemented multiple enhancements for EAS. The primary accomplishments include:

- Implementation of the EnterpriseIdValidationService, Consumption of BasicPerson and InstitutionalIdentity sync messages from BEA and I2S respectively, and Publication of NetIdAssignment sync messages by EAS
- Notification to users about expiring passwords, increased functionality in EAS Admin, addition of Security Questions, and turning on of locking
- Implementation of changes to ease maintenance and deployment challenges

Address EDW Usage/Usability Issues: AITS improved product quality and maintainability by addressing Data Warehouse subject areas with usage or usability issues. A detailed analysis of the Financial Aid, Payroll, and Recruiting & Admissions areas included the analysis of current usage, identification of usability issues, and the determination of what actions to take (e.g. removing unused tables, redesigning areas to improve usability). A series of Work Requests addressed maintenance issues with Financial Aid and query performance issues with Payroll. Two ITPC project proposals were submitted and approved for improving Payroll performance and usability (scheduled for FY 12).

New EDW Products: AITS worked to support new and expanded product offerings by extending DW and support infrastructure. AITS focused on establishing better ways to connect customers to OLAP cubes and support their use. This included R&D efforts related to portals, remote desktop, and OLAP browsers and also included determining effective approaches and methods for support, training, and metadata. AITS resolved connection issues with customers using Excel as the front end to the Expense Trends OLAP Cube and conducted numerous training classes, lab sessions, and demos for the Expense Trends Analysis OLAP Cube. Currently, AITS is planning additional training and support activities for both the Expense Trends Analysis and Consolidated Faculty Activity products to increase penetration and adoption.

Upgrade to Darwin Course Transfer Articulation Software: All campuses followed a direct upgrade path for Darwin to version 4.0.9.2 from 3.5.6. The new version is Java-based, making it easier for AITS developers to support. The upgrade to includes benefits such as the ability for audits to be run in HTML or PDF formats allowing reformatting capabilities and the sharing of templates for PDF versions with other schools. Exception entry screens are also provided in the new version and exception security has been added to allow controlled entry into DARSweb by exception code or requirement.

Proactively Expose Banner Data

Provide consistent and straightforward methods for departmental applications and third-party applications to utilize authoritative Banner data.

Vacation and Sick Leave (VSL) Application Integration to Banner: This project provides a mechanism for departments with online leave reporting systems to feed academic vacation and sick leave data into Banner electronically, rather than manually entering data into Banner forms. This automation helps prevent data entry errors and improve the efficiency of vacation and sick leave processing. The AVSL Integration to Banner is a collaborative development project that involves a number of units that currently use a leave tracking system other than AVSL. This web service went into production for the May 2011 leave reporting period. Phase II of AVSL Integration to Banner is to make the AVSL application message aware so that it can consume sync messages with updates to UA employees' Basic Person or Basic Employee data within Banner. This will eliminate manual entry and will ensure that Banner and AVSL data are synchronized. The scheduled completion date for Phase II is August 2011.

PRZM Evolution: PRZM was developed in-house and was updated in FY 11 to version 1.9.1 to reflect current needs. This release includes a set of enhancements to support MAFBE. The next step will be to place VAS authentication in front of PRZM to reduce the number of Service Desk tickets by eliminating multiple logons to UOCP systems. A further enhancement to version 2.0 will require additional analysis and proof-of-concept of PRZM/FCPWeb integration to populate new projects in PRZM when they are created in FCPWeb with cross-validation of data. PRZM 2.0 will have a new look and feel based upon Domino 8.5 and numerous functional, navigational, and user interface enhancements. Departmental Systems continues to work with DS and UOCP to facilitate the development of an EDW to support UOCP reporting and Business Intelligence.

Urbana Undergraduate Admissions Paperless Migration: AITS worked with the Urbana Office of Undergraduate Admissions to develop an integration between their eAdmit application and Banner. The redirect from Web for Admissions to the Urbana Office of Undergraduate Admissions (OUA) website was migrated to production in June of 2011. The integration between Banner and OUA's eAdmit application will be migrated to production in July 2011 and the integration from eAdmit to Xtender will begin this fall.

FABWeb: AITS worked with OBFS to complete the final version of FABWeb in January of 2011. This allowed for the surplus, transfer and disposal of fixed assets. Departmental staff that handle fixed assets and Property Accounting staff use FABWeb. FABWeb utilizes messaging to query Banner for display in FABWeb and to send updates made in FABWeb to Banner.

Travel and Expense Management System: AITS has made significant progress in building the hardware infrastructure and interfacing software necessary to support the Travel and Expense Management System (TEM), and to integrate TEM into our existing Enterprise Systems framework. Through requirements consultation, application design, application development, and hardware and systems support, AITS has played a key role in bringing the project forward to its current stage. This project is scheduled for completion in the first half of FY 12.

Data Quality

Provide consistent policies, procedures, and data entry standards.

EDW Data Validation: AITS designed and built new infrastructure to support automated data validation scripts in order to ensure the quality of data in the Warehouse. This includes established procedures to systematically validate that the data in the Data Warehouse has been correctly extracted, transformed, and loaded from source systems. AITS also designed a new functional specification template for data validation, and completed the initial proof of concept for automating validation scripts for the Expense Trends Analysis product. Functional specifications are underway for Grants Lifecycle and Grants Summary, Consolidated Faculty Activity, and several areas of Student data.

LOWER COSTS / STEWARDSHIP OF RESOURCES

Equipment and Server Space

Determine the most efficient locations and configurations for primary and secondary (BCP) data centers. Consolidate any applicable equipment, including by equipment of others throughout the University.

Administrative Network Upgrade: The Administrative Network is becoming part of an enterprise services network, which is to be shared by all three campuses and University Administration. Toward that end, AITS and CITES will collaborate on new network exits at the AITS Data Centers in Chicago and Urbana. Both exits will serve as infrastructure components for Unified Communications. Currently, new routers are being procured and the implementation is expected to take place the summer of 2011.

Linux Server OS Upgrades: Work to upgrade all Linux servers to the Red Hat Enterprise Linux 5 is nearing completion. Compatibility of vended applications is also being assessed for Red Hat Enterprise Linux 6, which was released in November 2010.

Linux Server Virtualization: All pre-existing Linux server instances are being migrated from physical hardware to virtual machines. All new Linux server deployments are also being installed on virtual machines. As of June 2011, nearly 100 virtual machines have been deployed, resulting in reduced hardware and staff resource requirements. Having experienced no negative results, this initiative will continue during the next fiscal year.

Windows Virtualization: AITS continues its quest to virtualize services on the Windows platform in order to more efficiently utilize our hardware resources. Microsoft Hyper-V is now the prevalent platform for new Windows server deployments. Over the past year, several additional hypervisors have been deployed in production and non-production. This effort will remain in progress as a priority until the physical hardware has been retired from the data center. During FY 11, we virtualized 134 additional environments. These environments either were moved from older hardware or were created for new projects.

Banner Document Management System (BDMS) 6.5 Upgrade: In order to remain supported with EMC and SunGard, a major upgrade was completed in April of 2011 to the BDMS. As such, the existing application was brought up on newer hardware to replace obsolete equipment as well as on virtual servers in the development environments.

Oracle 11g/Fusion Middleware 11g Upgrade: The Banner production database as well as the middle-tier application servers were upgraded to version 11g in May of 2011. The Fusion Middleware 11g upgrades are currently being tested in development and are scheduled to be moved into production along with the Banner 8.4 upgrades in November of 2011. These upgrades are mandatory, as both the database and middle tier software will be unsupported by Oracle at the end of 2011. Other environments were updated as well including production non-Banner and non-production (both Banner and non-Banner), EDW, and other databases.

University of Illinois Community Source Solution Development

Work with departmental, college and central IT organizations and individuals to develop a process for sharing solutions across organizations to leverage and reuse IT resources. Where appropriate, extend local solutions to a broader audience to be maintained and offered at centralized points (college, campus, UI).

University-wide Community Source Initiative: Several efforts have kicked off with colleges and departments across the University to increase collaboration and reduce duplication across the enterprise. The AVSL interface into Banner was the product of many colleges working with AITS to address a long-standing need, which prevented duplicate data entry into both a VSL system as well as Banner. The Office of the Registrar introduced a Mass Grade loader solution as a potential idea from a professor, which allows faculty to upload grades from a spreadsheet into Faculty Self-Service. After tweaking the code and incorporating it into Banner, AITS was able to make it available to any faculty member who wanted to use it. Additional efforts are in the discussion stages, including several Engineering applications that may be transitioning to AITS.

PC Thin Client and Application Server

Create a plan to provide the following: Moving people to thin clients and mini PCs and configuring a Terminal Services and Citrix environment to host applications and clients.

Remote Desktop Services (RDS) Project: AITS continued the expansion of its RDS deployment that would provide the typical administrative Banner user access to applications used day-to-day to conduct business. This emergent project was initiated in the spring of 2010 to cut down on the overall cost of Desktop services provided by AITS. The goal is to provide a cheaper, less labor intensive, more energy efficient, and more secure desktop environment for UA and non-UA departments that performs as well or better than current workstations/laptops. We now have 400+ users (UA and non-UA) that have asked for and been granted access to the RDS deployment. Our production capacity goal is 500 concurrent users with expansion up to 4,000 if needed. This RDS service allows campus and administrative units to

determine if they would like to use a thin client device to make the connection, saving in capital expense and energy cost.

People: Preserve employment to the highest extent possible. Discussions related to the reallocation or reduction of staff should focus on impact analysis for services provided by AITS.

Management Development: AFM facilitated the provision of ER/HR led supervisor and manager training to a broad group of AITS leads and managers on topics including: Trust, Influence, and Change; Employee Satisfaction and Engagement; Rewards and Recognition; Talent Acquisition/Search Process; Teams and Groups; Mentoring and Coaching. The sessions were not all completed during this fiscal year, but there was agreement that the possibility of continuing sessions (with the addition of exercises around how each topical area relates to identified challenges within AITS) be considered for FY 12.

Social Environment Enhancement: AFM sponsored and continued to participate in developing and enhancing working conditions that are excellent for both the employees and the organization through activities sponsored by the social committee. The group worked together to offer a variety of fun and inclusive activities (e.g. bake sale, pancake breakfast, spring egg hunt, summer picnic, SMILES, food drive, ice cream social, trick or treating, holiday potluck, holiday office decorating contest) to build better relationships within AITS and achieve organizational social objectives.

