Emporia State University

INFORMATION TECHNOLOGY
MANAGEMENT AND BUDGET PLAN

Plan Date: August 31, 2009
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SECTION I ~ AGENCYPROFILE

Mission
Emporia State University is a dynamic and progressive student-centered learning community that fosters student success through engagement in academic excellence, community and global involvement, and the pursuit of personal and professional fulfillment.

Business Programs

Program: As a Kansas Regents University, Emporia State University provides quality instruction, develops lifelong learners, imparts society’s cultural heritage, and educates its students for the professions and advanced study.

Locations: Emporia State University
1200 Commercial Street
Emporia, KS 66801

ESU Metro Learning Center
8400 W. 110th St, Suite 150
Overland Park, KS 66210
### Technology Assets

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<th>PLATFORMS</th>
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### IT Staffing

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<th>SFY 2011</th>
<th>SFY 2012</th>
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AGENCY IT ACCOMPLISHMENTS

Summary of IT accomplishments for SFY 2009

During SFY 2009, Technology and Computing Services (TCS) at Emporia State University continued to focus on providing the highest quality technology services and support to the campus community. Each of the major areas within TCS has continued to expand and enhance services for the university community, as detailed below.

**Governance**

**Information Technology Council:** During the past year, the Information Technology Council has been re-engaged to provide broad institutional input into technology directions and priorities. The 18 member Council serves in an advisory capacity to the Chief Information Officer and is comprised of faculty, staff, students, and administration. It meets regularly to discuss strategic directions, short and long-term goals, and serves as a reviewing body for institutional policy and procedure related to information technology. Continued active engagement of the IT Council will ensure information technology efforts at ESU are aligned with the strategic direction and needs of the university.

**Enterprise Systems**

**Banner 8.1x Hardware Refresh:** In preparation for the Banner 8.1x software upgrades, the Enterprise Systems Infrastructure team evaluated hardware architectural options, and procured, installed and configured new server and storage hardware. The configuration makes use of Sun Solaris Logical Domains for virtualized management of server, storage and application resources. The LDOM based architecture has allowed TCS to obtain significant cost savings in hardware acquisition while positioning the environment well for advanced remote disaster recovery solution options.

**Banner 8.1x Software Upgrades:** Successfully upgraded, tested and deployed the SunGard Higher Education Banner Advancement, Finance, Financial Aid, Student, HR/Payroll, General, ODS and EDW systems to the 8.1x release. In conjunction with the upgrade of Banner software, all Banner supporting applications were also upgraded to the most recent releases. These applications include UC4 and the Oracle RDBMS and Application Server systems.

The TCS Enterprise Systems team worked closely with University functional teams to ensure an appropriate level of system testing was completed. The teams collaborated to build thorough test plans, execute the test plans and to provide production readiness signoff prior to deploying the Banner 8.1x environment to production.

**Luminis IV Upgrade:** Successfully upgraded the Luminis Portal (“Buzz In”) to the Luminis 4.1 release. The Enterprise Systems team modified the authentication configuration to be based on the newly deployed Active Directory service. Self Service Password Reset functions were built, tested and deployed to provide seamless user password reset and identity management system synchronization.

**Cognos 8 Upgrade:** Successfully upgraded the Cognos 8 system to release 8.3. All pre-existing ODS and EDW integrations were established within the Cognos 8.3 environment. The Enterprise systems team worked closely with the University functional teams to develop and execute test plans and provide production readiness signoff.

**Runner Technologies Clean Address Implementation:** The Enterprise Systems team worked collaboratively with University functional teams to plan, design, build, test and deploy the Clean Address
system to the Banner Production environment to ensure data standards enforcement for address data entry.

**Banner Enrollment Management Suite Implementation Project:** The Enterprise Systems Student team is working with the Undergraduate Admissions, Graduate Admissions and International Admissions groups to refine data collection and communication campaign management processes for implementation within the Banner Enrollment Management Suite scheduled for production release in January 2010. The Banner Enrollment Management Suite consists of a CRM (Constituent Relationship Management) system, Prospective Student Portal/Luminis environment and Performance system for enhanced reporting, score-carding and performance dashboards.

A full test environment has been built to prepare and test the Banner Enrollment Management Suite prior to production environment build. To date, extensive business process analysis, product training and system design activities have been completed.

**Banner Data Integrity Validating Checks:** The Enterprise Systems team has made significant progress in the development of advanced data integrity validation checks to ensure proper data management practices in the production ERP environment for all Banner systems.