Rewards and Recognition: AFM members have worked with a group of AITS volunteers to revamp AITS's recognition program to promote and enhance employee programs that encourage recognition, professional development, and personal growth. The committee's initial focus was to generate ideas for potential types of recognition programs to pursue in the upcoming fiscal year, and the first sub-committee was convened and has begun implementation of a service recognition program to honor new hires, student employees, and employees for service time in five-year increments. The service award presentations occur at the annual departmental business meeting in early August.

Human Capital Initiative and Strategic Workforce Planning: AFM has continued its commitment to organizational effectiveness through resource management, communication mechanisms, and ongoing evaluation to meet the needs of AITS. AFM has conducted a review of the existing talent management framework and has started to identify the pieces of the framework currently in place, discuss what is working well/what would benefit from modified processes or implementation of new processes. Documentation of current state and future direction (approach, priorities, and next steps) continues. The leadership of AITS will review and prioritize items so development of a three-year plan, aligned with the University's long-term human capital plan, can begin in earnest early in FY 12. AITS has been highly successful in acquiring talent, both University employees and consultants. Dedicated effort focused on enhancing the on-boarding process for new employees and consultants resulted in the creation and implementation of a consultant on-boarding procedure, an employee orientation package, an employee orientation session for the employee's first day, a manager packet, and a resource directory this fiscal year. Additionally, a Succession and Career Planning mission statement and principles document has been created, reviewed, and distributed to AITS employees. The document outlines the mission of the

program, defines what's required for the program to be successful, illustrates who holds what role in the program, and acknowledges AITS's commitment to the principles of succession planning/career development.

AITS Newsletter: In February 2011, AITS launched a pilot newsletter with the goal of informing employees, raising awareness and celebrating achievements. The newsletter strives to provide a high-level overview of current AITS projects, spotlight individual employees and provide social, professional and human-interest stories. The initial feedback of the newsletter was very positive and encouraging.

Green IT

Create our statement of environmental sustainability.

As part of the University's larger sustainability efforts, AITS strives to conserve energy, recycle responsibly and reduce paper consumption. The following initiatives represent our ongoing efforts, and we continually analyze our processes to find areas where we can become more sustainable as we provide and support technology resources for faculty, staff and students at the University of Illinois. Green, or environmentally friendly, information technology can be described as effective power management to reduce unnecessary energy consumption, the eco-friendly disposal of e-waste of technology equipment, and the virtualization of servers and applications to reduce power consumption. Having appropriate IT asset lifecycles and practicing responsible refresh and purchasing strategies leverage advances in technology and energy utilization.

Planned refresh lifecycles (servers at 5 years, workstations at 5 years, laptops at 3 years, storage at 5 years as well as use of RDS for thin desktop computing) allow us to take advantage of technology improvements, lower price, and lower energy consumption as the industry advances. This approach has allowed us to standardize in high efficiency technologies and consolidation / virtualization of server farms. By investing in server and blade virtualization technology where possible, we experience appreciable reduction in cost and number of assets, data center and rack space, cooling, power consumption, and less hardware to recycle at the end of cycle. Virtual machines save on power and space by consolidating physical machines. AITS uses hardware that can host many servers on a single 'real' physical machine. The energy and space savings potential are good for both the environment and the bottom line. As physical servers are approaching their end of useful lifecycle, we work with vendors to move applications to a virtual environment where possible. AITS has successfully virtualized 315 servers in our data center as of the summer of 2011.

Investing in thin client computing for typical administrative user desktop needs, which results in appreciable reduction in power consumption and waste while providing application functionality on demand, has matured and is ready to offer to the University as a common good service in the summer of 2011.

A laptop loaner program is being instituted to provide laptop computers for University employees who travel occasionally. Employees can checkout a standardized laptop and use VPN (Virtual Private

Network) service to securely connect to the University network while working remotely. The use of VPN to connect to the campus network when working from home helps reduce our carbon footprint.

Administrative IT Consolidation

Continually search for opportunities to consolidate administrative services and functions where doing so can reduce costs while improving the quality and access to services and information.

AD/Exchange Consolidation via Unified Communications: CITES and AITS are migrating users and Email into a new, jointly operated Active Directory forest; this new forest is also the basis for a Microsoft Lync implementation. Lync provides telephone, voice, video, presence, instant messaging, voicemail, roaming, and conferencing services. AITS has completed the acquisition and deployment of hardware for Exchange, and is in the process of procuring Lync hardware. Both components will operate within the AITS Data Center in Chicago. In addition, as of June of 2011, the new Active Directory is available and UA user migrations have begun. UA Email migrations are scheduled to begin in the fall and Lync migrations are to be completed by June 2012.

Administrative Support Matrix: AITS AFM provides all of the business and administrative support responsibilities for all divisions of AITS. In FY 11, documentation of the support matrix for oversight and performance of essential administrative services provided by this group to improve service to AITS and the University was completed.

Improve Efficiency by Centralizing Customer Support and CRM Activities: As part of merging AITS and Decision Support, a number of support activities that DS previously performed separately are being consolidated and handled centrally by other parts of AITS. In FY 11, AITS completed the transition of provisioning production Data Warehouse access requests to the AITS Security team, resulting in improved average time to process requests for customers. DS also conducted a number of training sessions with Service Desk staff to increase their knowledge of common Business Objects errors and questions resulting improved service and response time for our customers.

Use What We Own

Increase functionality of enterprise systems by specifically using more of Banner delivered functionality and eliminating as many costly modifications as possible. Be a Leader in the SunGard Community Source Initiative to enhance baseline product functionality at nominal cost to the UI and partner institutions.

1098-T Interface Project: This project creates a more efficient and less costly process for the University by eliminating the need for students to go to an outside website to view their 1098-T forms, and allows the University to process all 1098-T data in-house, eliminating the need for any third-party vendors. This process was implemented in January of 2011, in time for students to view their 2010 tax data via Banner Student Self-Service.

Student 8.3 Upgrade for Banner: In order to remain supported with SunGard and stay up to date with the most recent features available with the Banner Student and Web Tailor system, a major upgrade to these areas was completed in September. This upgrade also allows us to continue moving forward with other projects, such as Banner Relationship Management.

Banner Relationship Management Project: SunGard's Relationship Management suite of products (formerly Enrollment Management) will help the University manage the relationship with prospective students, make informed decisions about campaigns and programs, use scorecards and dashboards to provide reports and analytics to management, provides easy comparisons of performance to goals, and provides a retention management tool. In FY 11, Phase I of the Banner Relationship Management project was completed as the BRM system went live and was opened for use with UIC and UIS. Phase II Recruiting and Analytics Performance and Phase III, the Luminis Prospective Student Portal is scheduled to go live in the second quarter of FY 12.

Cognos Business Intelligence: As part of the SunGard Enrollment Management System, AITS plans to implement the Cognos Business Intelligence software to support vendor-provided BI products. In FY 11, the Cognos software was installed and initial training with Cognos Administration has been completed. Additional training remains to be completed through the summer with production deployment in the fall of 2011.

CMDB/Change Management: Application Support is currently responsible for supporting and maintaining the Unicenter Service Desk ticketing application. To make further use of this tool, new features and functionality associated with the Configuration Management Database (CMDB) and Workflow for Change Management were implemented to assist with the cutover of the new change management process and decommissioning of the existing application. Leveraging our current installation of the product, the CITES Data Center Group and OBFS Payables were brought on board as new users of USD and others are scheduled to follow suit in the coming year.

Business Process Analysis: In FY11, AITS worked with the Office of the Registrar at the Urbana and Chicago campuses and the Office of Admissions at UIS to map critical Student processes for documentation and automation of processes. We also worked with the Office of Public Affairs to determine the business process and gather requirements for tracking FOIA requests. Upon gathering requirements, the Unicenter Service Desk application was reconfigured to track FOIA requests. This project leveraged current technology instead of purchasing new software.

Support the Unified Communications Project

Participate and provide support for the UCP initiative to converge email, calendar, voice, conferencing and instant messaging services.

AD/Exchange Consolidation/Unified Communication: The majority of the 'Real People with Mail' user accounts (1,353 of 1,406) in Active Directory (AD) Organization Units (OU) managed by AITS Security were moved from their previous OUs to the new 'People' OU. The move was necessary to facilitate

moving the user accounts to the new Active Directory Forest. Additionally, AITS Security submitted requests for the creation of Urbana NetIDs for those users who previously did not have an Urbana NetID. These Urbana NetIDs are necessary to complete the consolidation.

Vendor Interaction

Leverage partnerships with our vendors to maximize benefit to the University and minimize costs.

Web for Proxy Project: The University of Illinois is partnering with several other institutions as part of the SunGard Community Source Initiative on a Web for Proxy project, which will allow a student to identify other persons who will have permission to access their data in Banner Self-Service. Development and testing is in progress by the collaboration partners and SunGard Development has started code reviews. The plan is to include this functionality in the baseline release of Banner General 8.5, which is scheduled for fall of 2011.

Cloud Computing - Federal Methodology Needs Analysis: SunGard provided the federal methodology calculation for determining expected family contributions for financial aid in a hosted, Software as a Service (SaaS) environment. Development and testing continue with SunGard with a focus on improving performance prior to the University switching to the hosted solution.

Banner Community Source Technical Committee: AITS participates on the Banner Technical Review Committee to review submissions to the Committee Source Initiative. This process continued to evolve over the past year with the introduction of the code repository, increased usage of the SunGard Commons, as well as approval for additional modifications to be included for baseline Banner. The University of Illinois developed patch tracker application that was reviewed through this committee and accepted for deployment to the code repository where other institutions can both take advantage of the existing functionality as well as enhancing it further.

SunGard Database New Beta Project: AITS is taking a proactive, lead role in being a SunGard beta test partner for their Database New Beta project. This is critical to our long term success for supporting Banner in that it gives an early look at the changes associated with this effort including a large production conversion as well as allowing the University of Illinois an opportunity to offer suggestions and feedback before the process is finalized. Our input and feedback to SunGard helped them to increase throughput and decrease the time needed for the conversion. SunGard subsequently decided to roll out the changes with each upgrade rather than in one large conversion.