**State of Kansas SMART Project:** The Enterprise Systems team continues to collaborate with Wichita State University in the development of system interfaces to support the State of Kansas SMART project.

**Academic Technology**

**Online Instruction:** ESU offers approximately 350 fully online classes each academic year. In addition, every course section on campus now automatically receives a Blackboard course shell several weeks prior to the start of the semester. More than a dozen degree, degree completion, and certificate programs are available completely online to students across Kansas and the world using this and other complementary technologies. ESU also delivers a number of courses and programs utilizing Polycom IP-based web conferencing delivered to various statewide locations.

**Mediated Classrooms:** Faculty continue to integrate technology into their daily face-to-face teaching. ESU supports approximately 90 mediated classrooms in nearly every academic building on campus. Also known as Smart Classrooms, these enriched learning spaces employ a variety of presentation, media, and other technology to support instruction. Access to these technologies enhances innovative instruction and expanded learning opportunities. Newer Smart classrooms with more advanced technology have been introduced in approximately six classrooms across campus to better meet the expectations of students and faculty alike.

**Learning Management System:** The core of ESU’s online course delivery is the Blackboard Learning Management System. During the past year, several enhancements were made to the Banner-Blackboard integration component. For example, all faculty now see a fictitious student account in their course roster that they can use to log in and test the course features. Also, faculty can manually add GAs and co-instructors to their courses via a Banner portal utility, developed by TCS programmers. Finally, integration was completed that provides roster data transfer between Banner, Blackboard, and Adobe Connect Professional, the newest addition to the course delivery suite.

**Collaboration Software:** Adobe Connect Professional provides web conferencing capabilities utilizing a common Internet browser. It is currently utilized by academic departments who teach online courses, but can also be utilized by departments and individuals for various worldwide professional meetings.

**Global Resources:** ESU rebroadcasts the ResearchChannel on local CableOne Channel 8. The ResearchChannel, underwritten by the NSF, is a consortium of leading research and academic institutions who share the valuable work of their researchers with the public.
User and Client Support Services

Client Services: Campus technology support, including assistance with individual workstations, online and face-to-face learning support, and other related services are provided through a centralized helpdesk. Support service is provided via Email, phone, and through two walk-up campus locations – including a remote kiosk in WAW library. Soon, the Helpdesk staff will offer remote desktop assistance as well. The Helpdesk staff tracks each issue through to resolution and offers patrons the opportunity to complete a satisfaction survey following ticket closure. Policies and procedures are constantly refined and improved to ensure data integrity and information confidentiality. An institutional security officer promotes user awareness of security and other issues for faculty, staff, and students.

Technology Standardization: Client Services also attempts to reduce technology expenditures by serving as the central computer purchasing clearinghouse and by employing aggressive volume purchasing programs that allow the campus to leverage expenditures across multiple departments. This strategy saved the campus nearly $100,000 last year alone.

Technical Infrastructure and Operations

Active Directory (AD) Implementation: A multi-team task force within TCS completed the migration of approximately 2100 PC's and over 200 printers from Novell eDirectory to Microsoft Active Directory and the Windows Server system. At the same time, support systems such as inventory tracking, OS imaging and deployment and revised software delivery were implemented. The next phase of this project will be the migration of file shares from the NetWare platform to Windows Server.

Health Services Software Implementation: The Windows Server Infrastructure Team worked closely with ESU's Student Wellness staff to evaluate, design, and implement a new health services software package called Point & Click. The new system offers enhanced capabilities for the staff, including ubiquitous secure access, records scanning, integration with the Banner system, and plans are underway to expand the service to include a web portal for students. The system was designed to meet all required security standards and leverage high availability technologies.

User Support and Collaboration (TechSite and SharePoint expansion): TCS continues to evaluate technologies for improving collaboration and content delivery internally within the department and to the University community. This past year saw continued small-scale evaluations of Microsoft SharePoint services with several departments. SharePoint was implemented department-wide for TCS staff, offering services such as document sharing, blogging, wiki's and inventory tracking. TechSite, ESU's enterprise-wide, SharePoint-based application and printing services delivery system was migrated to a new virtualization platform and updated to include a more user-friendly interface and multiple authentication options.

Hyper-V expansion: The Hyper-V server virtualization environment was significantly expanded over the last year to include 4 new host servers, to a total of 13 hosts supporting over 50 virtual servers.

Cloud framework: The Technical Infrastructure Team is beginning to develop the technologies and architecture of the Microsoft physical and virtual server systems to support a cloud-based computing concept. While the industry is only developing the standards of cloud computing, TCS is focusing on a ubiquitous experience for end users and the capability to support a dynamic data center. While this will continue to be an ongoing project, ESU has already realized successes in providing remote application delivery to branch offices, anywhere access for IT staff, and the groundwork for providing disaster recovery for our virtualized systems.
InfoPath forms: Fall 2008 saw the completion and successful go live of the initiative to migrate from the unsupported and discontinued Novell Informs electronic forms system to Microsoft's equivalent called InfoPath, part of Microsoft Office. Features include automated routing and digital signatures via user certificates. The maintenance and addition of new forms continues to be an ongoing process.

Systems management enhancements: The migration to Microsoft Active Directory offered TCS the opportunity to improve system monitoring, backup and management. The Hyper-V-based virtualization environment is now managed via Virtual Machine Manager and the data is protected by Data Protection Manager, which provides both machine image and single-file level recovery. Both are components of the Microsoft System Center solution. Problem alerts via email and text message and automated corrective responses are now managed by a third-party application called PowerAdmin.

Improved Business Continuity Infrastructure: A 90 KVA UPS was purchased and installed to replace the existing 50 KVA UPS, providing additional conditioned power capacity to the University's central datacenter. An additional natural gas powered generator was installed to supplement the existing generator and provide power to the datacenter in the event of utility power failure.

Core switch upgrade: An upgrade of the university's core network switch was completed in July. This upgrade to new hardware positions ESU to be able to increase the bandwidth of the campus backbone to 10 Gigabit in the future, while currently providing faster throughput within the core switch.

Continued expansion of wired and wireless network coverage: The wired network in the Singular/Trusler residence halls complex was upgraded to allow 100Mb/s connectivity in the rooms. Additionally, the wireless network was expanded into the complex to provide wireless connectivity on all the floors.

Information Security

Policy: FY2009 brought more opportunities to expand the Information Security Program at ESU. Working with members of the Faculty Senate, six more policies were passed and added to the 20 existing policies, with six more in draft. Several new procedures, standards and guidelines were added to the existing procedures.

Awareness: During Cyber Security Awareness month in October, a weekly Information Security booth in the Student Union provided awareness through a theme-based campaign that target all segments of the campus community. Besides passing out security awareness materials, information was presented about phishing techniques, how to strengthen passwords, and other information about cyber security defense and protecting one’s information from unauthorized access. Other ongoing awareness efforts included focused workshops on SSN policies and payment cards standards.

Technology/Support: In addition to efforts on security awareness, vulnerability scanning software was purchased and implemented. ESU’s Information Security Officer also chaired the Regents Information Security Council and led efforts to expand its membership to other regional colleges and universities. ESU joined REN-ISAC this past year as a contributing member in the information technology security community. Additional personnel resources were identified to assist in IS efforts, providing the Information Security office with another 0.5 FTE.
STRATEGIC INFORMATION MANAGEMENT PLAN TRACKING

Data Catalog
ESU currently does not have a published data catalog.

Data Exchange Standards
ESU interfaces its Banner ERP system with a number of internal and external systems through a variety of exchange formats and processes.

Internal exchanges / interfaces: A total of 22 internal interfaces allow data to be exchanged between ESU’s Banner ERP and independent systems. These systems include:
- EMAS (a legacy student information system being eliminated in FY2010)
- RMS (Housing / Residence Life administrative system)
- Point and Click (Student Health Services administrative system)
- Blackboard (Learning Management System)
- Banner ODS (Operational Data Store)
- Budget Development System
- Identity Management (for provisioning of accounts in other systems)
- Several Alumni / Foundation systems

Nearly all data exchanges are based on standard protocols, mechanisms and formats, including
- SQL Server Data Transformation Services (DTS)
- ODBC
- JDBC
- SCP and FTP of flat files

In two exchanges, proprietary mechanisms and interfaces are utilized.

External exchanges / interfaces: There are 25 interfaces which allow for data exchange with external systems. Of those, 23 exchanges are with the State of Kansas. These exchanges support Finance and Human Resources processing and utilize formats and methods based on specifications set by DISC. They involve the transferring of fixed-length ASCII files (varying lengths) through Secure FTP to systems administered by DISC.