SunGard Higher Education Participation: AITS participates in many SunGard initiatives, including: Business development teams for Banner Relationship Management, Event Management and Faculty Self-Service. We have many participants on both functional and technical review committees for SunGard's Community Source initiative, as well as having a member on their Human Resources Customer Advisory Board. AITS has been involved in the Large School Consortium and has had someone sit on the LSC Leadership Council for many years running. AITS was responsible for creating the Illinois Banner Users Group (IL-BUG) and creating the Commons website for the group. AITS also has many

presenters at Summit each year and many employees are often requested to sit on panels and committees during Summit. In the SunGard SETA organization, AITS has program chair responsibilities and has a staff member who will be the conference chairman in Fall 2011. Our involvement with SunGard allows us to provide input and stay in tune with the most recent development plans and activities. AITS has also been a leader in the formation of an Illinois Banner HR User Group, which has started on the SunGard Commons area. This gives Illinois Banner users from across the state a forum to exchange information.

PROCESS IMPROVEMENT / INDUSTRY BEST PRACTICES

Policy Documentation and Ownership

Organize all policies and create clear rules for establishing, maintaining, and owning policies. Ensure that every policy relevant to AITS has a champion and a caretaker.

Update HR Policies and Practices: AFM has reviewed the policies and practices of the divisions within AITS and updates/posts departmental policies and practices across the organization where they differ from published HR practices for the University. AFM provided a list of links to frequently referenced HR policies on the AITS internal intranet site.

Measuring Progress

Document all relevant AITS metrics and provide regular updates and analysis of the metrics.

Expand of the scope of measuring availability of administrative IT systems: The availability numbers of the Banner Forms and Self Service applications are currently maintained metrics. The scope of these numbers will be increased to include EAS, SitePublish, and other key systems. In FY 11, availability metrics expanded to include Banner Forms as well as adding remote monitors for both EAS and InfoEd.

AITS Metrics: AITS collects and publishes an annual metrics report that is available on the AITS website. An AITS metrics library is available on the AITS intranet for all AITS employees.

Business Process Analysis

Identify avenues to create a more common and standardized BPA.

Representatives from the three campuses and University Administration are currently working together to develop a shared service for business process improvement at the University. Several initiatives across the University are working towards increasing the efficiency of University operations. This shared service for business process improvement may provide support for those and other efficiency initiatives in a number of ways including:

- Provide a shared pool of resources available for targeted temporary project management and business process analysis services for projects where they can provide impact

- Utilize a shared standard methodology for business process improvement engagements
- Provide tools and templates for process analysis and improvement initiatives
- Draw on the distributed expertise of shared service participants
- Provide training resources for business process analysis and improvement

The shared service will be resourced with team members from AITS and other units across the University.

Coordinated Administrative IT Governance

Evolve the ITPC into a more complete solution. Work with the campuses to integrate with their governance processes.

Significant progress was made to connect University and campus IT governance processes. UIC completed a new IT governance model in FY 11 and AITS personnel are members of that governance process. UIUC is redesigning its IT governance processes in FY 12. UIS has an operating IT governance process in place. All campuses now provide access to campus IT governance information on their respective Internet sites. As we move forward, ITPC will formally interconnect with the campus governance processes as needed by design.

Project Management

Coordinate all projects for consistency, communication, and standardization.

AITS utilizes a standardized project management life cycle methodology for project execution. IT governance processes provide for the selection and prioritization of all projects. Standard recurring project and portfolio reporting provides enterprise-wide access to project information.

RELATIONSHIPS WITH OUR CUSTOMERS

Communication and Expectation Management

Complete and publish a communication plan including publications, media, schedule and constituents served.

The completion of a comprehensive communication plan was not completed in FY 11 as the customer relationship management function continues to develop. Completion of the communication plan is planned for FY 12.

Get Students Involved

Provide opportunities for students to assist AITS through direct involvement or through college faculty.

Student Workers: AITS's student employment program is designed to augment students' educational experience at the University of Illinois by providing learning and growth opportunities. The student employment program provides mentoring opportunities for AITS staff, and it offers student employees the chance to apply their diverse talents and explore areas of interest. AITS currently employs nine student employees, six of whom perform administrative responsibilities such as answering phones,

greeting and directing visitors, and performing various clerical functions and customer service duties, and three of whom perform desktop support responsibilities such as assisting with the installation, configuration, and ongoing usability of desktop computers, peripheral equipment and software and working with clients to resolve technical problems.

Mobile Application Exploration: AITS is currently exploring and learning about the techniques, architecture, and frameworks for mobile application development. We are currently working with Students to get information on mobile applications that would be useful.

Administrative Services Training

Partner with other organizations to increase the consistency and access to IT training.

Managerial Workshops: In FY 11, AITS partnered with ER/HR in the delivery of a series of managerial workshops geared toward business-relevant exercises, practical application tools, and a results-focused process for success in a managerial role. The workshop series was entitled “**Managers and Leaders: Keys to Success**” and included such topics as Talent Acquisition/Search Process, Employee Satisfaction and Engagement, Rewards and Recognition, Trust, Influence and Change, Teams and Groups, and Mentoring and Coaching. A sub-set of the workshops was delivered, and the remainder will be re-scheduled for the fall of FY 12.

IT Leadership Workshop: Two AITS employees attended the Campus IT Leadership Workshop (ITLW). The workshop incorporates and enhances some of the aspects of the MOR Associates IT Leadership Program, The workshop is offered to IT professionals and is designed to share leadership concepts, strategies, practices, and knowledge with a larger audience of emerging campus IT leaders.

IT Pro Forum: AITS partnered with CITES and other college, department and unit IT groups to provide a platform for IT professionals to share updates about innovative and far-reaching projects, facilitate dialogue, and catalyze networking among IT professionals at the IT Pro Forum. The FY 11 theme was **Vision. Action. Results.** The event focused defining community driven IT initiatives, connecting IT professionals with the tools and resources they need, and highlighting successful collaborative efforts.

ITPC Summit: At the ITPC summit, administrative IT plans for FY 12 were developed, and input on integrating the ITPC process with campus and college administrative IT prioritization processes was gathered, with the hope that more users will be enabled to connect with the resources they need. The ITPC Planning Summit brought together technical and functional leaders from across the University to collaborate on areas of administrative IT on which to focus. Participants were offered the opportunity to provide feedback on the ITPC process to help create a more effective integration of the ITPC process with campus and college governance for administrative IT project investments.

Consolidated AITS Website

Create a one stop shopping for services, standards, processes, pricing, policies, news, assistance, and contacts both internally and externally.

A team is currently working to create a new AITS website to better provide information and services to the University community. In FY 11, the existing sites for AITS, Decision Support, and UleRA were consolidated into a single site and re-platformed to the Intrafinity SitePublish product. Development continues on content and user interface redesign.

Business Relationship/Development Management

Coordinate the customer needs to the delivery and modification of AITS services.

Customer Relationship Management: AITS continues to pursue improvements to customer relationship management and tailoring services to meet the existing and emerging needs of our customers. Early in the year, a small team was formed to investigate and provide a proposal for improving AITS customer relations. This team completed and submitted its recommendations in the last quarter of year. These recommendations are currently under review and a number of them are moving towards implementation.

Admissions Service Desk Queue: After technical incidents affected the admissions offices, AITS created a High Priority Admissions Service Desk queue, which is monitored by specialized staff during peak admissions times. AITS wants the admissions offices to understand that their needs will be met quickly during these critical periods.

SECURITY AND COMPLIANCE

Comprehensive Compliance Monitoring

Create an ongoing coordination plan to ensure we continue to assign responsibility for implementation and track maintenance.

Comprehensive Compliance Monitoring: The Enterprise System Assurance (ESA) staff drafted a proactive, ongoing compliance-monitoring plan. The goal of the Plan is to help ensure responsibilities are identified/assigned, to reduce Information Technology risks and support internal/external compliance audit activities.

Security Compliance

Review, revise and ensure compliance with all AITS and University security policies and procedures.

Coordinate Annual User Access Reviews: As required by an External Audit Finding and to align with business practices, the ESA staff coordinated the annual user access review with Unit Security Contacts (USCs). The purpose of the annual user access review is to help ensure the access granted to staff is appropriate and approved. The user access review also helps to identify changes to various departmental USCs were needed (right person for the right job).

BANNER HR/Pay and Student Security Group/Profile/Class Review: AITS Security Administration facilitated tasks necessary with HR/Pay, Financial Aid and Student representatives to complete the review of BANNER HR/Pay, Financial Aid and Student Profile/Class/Form relationships. Additionally, owner/responsible parties for all BANNER HR/Pay, Financial Aid and Student Profiles were established. It is the duty of the owner/responsible parties to help ensure the forms associated with classes are appropriate and approved. Furthermore, as new Banner forms are delivered, the owner/responsible parties will help AITS ensure the forms are added to the correct classes.

BANNER 8 Security Enhancements: AITS Security Administration began an internal project to analyze and document the work effort required to implement and support the BANNER 8 security enhancements. The hours identified in the analysis project will then be use during FY 12 to create an internal project necessary to proceed with implementing the BANNER 8 security enhancements.

Streamline Access Provisioning: To help streamline access provisioning and provide adequate coverage, AITS Security Administration assumed responsibilities for provisioning EDW/Data Warehouse and Banner Finance settings (e.g. Finance approval queues) access. This centralized approach for provisioning access helps to ensure consistent processes are followed and sufficient resources are in place to handle the increases in access requests.

Unit Security Contact (USC) Portal ITPC Project: As the Identify and Access Management (IAM) project matured, it became evident, proceeding with the USC Portal ITPC Project would not be an efficient and effective use of University resources. With the agreement of the project sponsors, ESA placed the project on hold. During FY 12, ESA will participate in the IAM vendor selection process.

Committee on Institutional Cooperation (CIC) Security Working Group: AITS will continue to be a participating and contributing member of the CIC Security Working Group (SWG) and consortium for Big Ten schools. This will allow AITS to continue to evaluate and monitor the progress of our IT security efforts in comparison to our Big Ten peer institutions. AITS has taken on responsibility for chairing CIC SWG meetings as that role continues to rotate through the Big Ten schools. In addition, we continue to be actively involved in the CIC InCommon Silver activities.

EAS Administration Enhancements: The EAS Admin Application was enhanced to provide better search functionality for existing NetIDs. This new functionality allows a comprehensive search of all repositories. This provides a solution to the problem that has been experienced by all three campus IT units where a manual ID search is conducted, an ID is chosen, and then it turns out that the ID is not available for use as an Enterprise ID.

PCI Compliance

Review and revise PCI-related policy and assist the University with compliance for PCI policies and procedures.