In one case, a proprietary data integration tool is utilized (specific to the application) to exchange data regarding international students. In another, information is uploaded through a CSV file to a service providing support for Alumni business processes.

External Collaborative Groups
ESU collaborates with a number of external entities that provide benefits to Information Technology Management efforts. These groups include:

Board of Regents and other Regents Universities: Significant collaboration happens through the Regents Information Technology Council (RITC), the Information Technology Services Advisory (ITSA) sub-committee (of RITC), and the Regents Information Security Council (RISC). Collaboration through joint efforts in code development, volume purchasing power, information sharing and direct interaction provide numerous benefits. RITC sponsors an annual Conference on Higher Education Computing in Kansas (CHECK), planned by ITSA and hosted by a Regents institution at which IT staff gather to share ideas and best practices.
**KanREN:** As a member of the KanREN consortium, the ESU community experiences numerous benefits through reliable, cost-effective, very-high-speed connectivity to the Internet and Internet2. In addition, inter-consortium collaboration enhances ESU’s efforts in providing leading edge network-based services to its constituents.

**Metadata Repository**
ESU has implemented an Operational Data Store and an Enterprise Data Warehouse as extensions to the Banner ERP system. These provide key resources for the Enterprise Systems Group, the office of Institutional Research, and individual functional units in their reporting efforts. These resources are not available to external entities.

**Online Transactional Services**
ESU provides a variety of services online, primarily for the use of potential and current students, and current faculty and staff of the university. It includes:

Student Services:
- Application for admission / Registration / Fee payment
- Co-curricular transcripts
- Financial Aid application / tracking
- Learning management system: electronic classrooms / coursework / grading
- Library Services: online catalog / e-reserves / archives
- Software downloads

Faculty/Staff
- Course management / grade reporting
- HR functions – electronic paystubs, verification of information
- Dynamic report generation
- Web conferencing
- Software downloads

Alumni
- Online giving

**Portfolio Management Methodology:**
ESU currently does not have an application or project portfolio management methodology.

**Web Services**
ESU currently offers no services (as defined) at this time.
AGENCY IT STRATEGIC DIRECTION

Summary

During the coming fiscal year, efforts will continue to be directed towards ensuring that the strategic
direction of Information Technology is in alignment with and provides foundational support for the
University’s Strategic Plan. Implementation teams are currently determining priorities for the different
goals with the Plan which will directly and indirectly determine the short and long-term priorities for
Information Technology efforts.

Continued standardization in supported technologies (in alignment with KITA), increased use of project
management methodologies for IT operational activities and services, and project portfolio management
will all be strategic priorities during the coming year. Given the current fiscal environment, a renewed
focus will be required to ensure that the most critical IT services and infrastructure continue to be
supported and meet the needs of the university community.

Specific Areas of Note

• Agency Architecture: Emporia State University continues to strive to be in compliance with the
target architecture as defined in the Kansas Information Technology Architecture. Some infrastructure
technologies, including network cabling, continue to be in need of upgrade or replacement. Funding
has been identified to support a significant cabling replacement project beginning this fiscal year. As
part of established IT project management processes, ESU ensures new technology initiatives and
their supporting architecture are in full compliance with KITA.

• Business Contingency Planning: As indicated last year, a comprehensive business continuity and
disaster recovery plan is a part of the University’s Strategic Plan. Organizational efforts are underway
to ensure each department and division has a documented Continuity of Operations Plan (COOP) in
place.

• Business Process and Workflow Management: Use of online forms processing and imaging
continues to expand across campus. Institutional process automation and workflow management will
be a priority for TCS and the appropriate functional units during this fiscal year. A review of the
current solutions and applications that currently exist at ESU is underway as part of an effort to define
a coordinated approach to integrating the various enterprise-wide applications. During the coming
fiscal year, functional requirements will be defined and a new architecture will be defined for
institutional process automation that is consistent with KITA.