PCI Compliance: AITS continues to provide guidance and technical oversight of PCI compliant implementations including policy and process reviews, architecture reviews, as well as periodic vulnerability and penetration testing. Major University merchant implementations in FY 11 included the Urbana and Chicago campus bookstores, Chicago Parking, Urbana Bevier Hall, and Urbana Assembly Hall. While the Merchant Card office will not have completed PCI Compliance for all merchants by end of FY 11, AITS Enterprise Systems Assurance continues to meet our commitments as the merchants become ready for PCI services.

Identity Management and Login Credentials

Unify identity management into a single logical and effective infrastructure.

Identity and Access Management (IAM) Solution: The objective of this project is to identify current issues with identity management, review and modify existing policies, document requirements, and recommend the deployment of enterprise wide IAM system for Access Management at the University of Illinois. The assigned project team will be looking into the following six tenets of identity management: identity governance, identity affiliations, identity business intelligence, identity proofing and provisioning, authentication, and authorization.

In FY 11, the analysis phase of this project was completed with a recommendation to purchase a product or set of products to fulfill the University needs for Identity and Access management. This project is scheduled to take three years to complete. For the status of this project, check the following web site: http://www.utmt.uillinois.edu/identity_and_access_management_project

Affiliation Service: The goal of this project is to address the problems with tracking non-traditional identities affiliated with the University for the Identity and Access Management project. This project will allow for the creation of streamlined and standardized business processes, reduce the cost of future IT projects, provide significant labor savings, and lay the foundation for an enterprise identity and access management solution by:

- Creating or identifying authoritative sources and business processes to manage non-traditional University affiliated identities at the enterprise level.
- Modifying or creating a service to provide event-driven messages as those affiliations change.

This project was combined to be implemented in conjunction with the Identity and Access Management (IAM) project. Both the Affiliation and IAM projects are projected to take three years to complete.

Moodle On-line Training EAS Integration: AITS continues to work with Vice Chancellor for Equal Opportunity and Access and ATLAS to provide an EAS integration for the Moodle On-line training application.

Management-level Processes

Review and revise management and operational policies within AITS. Document unwritten policies and procedures within AITS.

Performance Appraisal: AFM developed an integrated competency based performance appraisal instrument, which takes into account both objectives and behavioral competencies -- while linking development goals to the competencies and organizational objectives. AITS collaborated with ER/HR, and a draft of a form proposed for use across all UA units was developed using components of both the AITS and UA proposed forms.

Stipend Program Review: AFM conducted a multi-phased review of the AITS stipend program, and implemented related recommendations. AITS secured an exception from OBFS to continue the stipend program based upon the nature of services AITS provides and the requirement that staff be on call to provide 24/7 high availability services to the University. A goal of the review was to reduce the overall program expense by approximately \$8,000. To reduce the program expense, leveling occurred for all Internet stipends at a single compensation level for all employees receiving a stipend. Additionally, AITS applied a downward adjustment to all stipends that exceeded the leveled Internet stipend and/or the current rate from the two carriers, given that new package costs for voice/text and data with primary carriers (e.g. Verizon and AT&T) has dropped since the pilot implementation of the program.

Administrative Process Improvement: AFM serves as a willing advocate for sound and responsible management of AITS resources and provides advice in support of AITS's administrative services. In FY 10, nine FTE provided business and administrative support to AITS. In FY 11, AFM continued to provide highly reliable, responsive, and effective service with two fewer FTE, offering a recurring cost savings to the department in excess of \$90,000.

Incident Management: AITS continues to coordinate incidents utilizing the process in place that includes updates to users during critical incidents, an executive summary, and follow-up information on what caused the incident, how it was resolved, and what we were doing going forward to prevent future occurrence. This process will continually be reviewed and refined to improve efficiencies.

Enterprise Architecture

Formally document the outcomes of the Enterprise Architecture Committee to provide assistance in collaborating with AITS to access enterprise data.

Create EAC Web Page on the AITS Sites: The goal for this project is to create an Enterprise Architecture web page to communicate the EAC standards, decisions, and work. This page will also provide an overview of the UA Enterprise Architecture. This web page will be available by August 2011.

Deliver BI via Campus/University Portals: AITS continues efforts to deliver Corda Centerview graph and/or Business Objects products via a portal. A pilot project successfully delivered report content from the EDDIE environment. Enhancements to the uPortal environment are in development to enhance the functionality of the Business Objects delivery. A second research project has proven the viability of the

Tableau Server product, leading to its purchase. This product will facilitate the development of performance metrics for easy deployment via the campus or University portals.

Document the Enterprise Architecture Decisions and Standards: EAC continues efforts to document the UA Enterprise Architecture standards. This documentation includes the AITS Architecture Stack, Architecture evaluation tool, and the Forms Tools Options. This documentation will be made available on the AITS web site by August 2011.

FY 11 Other Accomplishments

A number of the initiatives AITS completed or were engaged with in FY 11 were operational in nature or were important to the institution, but do not directly support any of the AITS Strategic Objectives. These initiatives and accomplishments are detailed below.

Application Security Scanning Partnerships: AppScan has been used by Quality Assurance for several years to scan new web applications and rescan all web applications on a six-month interval as new vulnerabilities are discovered and added to the repository. In FY 11 Quality Assurance set up and maintained an AppScan machine for local CITES application security scanning. The CITES Security team was then trained on AppScan by AITS Quality Assurance. The knowledge transfer extended to a University-wide meeting for IT Professionals known as the Caffeine Break where two AITS Quality Assurance staff members were selected to field security scanning questions as technical experts.

Implement Enterprise-Level Test Management Solution: HP Application Lifecycle Management (ALM) replaced the AITS in-house developed QA Tool. ALM is compatible with our HP Quick Test Professional and HP LoadRunner software and internally developed scripts utilized in performance, functional, and automated regression testing. The new system provides enterprise level project data, analysis and tracking, as well as integration for automated functional and performance testing. In FY 11, users began migrating to the new ALM system and training was provided to all users of the new system by the QA Team.

Update QA Server Platform: Quality Assurance was able to update the QA Server Platform that included Windows 2000 servers that are utilized for functional, regression, performance, and automate the testing of hardware and software at AITS. Quality Assurance performs the testing for internal projects as well as other UA departments and campus entities such as CITES, UOCP, and ISTC. The new hardware and Windows 2003/2008 platforms are vendor supported and these updates will allow increased capacity and consolidation. QA is continuing the upgrade to completion in FY 12.

Upgrade Tomcat instances to Tomcat 6: AITS began upgrading the shared enterprise systems to use Tomcat 6. This upgrade will bring existing applications to a more current platform and make new Tomcat features available to various development teams. Currently, AITS has upgraded select non-production servers to ensure compatibility and address any outstanding upgrade issues. This project will continue into FY 12.

Upgrade SonicMQ and AppWorx: AITS upgraded AppWorx and SonicMQ to remain on a supportable product releases. The Sonic upgrade was completed in January of 2011 with improvements including reduced interdependencies to limit impact of large volume business events, simplifying deployment pattern to simplify production migrations, and improved monitoring. The Appworx upgrade was completed in March of 2011 with Service Pack 6 applied in May of 2011. This system has been moved to the new vendor (UC4) architecture and is now on a supportable version.

Vendor Database Project: AITS integrated Upside, a Contract Management system, with the Vendor Database product allowing improved data access and integrity.

SEIU Contract Settlement: Chicago's Service Employees International Union (SEIU) came to an agreement on their contract that had been in negotiations since 2009. To handle the agreements for each of the three bargaining units in the union, AITS worked with University and Chicago Human Resources to configure Banner and set up retroactive pay for years one and two of the contract. The contract settlements were extremely complex, requiring calculations that had not been done in Banner previously.

Student Web Application Modifications: The current web application, which is used extensively by the University of Illinois was modified to provide better functionality for users including modification to the agreement page that an applicant must submit stating that what they are about to submit is accurate information. Another change introduced a user-friendlier format for the summary page, which provides the applicant an easier to read and understand version of their application after submission, which will result in fewer calls to the Office of Admissions.

Graduation Application: Banner 8 functionality has given the campuses an opportunity to move to a more efficient graduation process. Each campus has utilized this functionality, which will also allow us to retire a legacy application (PDL) with the addition of the new processes.

Student Transcripts to PDF: By generating and delivering transcripts as PDF files for some instances, the University can provide more timely and convenient services, reduce paper and postage costs, and reduce staff labor associated with printing and sending transcripts. This service is being utilized on all three campuses.

Hudson Implementation: AITS has completed the deployment of Hudson for managing software development and deployment in FY 11. Hudson has improved software development quality and reduced deployment errors.

ColdFusion Upgrade: AITS has completed the upgrade of Human Resources Information Systems (HRIS) applications to ColdFusion 9 in April 2011. During this upgrade, AITS implemented operational improvements to HRIS systems by moving production and development artifacts to Subversion. In addition, the operational support has been migrated to AITS Computer Operations Engineering.

Batch Management Software Enhancements: AITS established a new AppWorx/UC4 (batch management software) clustering methodology for Business Object servers to allow for better resource utilization, to reduce the demand for new hardware and to reduce batch-processing time by increasing throughput. In addition, AITS implemented a standard encryption process to allow full control of file transfer in AppWorx/UC4. The process reduces implementation time and improves consistency and reliability.

Nelnet Cashiering Application: The Nelnet cashiering system replaces the current SalePoint Cashiering product and introduces functionality that will enable approved Cash Handling units on all UI campuses to enter deposit information via a secured, web-based form. The Cashiering System leverages Nelnet's Banner Integration Kit to access and update Banner in real time. This application is being used by USFSCO staff on all three campuses.

Legal Files/Prodiagio Contract Management: Projects were begun for the new Legal Files and Prodiagio Contract Management vended applications. Virtualized hardware was secured and development installations were completed for these new applications as project work is under way.

View Direct Policy Rewrite to and Upgrade Support BOXI: ViewDirect is utilized by end users to view reports produced by Business Objects. In order to support a major upgrade to Business Objects XI, ViewDirect was upgraded and hundreds of policies were rewritten and migrated to production.

Implement Poller Application: AITS has improved operational efficiencies and system monitoring by implementing monitoring at the EAI service level via the Poller application.

Migrate OBFS SQL Servers to New Hardware: As part of OBFS hardware refresh, AITS migrated to new hardware and upgraded to SQL Server 2008 64-bit.

Moving Documentation to SharePoint: Many documents have been moved to the SharePoint documentation library. Other documents have been organized and staged on the LAN and are ready to be moved to SharePoint. Further movement of documentation is on hold pending an upgrade to SharePoint 2010 that will provide additional features and search functionality. A support structure is also being defined.