• Collaboration Software: Emporia State University currently utilizes multiple applications to support
administrative and academic collaboration. Support for those applications, as well as new
technologies, will continue to evolve to provide a solid foundation for collaboration, including:

  o Novell GroupWise, version 7.0, is the standard e-mail, calendaring, and messaging system
    used across the University. This platform is a twilight technology and will be replaced in the
    coming several fiscal years in favor of either Microsoft-based systems, hosted services, or
    combination of the two.

  o The Luminis Enterprise Portal is used to connect all ESU stakeholders to role-specific
    targeted content, collaboration tools and single-sign-on access to enterprise applications.
    Content within the portal is slated for review to ensure it is current, appropriate, and useful to
    the campus community.

  o Adobe Connect Pro has been selected and recently implemented to provide web-based
    conferencing capabilities. It is currently primarily used by academic departments for
classroom collaboration, but has the potential for broader application, including use by all faculty/staff for internal and external collaboration.

- Techsite, an internally developed Microsoft SharePoint-based system, provides user access to supported software for installation, shared workspaces, support documentation and active project updates. The site has been recently revised with a more intuitive user interface and continues to enjoy significant utilization by the campus community.

- A pilot project involving Microsoft Sharepoint for intra-departmental collaboration has been undertaken by TCS, and initial results have been positive. As best practices are identified and the pilot project matures, similar uses of Sharepoint will be examined for potential as an institution-wide initiative.

- A software suite which provides Web 2.0 technologies (blogs, wiki’s, etc.) has been piloted as part of an integrated solution with the Learning Management System (Blackboard.) If funding permits, TCS hopes to provide this capability to all online courses as well as for ad-hoc, non-academic collaboration purposes.

**Data Storage and Administration:** All administrative data for the Student, Finance, Advancement, Financial Aid, Blackboard and departmental applications are stored and managed within either Microsoft SQL Server or Oracle RDBMS systems. Supporting storage for such databases is in either directly attached server storage or the Enterprise SAN environments. Data backup and retention processes exist to ensure appropriate storage and retention of all University data and information assets. Emporia State University utilizes a combination of strategies and tools for backup and recovery, including Veritas NetBackup, Microsoft Data Protection Manager, and various other application specific tools. As data storage needs for email and network-based drives have expanded, the need for quotas on both email and drive space usage have been identified and discussed. At this point, quotas still do not exist, although that is likely to change during the next fiscal year.

**Electronic Records Retention:** The University follows state guidelines regarding adoption and promulgation of electronic records retention policies and processes. University-specific policies regarding data classification and records retention still need to be established, as does enterprise data lifecycle management planning.

**E-Government:** The university website, university portal (“Buzz In”), and Self-Service Banner (SSB) interface with the Banner@ESU ERP system, providing the primary conduit for access to online content for the ESU community and (as appropriate) non-University community. Continual review and expansion of the type and scope of services offered ensures availability of university services to all university stakeholders.

**End User IT Security Training:** IT Security Awareness materials are distributed to the campus community throughout the year. A month-long awareness program was successfully executed during the month of October (National Cyber Security Awareness Month). Online training courses for all faculty, staff, and students will be made available and required during the upcoming fiscal year. More focused training is being established for departmental technology administrators.

**Identity Management:** ESU currently relies on Novell’s eDirectory for the foundation of its Identity Management infrastructure for provisioning of accounts. Microsoft’s Active Directory is used to support the authentication and authorization services of all workstation-based applications at ESU and to maximize the “single-sign-on” environment across all University on-line services. The use of Novell will be phased out over the next several fiscal years, with migration of that functionality to either the Microsoft platform or one that works with AD in a tightly integrated manner.

**IT Disaster Recovery:** As part of an institutional effort in this area, TCS will be reviewing and revamping its Business Continuity / Disaster Recovery plan. Planning and design of new applications currently requires consideration of availability and recovery capabilities in case of a disaster. Specific
architectural models (load balancing, clustering, and virtualization) continue to be expanded to increase availability and minimize recovery efforts. Location of geographically distant data center facilities for continuity / recovery purposes is a longer-term goal.

- **IT Security Staff:** Emporia State University currently has one full-time staff member who serves as the University Information Security Officer (ISO). During the past year, a second individual at one-half FTE was assigned to work with the Information Security Officer, providing support for vulnerability scanning and incident response. With the attention given to a comprehensive Information Security Plan in the forthcoming Strategic Plan, the ISO will lead an inclusive effort of all TCS staff, department technicians, and the university community in the review, revision, and update of security policies, procedures, and awareness training.

- **Public Key Infrastructure:** ESU currently has no active initiatives or plans related to PKI.

- **Service Oriented Architecture:** ESU currently has no active initiatives or plans related to SOA.

- **Software as a Service (SaaS):** ESU is currently negotiating a contract for SaaS services to provide remotely hosted online payment processing services. This will help to ensure compliance with PCI and PA Data Security Standards.