Solaris Server Maintenance: We continue to shorten the maintenance windows needed for Solaris servers by leveraging LiveUpgrade and ZFS snapshot technologies to streamline our patching process. These technologies allow us to complete most of our maintenance tasks prior to the actual maintenance event.

Solaris Server Virtualization: AITS continued the virtualization of Solaris environments, which allowed consolidation of more workloads onto newer servers forgoing the maintenance costs of the older servers. During the consolidation of environments, we also put ourselves in a position to drop Veritas filesystem licensing on a number of servers for yet more cost savings.

Wide Area Network Vaulting: AITS began moving our production backups to our non-production data center across the WAN instead of using physical tapes shuttled by a courier service.

Business Objects XI Release 3.1 Upgrade Implementation: AITS planned to upgrade the Business Objects Enterprise system to Release 3.1 and the current service pack. During User Acceptance Testing,

several defects in system functionality were identified and SAP Support confirmed these defects will require code changes and will be included in the next Service Pack or subsequent Fix Pack. The upgrade will be completed in fall 2011.

Electronic I-9 System: The purpose of this project is to implement a vendor hosted electronic I-9 system. The Tracker I-9 system ensures I-9 compliance through automated error identification, retention period tracking, and recertification monitoring capabilities. Employees are able to complete their I-9 forms online and departments are able to process and send I-9 data electronically to HR. The Tracker I-9 system provides a robust set of Web services that lay the foundation for future integration with University HR systems and processes. Currently UIS and ER/HR are using the system for the processing of electronic I-9s. UIC and UIUC plan a Tracker go-live date of July 1, 2011.

Internal Projects: The AITS PMO and Management Group work together on a process to solicit, evaluate, select, and prioritize internal projects. AITS Internal Projects are created to fill an identified need that is out of scope of the ITPC process. Internal projects are investments in providing the standards, tools, and technologies AITS requires to best serve the University in our evolving technological environment.

The following internal projects were completed in FY 11:

- AITS-0018 Upgrade Oracle to 11g for non-Banner databases
- AITS-0020 Update QA Server Platform
- AITS-0022 Replace QA Test Management Tool with Test Director
- AITS-0039 Implementation of Progress Actional for SOA Operations
- AITS-0045 Identity Management Analysis Project
- AITS-0052 License Tracking Analysis Project
- AITS-0053 Batch Application Migration Effort
- AITS-0054 Storage Mgt. Snapview/Replication/NQM and alt. Media Application Testing
- AITS-0055 Cisco Director Replacement
- AITS-0063 ITIL Configuration Management
- AITS-0064 ITIL Re-deploy Change Management on CA UniCenter
- AITS-0067 DS PS: Knowledge Center
- AITS-0082 Bluestem Upgrade
- AITS-0085 Informatica Upgrade 8.1.1 to 9.0.1

FY 12 Strategic Goals, Objectives, and Initiatives

FY 12 Strategic Goals

The AITS strategic goals are broad statements indicating the specific strategic areas that AITS will focus on in supporting the University's mission and our responsibilities as an organization. In the pursuit of realizing these goals, the strategic objectives in the next section serve as actionable broad and specific initiatives that AITS will pursue in order to fulfill these stated strategic goals. AITS's strategic goals for FY 12 are:

The Information Continuum

- Provide beginning to end information delivery to our customers including transactional, historical and analytical information resources to facilitate operations and support decision-making.

Do Work Better, Faster, and Cheaper

- Pursue opportunities to improve and offer new services, increase productivity, and drive out costs wherever possible.

Simplify IT

- Improve the breadth, quality, and access to information technology services.

Trust

- Build and strengthen relationships with people and organizations throughout the University based on mutual trust.

FY 12 Strategic Objectives

The AITS strategic objectives were created through discussions with our customers, and are refined by internal conversation within AITS. In planning our objectives for FY 12, a number of themes emerged to drive their development. The University's revenue has almost equal components of tuition, state funding and sponsored research. These make up about \$700M each, and they are vital to the University. Even though AITS cannot directly influence these important aspects of the University, our strategic objectives can help ensure that our revenue is maximized and our expenses minimized.

To do this, we work on objectives that help departments, colleges and campuses access that information they need to make decisions. Since the U of I is highly decentralized, it is important to provide the infrastructure for accurate and timely information to assist decision makers and managers throughout the University. Students are the source of tuition, and although administrative units are not the reason students attend the U of I, a bad experience with the University can make it less likely for students to continue their attendance. We must help provide transactional services that make it easier for students and faculty to perform their work and gather the information needed to be successful. In regards to sponsored research, the faculty continues to write more proposals and receive more awards each year. Research administration is key to making this process more efficient so that more proposals can be accurately submitted and awarded with the same (or less) administrative support. These are just a few of the examples of why our strategic objectives are chosen and how they are relevant to the success of the University.

Each objective has a different priority, and the priority changes throughout the year depending on environmental factors such as funding, urgency, University needs, vendor partnerships and human resource availability. Below is a summary of significant initiatives AITS intends to pursue in FY 12. These initiatives will be a key component in next year's annual progress report when reporting progress against our strategic objectives.

SUPPORT THE ADMINISTRATIVE REVIEW & RESTRUCTURING

Support the implementation of the Administrative Review & Restructuring (ARR)

recommendations: AITS will implement projects specified in the UA IT Council review of the ARR recommendations including:

Grants Management Software

AITS is working with the Vice Chancellors Research on their evaluation and assessment of the Grants Management software.

Reduce Application Portfolio

AITS will reduce the application portfolio to reduce support costs.

Workflow Project

AITS will implement and support workflow tools, software and standards.

Disclosure Portal

AITS will implement and support the disclosure portal.

Reduce Power Consumption for Desktop Computing

AITS will reduce the power consumption for desktop computing.

Outsource Where Beneficial

AITS will look for opportunities to outsource where cost effective.

Note: A number of the items below also support the ARR Implementation

UNIVERSITY INFORMATION TECHNOLOGY INITIATIVE SUPPORT

Support Executive CIO Initiatives

AITS will assist in the support and implementation of initiatives related to the Office of the ECIO that could include:

- Governance Initiatives
- Service Improvements
- Expense Reductions
- Performance Measurement

Shared Services

Involvement in increasing support of shared services for Data Center, Desktop Support, Server Support, Storage, and Service Desk.

INFORMATION MANAGEMENT

Departmental Planning and Information Provisioning

Analyze and deliver beginning to end information delivery to the customer.

Decision Support Function

AITS will work with Institutional Research (IR) and the University Technology Management Team (UTMT) Business Intelligence/ Performance Management (BI/PM) group to optimize data utilization across the enterprise.

Document Management

Create University standards for document imaging, storage, use, retention and disposal.

Unified Portal Strategy

Plan, create, and implement a unified portal strategy.

Information Management

Create a roadmap for the future state of obtaining, storing, validating, moving, using and disposing of data.

Proactively Expose Banner Data

Provide consistent and straightforward methods for departmental applications and third-party applications to utilize authoritative Banner data.

Data Quality

Provide consistent policies, procedures, and data entry standards.

LOWER COSTS / STEWARDSHIP OF RESOURCES

Equipment and Server Space

Determine the most efficient locations and configurations for primary and secondary (BCP) data centers. Consolidate any applicable equipment, including by equipment of others throughout the University.

University of Illinois Community Source Solution Development

Work with departmental, college and central IT organizations and individuals to develop a process for sharing solutions across organizations to leverage and reuse IT resources. Where appropriate, extend local solutions to a broader audience to be maintained and offered at centralized points (college, campus, UI).

PC Thin Client and Application Server

Create a plan to provide the following: Moving people to thin clients and mini PCs and configuring a Terminal Services and Citrix environment to host applications and clients.

People

Preserve employment to the highest extent possible. Discussions related to the reallocation or reduction of staff should focus on impact analysis for services provided by AITS.

Green IT

Create our statement of environmental sustainability.

Aligning Administrative IT with Partners

Continually search for opportunities to consolidate administrative services and functions where doing so can reduce costs while improving the quality and access to services and information.

Use What We Own

Increase functionality of enterprise systems by specifically using more of Banner delivered functionality and eliminating as many costly modifications as possible. Be a Leader in the SunGard Community Source Initiative to enhance baseline product functionality at nominal cost to the UI and partner institutions.

Support the Unified Communications Project

Participate and provide support for the UCP initiative to converge email, calendar, voice, conferencing and instant messaging services.

Vendor Interaction

Leverage partnerships with our vendors to maximize benefit to the University and minimize costs.

PROCESS IMPROVEMENT / INDUSTRY BEST PRACTICES

Policy Documentation and Ownership

Organize all policies and create clear rules for establishing, maintaining, and owning policies. Ensure that every policy relevant to AITS has a champion and a caretaker.

Business Process Analysis

Identify avenues to create a more common and standardized BPA.

Coordinated Administrative IT Governance

Evolve the ITPC into a more complete solution. Work with the campuses to integrate with their governance processes.

RELATIONSHIPS WITH OUR CUSTOMERS

Communication and Expectation Management

Complete and publish a communication plan including publications, media, schedule and constituents served.

Get Students Involved

Provide opportunities for students to assist AITS through direct involvement or through college faculty.

Administrative Services Training

Partner with other organizations to increase the consistency and access to IT training.

Consolidated AITS Website

Create a one-stop shopping for services, standards, processes, pricing, policies, news, assistance, and contacts both internally and externally.

Business Relationship/Development Management

Coordinate the customer needs to the delivery and modification of AITS services.

SECURITY AND COMPLIANCE

Comprehensive Compliance Monitoring

Create an ongoing coordination plan to ensure we continue to assign responsibility for implementation and track maintenance.

Security Compliance

Review, revise and ensure compliance with all AITS and University security policies and procedures.

PCI Compliance

Review and revise PCI-related policy and assist the University with compliance for PCI policies and procedures.

Identity Management and Login Credentials

Unify identity management into a single logical and effective infrastructure.

FY 12 Departmental Strategic Initiatives

AITS departments implement initiatives in order to fulfill the AITS strategic objectives as outlined above. For FY 12, these initiatives are described below by department. The first section describes initiatives that are shared among multiple departments in AITS.

Shared Initiatives

Banner 8.4 Upgrade: AITS will upgrade to the most recent version of AR, Finance, General, HR, Student and Self-Service releases of Banner in order to stay as current as possible. This allows us to stay up-to-date with regulatory releases and patches, and allows us to take advantage of new functionality within Banner, including Community Source functionality that was at one time local modifications.

Common Good Services: AITS will strive to offer the University community an increasing array of Common Good Services in the areas of:

- Student, Faculty, & Staff Support
- Productivity Applications
- Communications
- Business Applications
- Infrastructure

Partnering with Campus IT: AITS will continue to seek opportunities to partner with campus IT units to leverage our combined broad perspectives and expertise to provide new and improved services to the University community.

Client Services Center (Security and Service Desk Improvements): The University IT environment is rapidly evolving. AITS recognizes the need to be proactive during this time of change; to maintain focus on providing the highest level of customer support and to continue growing and developing in the current University climate. To that end, we have combined the Service Desk and Enterprise Systems Assurance (ESA) Security Administration into one dynamic team within Computer Operations Engineering. As AITS merges these groups together during this fiscal year, review of work processes will be performed to ensure proper segregation of duties and controls are addressed. Combining these resources into one Client Services Center will create greater depth and ability to respond to client needs, with a goal to dramatically increase the overall level of AITS customer support.

The Client Services Center will include walk-up service. Services offered in the walk up area will be highly interactive, based on how customers actually utilize our services, to include:

- The center will provide hands-on help, demonstrations and scheduled time with experts. Departments and campuses outside of AITS will be asked to partner in this service.
- Services for Unit Security Contacts where you can ask questions and receive training
- Services for users to ask questions regarding their access and accounts
- Provide clients with general computing information, and as it applies specifically to the University with on-site personalized answers and self service kiosks

UA Portal: The goal of this project is to deploy the Luminis portal infrastructure to serve as a portal for University Administration (UA). The UA portal will provide:

- Organization of the most common links and applications used at the University;
- Personalization based on roles and affiliations;
- Customization abilities for end users;
- Decentralized control of content authoring and targeted announcements

Identity and Access Management (IAM): The goal of this project is to implement IAM solution to address the University of Illinois needs to manage Identity and Access issues. This project will be implemented in three phases that span over 3 years.

Phase 1 - Identity Provisioning and Administration

Phase 2 – Access Management

Phase 3 – Identity Business Intelligence and Auditing

DS Applications Migration and Support: This is an on-going effort to transition support of applications developed by DS to ADS and EAI teams. This effort includes decommissioning applications that are no longer required, and identifying possible new applications. As part of the migration, these applications will be re-architected to be consistent with the EAI support standards.

Tomcat 7.0: AITS will upgrade application servers to Tomcat 7.0 to stay current and on a supportable platform. By keeping up with new release of Tomcat, AITS will be able to collaborate with others to develop shared services.

Contract Management System: This project will implement a contract management software solution (Prodagio) that will enable the University to manage the entire contract creation lifecycle (contract request, authoring, negotiation, approval and final execution). Pilot implementations are scheduled to begin in January 2012, with rollouts to continue throughout 2012. Prodagio will become the system of record for all finalized contracts.

SunGard Banner Relationship Management System Implementation: The installation and implementation of the SunGard Banner Relationship Management System which contains modules for Relationship (managing the prospective student experience) and Performance (providing metrics) for both Recruiting and Admissions (acknowledging the continuum from when a prospect first makes contact through becoming a student).

Travel and Expense Management: This project will implement Infor Expense Management to provide employees the capability of entering reimbursement claims into an online system. The first go-live with a pilot group of participants is scheduled for early FY 12.

SharePoint 2010: SharePoint will be upgraded to the 2010 version to stay current and be on a supportable version. SharePoint 2010 offers many features that will simplify collaboration, file management, and authentication.

Unified Communications (UC): CITES and AITS working are together in a number of ways on the Urbana UC initiative. The organizations are migrating users and Email into a new, jointly operated Active Directory forest. The new forest is also the basis for a Microsoft Lync implementation. Lync provides telephone, voice, video, presence, instant messaging, voicemail, roaming, and conferencing services. AITS has completed the acquisition of hardware for Exchange and Lync. Both components will operate within the AITS Data Center in Chicago. The new UOFI domain is available and UA user migrations have begun. UA Email migrations are scheduled to begin in the fall. Lync migrations are to be completed by June 2012. AITS is also providing support with security and program coordination for the project.

System Upgrades: AITS will perform a number of system upgrade in the coming year in order to provide new functionality to users and remain supported by vendors. Some upgrades not discussed elsewhere in this report include:

- Altiris License Management Application
- Bomgar Remote Assistance Application
- Urchin Reporting and Analysis Tool
- Clarity Portfolio and Project Management Application

Administrative and Financial Management

Administrative Process Improvement: AFM serves as a willing advocate for sound and responsible management of AITS resources and finds ways to provide recurring cost savings to the department.

Social Environment Enhancement: AFM sponsors and continues to participate in developing and enhancing working conditions that are excellent for both the employees and the organization through activities sponsored by the social committee. The group works together to offer a variety of fun and inclusive activities to build better relationships within AITS and achieve organizational social objectives.

Rewards and Recognition: AFM members work with a group of AITS volunteers to promote and enhance employee programs that encourage recognition, professional development, and personal growth.

Human Capital Initiative and Strategic Workforce Planning: AFM has continued its commitment to organizational effectiveness through resource management, communication mechanisms, and ongoing evaluation to meet the needs of AITS. AFM has conducted a review of the existing talent management framework and has started to identify the pieces of the framework currently in place, discuss what is working well/what would benefit from modified processes or implementation of new processes.

Documentation of current state and future direction (approach, priorities, and next steps) continues. The leadership of AITS will review and prioritize items so development of a three-year plan, aligned with the University's long-term human capital plan, can begin in earnest early in FY 12.

Emergency Preparedness: AFM will continue to coordinate emergency procedures for all AITS sites.

Applications Development, Support, and Data

Notice of Appointment (NOA) Rewrite: This project replaces the existing Notice of Appointment with a version consisting of more concise and accurate information regarding the employee's position, and strives to reduce the number of erroneously generated and inaccurate NOAs, reducing the amount of time and effort spent by HR and AITS troubleshooting issues.

Adjustment Notification Application (ANA): This project takes into account previous work done on current pay period adjustments and will also leverage the HRFE infrastructure, in order to address the issue of double entry of pay adjustment data into both ANA and Banner. This project team will work closely with the HRFE Steering Team to ensure that the proposed solution satisfies the needs of both Payroll and HR, given the desire to create a HRFE module to satisfy the business requirements for ANA.

Campus Recreation - Time Clock Interface to Banner (UIUC): This project will use an established process to feed time clock data for Urbana's Campus Recreation department into Banner, rather than the current process of Campus Recreation employees manually keying their time into Banner twice per month, with supervisors making adjustments as needed. This feeder interface will automate the entire process, making more efficient use of resources.

Payroll Involuntary Deductions: The University has a federal obligation to process involuntary deductions, and currently, child support, alimony, and garnishments are managed manually through an in-house database. This project will take advantage of the Electronic Income Withholding Order Portal that allows states to process these withholdings electronically.

FY 12 HR Front-End Support: This project will provide application maintenance and support for the HRFE for fiscal year 2012.

1098-T Enhancements: This project expands on the previous 1098-T project, and will display the details behind the 1098-T totals. This information will come from Banner SAR transaction history, UIC Study Abroad data, Payroll fellowship stipend report, and Payroll employee tuition benefit report. This information will be displayed to students in Banner Student Self-Service.

Banner Events Management Beta Participation: In order to gain a better understanding of Banner 9 and the new Horizon architecture, we would like to participate in the beta testing for the Banner Events

Management project. This will require performing the Database Extension Utility process in a test environment.

UIeRA Business Process Improvement: A project is underway to perform a business process analysis related to research administration across the University, including pre-award, regulatory compliance and oversight, post-award and business analytics.

Proxy Access: This is an ongoing collaborative project with SunGard and several other institutions to make web proxy access available in Banner. Testing is currently in progress, with a tentative plan for release to baseline Banner in November 2011.

SunGard Community Source/Large School Consortium Participation: Our participation in various SunGard committees allows AITS to be involved in accepting modifications for baseline, have involvement in beta opportunities and stay up-to-date on SunGard's upcoming development plans.

VSL (Vacation Sick Leave) Banner Integration: We will be completing phase 2 of the VSL Banner Integration project (ITPC-0320) in early FY 12. Phase 2 will include a near real-time feed of biodemo and employee data from Banner into VSL and some minor fixes to the EmployeeLeaveBalance web service released in phase 1. The EmployeeLeaveBalance web service enables the various VSL applications throughout the University to upload their employee vacation and sick leave data into Banner.

Ethics Reporting System: The support and maintenance of systems utilized for Annual University Ethics Reporting is moving from Planning & Budgeting to AITS. This will require that the system be redesigned and re-platformed to make it sustainable moving forward.

Campus Charitable Fund Drive System: AITS is working with the Chancellor's Office to replace their existing Campus Charitable Fund Drive system. We are currently reviewing existing system functionality, evaluating possible vended applications, and determining what integrations will be required.

SDLC 2.0 Rollout: AITS will conduct formal training of SDLC 2.0 with AITS staff. The Software Engineering Process Group will continue to review, revise, and distribute changes to the SDLC.

PRZM 2.0 Implementation: A major release of PRZM (the Capital Programs project tracking software) will be released in support of the UOCP requirements. The release will be done on the latest release of Lotus Domino and will have a new look and feel plus further integrations with the Vendor Services Application.

Transition Support and Redesign flycmi.com: The University's Real Estate Services office has assumed oversight responsibilities for the Willard Airport in Champaign. AITS now supports flycmi.com and has converted the site to the Intrafinity SitePublish content management platform. In cooperation with Real Estate Services, the site will be redesigned to provide a more current look and feel.

Virtualization of Non-production Application Environments: This effort will replace hardware that supports AITS non-production web applications with virtualized environments, which can support newer frameworks and products.

Vulnerability Scans and Fixes: Web applications developed and supported by AITS are scanned for vulnerabilities by the QA team on an on-going, rotating basis. Application vulnerabilities revealed by the scanning process are corrected the Application Development team, and the fixes are tested by TAM and ESC analysts, with application customers giving final approval before the corrected applications are migrated to production.

Course Enrollment Service: AITS is working with CITES to allow them to query for course section enrollment availability data in near real-time. AITS has also been working with the Illinois Office of the Registrar to make sure we are following appropriate guidelines for the use of this data. Development of this service is complete and testing is underway.

EAS Authentication using Web Service: AITS was involved in setting up EAS authentication for Icard applications, Prodagio, Tracker I9, and PRZM. I9 and I-Card applications have been implemented in production. Prodagio and PRZM will be implemented sometime in FY 12.

Tracker I9 Integration with HR Front-End: The new Tracker I9 software package will be integrated for use with HRFE.

Transition P-Card Support to AITS: Application Development will enhance and assume application development responsibilities for the Pcard application. This includes removal of a large number of security vulnerabilities.

Benefits Choice: The annual Benefits Choice open enrollment period was particularly challenging for FY 11. Uncertainty about which healthcare insurance providers were contracted, an unexpected due date change, and a 90-day extension of prior-year health care contracts, among other things, created technical, coordination and communication challenges. Because of the contract extension, the FY 11 Benefits Choice period is extending into FY 12.

Computer Operations Engineering

Application Startup and Stop: This project will implement the startup and stop framework and scripts recommended by the Enterprise Architecture group. The goal of this project is to simplify the start/stop of web and messaging applications, which will reduce down time during administrative application outages and expedite recovery during un-planned events.

Continue to Develop the Usage of Actional: The Actional software infrastructure deployment was completed in April 2011. This software provides an end-to-end OpenEAI and Web Applications monitoring. The power of this tool is its ability to translate system into business metrics. AITS will be working on developing the business metrics based on data monitored by Actional in FY 12.

Continue the Migration of HRIS Applications to Subversion: Efforts continue with the migration of support for HR applications to the EAI team. As part of this effort, HR application artifacts will be migrated to SVN.

AITS Infrastructure Mapping for CMDB: AITS will complete AITS maintained infrastructure relationship mapping in the CMDB.

Transition Web Applications to New Virtual Application Servers: AITS will continue the migration of web applications from physical hardware to virtual servers. This change will improve system utilization and efficiencies, reduce cost, and help with green IT initiatives.

Implement Auto Configuration: The CA Auto Configuration Application will be deployed to improve data gathering and auditing of the CMDB.

CMDB Shared Service: COE will work with AITS and non-AITS departments to offer the CMDB as a shared service.

AITS Collaborative Web Services: AITS will continue to develop the AITS Collaborative Web Services strategy, structure, and governance.

Linux Server OS Upgrades: Red Hat Enterprise Linux 3 has reached the Extended LC Support phase of its life cycle. Work to upgrade all Linux servers to Red Hat Enterprise Linux 5 and 6 is nearing completion.

Linux Server Virtualization: All pre-existing Linux server instances are being migrated from physical hardware to virtual machines. All new Linux server deployments are also being installed on virtual machines. As of June 2011, nearly 100 virtual machines have been deployed, resulting in reduced hardware and staff resource requirements. Having experienced no negative results, this initiative will continue during the next fiscal year.

Administrative Network Upgrade: The Administrative Network is becoming part of an enterprise services network, which is to be shared by all three campuses and University Administration. Toward that end, AITS and CITES will collaborate on new network exits at the AITS Data Centers in Chicago and Urbana. Both exits will serve as infrastructure components for Unified Communications. New routers have been procured and the implementation is expected to take place this fall.

Windows Server Virtualization: In an effort to cut down on overall server costs, we have leveraged Microsoft virtual machine technology to virtualize 218 Windows servers as of June 2011. This

virtualization cuts down on server hardware costs as better utilization of the hardware occurs and thus reduces the supporting power consumption, cooling costs and physical space of the server environment. This initiative will continue during the next fiscal year.

Replacement of Older Enterprise Business Objects Servers: Older Enterprise Business Objects servers will be decommissioned with virtual machines on shared hardware. This will significantly reduce maintenance costs we pay to an outside vendor.

Improved BCP Data Movement: We will be improving our method of getting BCP data between our data centers by moving that data across the WAN and discontinuing the truck carrier service that currently moves the data held on tapes.

Continue Support of Growing RDS Deployment: The goal of this initiative is to provide a cheaper, less labor intensive, more energy efficient, more secure desktop environment that performs as well or better than current workstations/laptops. We currently have 400 users that have asked for and been granted access to the new service. Our production capacity goal is 500 concurrent users with expansion up to 4,000 if needed.

Continue Migration from Solaris SVM to ZFS: We continue our migration from older Solaris SVM volume management to newer Solaris ZFS file system. This makes management of the file systems and their data much less resource intensive.

Shorten Backup Windows for UA Windows File Servers: By converting from LAN backups to SAN backups, we will be able to significantly decrease the amount of time it takes to back up our large Windows file servers.

Office 2010 Upgrade: All user machines supported by AITS will be upgraded to Office 2010.

Replacement of Backup Infrastructure: AITS will decommission the CDLs and tape libraries and implement a net new backup infrastructure.

Customer Relationship Management

CRM Advisory Board: An advisory board comprised of AITS customers will be formed and become operational with the intention of providing input and feedback to AITS regarding customer communications, interactions, and services.

Consolidated AITS Website: Work continues led by the Customer Relations group to design and implement a consolidated AITS website with enhanced functionality focused on customer usability and access to data.

AITS Communications Plan: Working together, the Customer Relationship Group, AFM and PMO will complete and publish a communication plan for AITS including publications, media, schedule and constituents served.

Decision Support

Optimize Data Utilization: DS will continue to optimize data utilization across the enterprise by assessing and improving adoption of analytics products. Areas of focus include:

- Determine training and support approach for new product deployments, especially analytics such as OLAP cubes and dashboards
- Assess adoption for existing analytic products and determining strategies for improving as needed
- Determine standard overall usage/adoption metrics and begin collection and monitoring
- Support efforts to determine future direction for standard reporting technologies by assessing effectiveness/utilization of existing technologies

Information Provider Coordination: DS will work with UTMT BI/PM subcommittee to develop strategies for improving coordination among information providers and reducing unnecessary duplication of effort. Provide recommendations to address key BI strategy questions such as how central information producers should work together, which information needs are most important, and how to better empower local information producers.

Address Usage/Usability Issues: DS will continue to improve product quality and maintainability by addressing Data Warehouse subject areas with usage or usability issues. Areas of focus include:

- Identify DW subject area(s) to target and assess them in terms of performance, usability, and customer usage. Create and execute project/work requests as needed
- Continue to extend systematic data validation to cover more areas
- Conduct a risk assessment for data growth and need to implement archival procedures and technologies

Improve Information Delivery: DS will continue to improve beginning to end information delivery to the customer by capitalizing on existing BI/DW capabilities and exploring new capabilities. Areas of focus include:

- Complete efforts to define approach for visualization capabilities
- Assess ways to better utilize existing investment in Business Objects product suite
- Assess how Cognos fits into the existing BI stack
- Develop guidelines for which needs are best met with Enterprise Standard Reports vs. other BI capabilities

Enterprise Standard Report Technologies: DS will continue to determine future direction for technologies to support enterprise standard reports. Areas of focus include:

- Define strategy for eventual migration away from BO Desktop Intelligence (e.g. to Web Intelligence) as it relates to both ad-hoc usage and to Enterprise Standard Reports
- Determine strategy for how broadly to engage outside AITS in improving Enterprise Standard Reporting
- Assess customer usage/needs and determine which kinds of information needs the different Enterprise data sources (EDW, REPTPROD, Banner EDW/ODS) are most appropriate to support, especially with respect to Enterprise Standard Reports. (This is a first step towards the longer-term goals of reducing overlap and customer confusion regarding which sources to use, and optimizing each source for the kinds of information needs it supports.)

Leverage Portal Technology for Information Delivery: DS will provide customers with better "one stop shopping" by consolidating delivery of BI solutions through portal technology. Areas of focus include:

- Determine strategic approach for delivering BI products through an information portal.
- Build the infrastructure needed to deploy BI products through an information portal, including: reports, ad-hoc, OLAP, and dashboards
- Design and begin building an interactive directory/catalog of BI products and services to make it easier for customers to find information solutions

Improve Data Mart Integration: DS will make data easier to use and support analytics by continuing to build out an integrated layer of data marts. Areas of focus include:

- Increase our coverage of data marts that simplify EDW data for reporting and analytics
- Add OLAP cubes over data marts where appropriate to increase support for dynamic analysis
- Determine approach for conforming dimensions and/or other techniques to establish a more integrated data mart layer

Enterprise Architecture

Document Enterprise Architecture Decisions and Standards: The EAC will continue to document the Enterprise Architecture decisions and standards and make these standards available on the AITS web site.

Create EAC Web Page: An Enterprise Architecture web page will be created to communicate the EAC standards, decisions, and work and to provide an overview of the UA Enterprise Architecture.

Mobile Application Exploration: AITS is currently exploring and learning about the techniques, architecture, and frameworks for mobile application development. Functional applications will be

developed for native mobile devices as well as a mobile website, but the applications may be of limited practicality. The exploration and development of these mobile applications will help AITS gain expertise and prepare the department for a growing area of IT. We are currently working with Students to get information on mobile applications that would be useful.

Community Source Repository / Service Directory: AITS is participating with various campus departments and colleges through collaborations such as Community Source, Web@Illinois, and Core Services for ARR. A common initiative from all of these efforts is the need to build a web services registry as well as a common repository for applications, messages, and community source development initiatives.

Application Start/Stop Scripts: AITS will develop a common set of scripts to use for starting, stopping and monitoring web and messaging applications. The scripts will be designed and implemented so that they can be invoked remotely.

Status Page: This is a joint effort between AITS and CITES to develop a new application for managing communications regarding system status. The application provides the ability to post status notifications regarding planned and unplanned interruptions to services and systems. It also provides for "push" notification via RSS feeds and email. It records history of updates as well. The updated version of status should provide an improved user interface for IT pros and end users as well as support for CITES, AITS, and other campus units, and other campuses to post updates via a shared namespace.

Workflow Recommendation/IPP: AITS will document a recommendation for tools available for managing both human and business process management (BPM) workflows. Human workflow is the automation of flow and approval from one person to another. Business Process Management (BPM) is the automation of business process, which will require the development of specialized applications or services.

Network Architecture: AITS will assist CITES and the CAV in redesigning the campus network to improve efficiencies, improve the inter-campus communication, and reduce cost.

EAS/Shibboleth: Shibboleth will be integrated with EAS to pave the way for better federation. As the University deploys the new identity management systems, Shibboleth will continue to be used for federating applications with internal and external entities.

Enterprise Authentication with SharePoint: AITS will integrate SharePoint with an enterprise authentication system to allow wider collaboration using SharePoint. This integration will allow any user affiliated with the University access SharePoint resources.

Hardware Replacement Strategy: AITS will review the Banner hardware strategy and begin the plans for testing alternate plans for moving off the big Sun Hardware. This effort will take three years, which will include the migration of Banner to new hardware architecture

Deliver Business Intelligence via portal: AITS will deliver various Business Intelligence products (Dashboards, KPI's, Scorecards and/or Reports) via a portal technology.

Information Security and Compliance

Comprehensive Compliance Monitoring: In FY 12, the Enterprise System Assurance (ESA) staff will develop metrics to support a compliance monitoring plan. The goal is to help ensure compliance activities are being performed across key IT areas.

Coordinate Annual User Access Reviews: As required by an External Audit Finding and align with business practices, the ESA staff will coordinate the annual user access review with Unit Security Contacts (USCs). The purpose of the annual user access review is to help ensure the access granted to staff is appropriate and approved. The user access review also help to identify some changes to various departmental USCs were needed (right person for the right job).

Banner HR/Pay and Student Security Group/Profile/Class Review: AITS Security Administration will facilitate the tasks necessary with HR/Pay, Financial Aid and Student representatives to complete the review of BANNER HR/Pay, Financial Aid and Student Profile/Class/Form relationships. Additionally, owner/responsible parties for all BANNER HR/Pay, Financial Aid and Student Profiles will be established/reviewed. It is the duty of the owner/responsible parties to help ensure the forms associated with classes are appropriate and approved. Furthermore, as new Banner forms are delivered, the owner/responsible parties will help AITS ensure the forms are add to the correct classes.

Banner 8 Security Enhancements: AITS will create an internal project necessary to proceed with implementing the BANNER 8 security enhancements.

Unit Security Contact (USC) Portal ITPC Project: While the Identity and Access Management (IAM) project will address most of the USC Portal ITPC Project requirements, security awareness training is beyond the scope of IAM. To address that USC Portal requirement, AITS is engaged with a University-wide group developing a common approach and delivery mechanisms for various security training required across the University. The objective is to meet a variety of compliance requirements for both content and tracking of training.

Committee on Institutional Cooperation (CIC) Security Working Group: AITS continues to be a participating and contributing member of the CIC Security Working Group (SWG) and consortium for Big Ten schools. This will allow AITS to continue to evaluate and monitor the progress of our IT security efforts in comparison to our Big Ten peer institutions. AITS continues in the role of chairing CIC SWG meetings as that role rotates through the Big Ten schools. In addition, we continue to be actively involved in the CIC InCommon Silver activities.

PCI Compliance: AITS continues to provide guidance and technical oversight of PCI compliant implementations including policy and process reviews, architecture reviews, as well as periodic vulnerability and penetration testing. In FY 12, major University merchant implementations are expected to complete transition to the Urbana PCI network and commence with AITS performing quarterly vulnerability assessments and annual penetration testing.

Portfolio Management Office

Application Portfolio Review: This effort will continue as a standard process with a goal of reducing the application inventory to reduce costs.

Expanded Use of IT Governance: PMO will support the campus efforts to grow IT governance processes and will directly participate in certain instances.

Business Process Improvement Shared Service: Representatives from the three campuses and University Administration are currently working together to develop a shared service for business process improvement at the University. Several initiatives across the University are working towards increasing the efficiency of University operations. This shared service for business process improvement may provide support for those and other efficiency initiatives in a number of ways including:

- Provide a shared pool of resources available for targeted temporary project management and business process analysis services for projects where they can provide impact
- Utilize a shared standard methodology for business process improvement engagements
- Provide tools and templates for process analysis and improvement initiatives
- Draw on the distributed expertise of shared service participants
- Provide training resources for business process analysis and improvement

The shared service will be resourced with team members from across the University.

Project Management Lifecycle: AITS will continue the evolution of the Project Management Lifecycle (PMLC) to include more project types in its standards as well as promote use of the methodology across the organization. Recurring training will be offered for both the PMLC and Clarity application.

Enhancing Organizational Metrics: New measures of success will be developed and tracked for strategic initiatives for FY 12. In addition, existing metrics will be validated.

Appendices

Other Information

Detailed information is available on AITS and its services and interactions at the University on several convenient websites:

AITS Internet: www.ait.s.uillinois.edu

ITPC: www.itpc.uillinois.edu

UTMT: www.utmt.uillinois.edu

IT Service Catalog

For a full description of the following services that AITS provides, please visit our IT Service Catalog @:
http://www.ait.s.uillinois.edu/our_services/

- | | |
|---|--|
| • Application Development | • Enterprise Batch Scheduling |
| • Application Support | • Firewall Service |
| • Authentication and Authorization Services | • IT Portfolio Management |
| • Backup Management Service Catalog | • Release Management Service |
| • Business Continuity Planning | • Remote Access and VPN |
| • Business Process Analysis and Automation | • Service Desk Management |
| • Change Management Service | • Source Code Version Control |
| • Database Services | • Storage Management |
| • Desktop Support | • System Monitoring and Metrics Collection |
| • Directory Services (LDAP, Active Directory) | • Technology Performance and Optimization |
| • Distributed Hosting Service | • Web Content Management System (WCMS) |
| • Document Management (DM) | |
| • Email and Calendar Services (MS Exchange) | |
| • Enterprise Application Integration | |

Key Performance Metrics

AITS has been collecting various performance measures and metrics for many years. In FY 09, AITS bolstered comprehensive metric generation and collection across the organization and a stand-alone AITS Metrics Report is available separately. This section of the progress report highlights selected representative items from that report. The complete FY 11 AITS Metrics Report is available on the AITS website at the Reports and Presentations link.

Select Metrics

Customer Feedback for Work Requests: ADSD consistently receives customer satisfaction scores between Good and Excellent in monthly surveys of our customers.

Active Databases and Database Servers: Active databases increased by nearly 40%, up from 514 databases in FY 10 to 717 databases in FY 11 mostly due to support for Microsoft SQL Server from OBFS and other departments. The number of host servers decreased by 20%, down from 44 database servers in FY 10 to 35 database servers in FY 11, as old SQL Server platforms were retired.

Quantity of Data: The volume of production and development environment data stored on AITS maintained hardware increased at a rate of 24%, increasing from 18.2 TB in FY 10 to 22.6 TB in FY 11 due in large part to the many clones of Banner databases needed for concurrent projects.

Allocated Storage Capacity: Allocated storage capacity increased at a rate of 17%, increasing from 135 TB in FY 10 to 158 TB in FY 11.

Security Service Desk Tickets Closed: The volume of security service desk tickets closed by AITS Security Administration increased at a rate of 27%, rising from 1,521 tickets closed in FY 10 to 1,925 tickets closed in FY 11.

Availability of Banner Self-Service: This availability measurement includes Banner Self Service and the systems and services upon which it depends, such as: apps.uillinois.edu site, EAS, brokers, Banner database, the network, the campus backbone, and application servers. Total availability for FY 11 was 98.77%. Availability excluding planned outages was 99.7%, meaning that unplanned unavailability of these systems was 26 hours for the year. These 26 hours include issues such as power outages, system outages, and infrastructure problems.

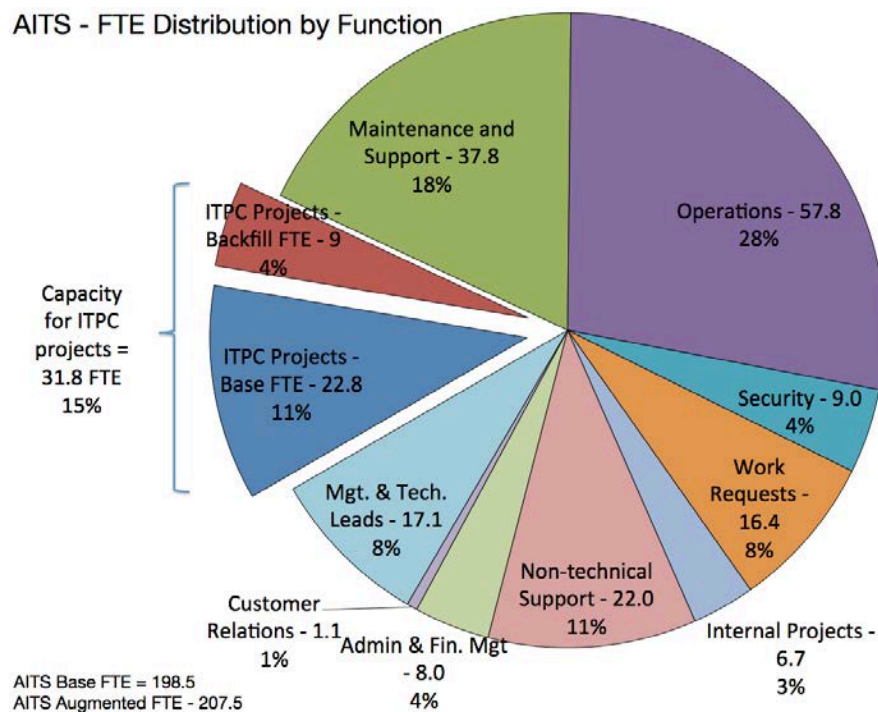
Total Change Requests (CRs) Submitted: The volume of CRs submitted for deployment dropped more than 3% from 1,890 requests in FY 10 to 1,827 requests in FY 11.

Report Usage: An analysis of report usage via ViewDirect indicates that there are a large percentage of unused reports among all available. As of the end of FY 11, 91% of reports in ViewDirect were not being

utilized indicating that an effort is needed to archive unused reports. There is an initiative ongoing to examine and decommission reports no longer in use.

Project Performance: Project performance against budget and schedule improved for AITS-led ITPC projects in FY 11 with the average ongoing percentage of projects on schedule increasing 16% and the average ongoing percentage of projects on budget increasing 10%.

Projected AITS Project Capacity for FY 12: The following chart provides an overview of anticipated AITS resource distribution for FY 12. Approximately 15% of this capacity is available for discretionary projects. AITS's approximate base capacity for projects is 22.8 FTE. AITS's approximate augmented capacity for projects (capacity including backfill and contractors) is 31.8 FTE.



Total AITS Effort Breakdown for FY 11: The following chart shows the actual hours spent by AITS resources in FY 11.

aits - Hours of Effort - FY 11

Total Effort = 371,550 hours