- **Technology Infrastructure:** The University currently supports a mixed platform environment including Netware, Windows Server 2003, Windows Server 2008, Linux, and Solaris. It relies on a combination of physical and virtual server technologies, depending on the nature of an application’s technical requirements.

Emporia State University is currently pursuing replacement of all Novell-based identity management, email, file and print services with Microsoft-based technologies. This will better position the University to support a fully integrated federated identity and service/content authentication/authorization environment. This initiative supports a critical goal of information technology services at ESU in providing the right data to the right people at the right time in a convenient and secure manner.

All campus buildings including residence halls are connected via an Ethernet data network comprised of copper cabling to the desktop and fiber optic cabling between buildings and between building segments. Significant amounts of “Type 1” cabling exist within the campus buildings that are relied on daily. Funding may be forthcoming to begin the process and project of replacing this aged cabling with modern Cat6 or Cat6e cabling. The wireless network infrastructure continues to be expanded and ubiquitous wireless coverage will likely become a priority in the coming year as a part of the University’s Strategic Plan.
SECTION II - MAJOR IT APPLICATIONS

Part I: Unmodified Applications

Application 1: EMAS – Enrollment Management and Admission System
- **Purpose:** Manages undergraduate recruitment and admissions processes and procedures. Interfaced with the Banner Student System.
- **Planned Initiatives:** Consolidate functions and data of EMAS in the Banner@ESU ERP with the implementation of the Enrollment Management Services module. Eliminate the EMAS application upon completion of the migration to Banner EMS.

Application 2: Banner Finance
- **Purpose:** Supports business and finance needs of the University
- **Planned Initiatives:** Expanded reporting and analysis of data through reporting tools. Review and implement process controls and change management procedures.

Application 3: Banner Advancement
- **Purpose:** Supports information needs of development and alumni relations
- **Planned Initiatives:** Expanded reporting and analysis of data through reporting tools. Review and implement process controls and change management procedures.

Application 4: Banner Student
- **Purpose:** Supports the management of academic programs, faculty, advising, and registration services
- **Planned Initiatives:** Expand reporting and analysis of data and creation of dashboard reports. Refine baseline implemented business rules. Review and implement process controls and change management procedures.

Application 5: Banner Financial Aid
- **Purpose:** Supports the management of financial aid services and processing Requirements
- **Planned Initiatives:** Expanded reporting and analysis of data through reporting tools. Review and implement process controls and change management procedures.

Application 6: Banner Human Resources
- **Purpose:** Supports the management of ESU Human Resources services
- **Planned Initiatives:** Expanded reporting and analysis of data through reporting tools. Review and implement process controls and change management procedures.

Application 7: Banner Operational Data Store
- **Purpose:** Supports information reporting needs of Banner users.
- **Planned Initiatives:** Expand reporting and analysis of data through reporting tools.

Application 8: Cognos 8 BI (Business Intelligence)
- **Purpose:** Supports information analysis and reporting needs of Banner users.
- **Planned Initiatives:** Expand reporting for University-wide performance dashboards and analytics. Deploy score-carding features to support the Banner Enrollment Management performance module.

Application 9: e~Print
- **Purpose:** Reporting; decision support; data analysis
- **Planned Initiatives:** None.
Application 10: OnBase
Purpose: Document Imaging, Limited workflow
Planned Initiatives: Interface imaging functionality with Banner module(s) for timely data retrieval and improved workflow.

Application 11: Infopath
Purpose: Workflow, Online document storage
Planned Initiatives: Expand application of workflow to business processes.

Application 12: Novell Groupwise / Integrated Messaging
Purpose: Email, Calendaring, Messaging for faculty, staff, and students.
Planned Initiatives: Identification of replacement platform and subsequent phase-out.

Application 13: RMS
Purpose: Residence Halls management system.
Planned Initiatives: None.

Application 14: Millenium ILS
Purpose: Supports operation of University Libraries and Archives - including circulation, acquisition, cataloging, serials management, etc.
Planned Initiatives: Possible integration with university’s Banner ERP.

Application x15: Footprints
Purpose: Incident and Job Tracking – primarily utilized by TCS Help Desk.
Planned Initiatives: Will be replaced in FY2010.

Application 16: Novell eDirectory & Provisioning
Purpose: Provisioning of user accounts, storage space for network and home directories.
Planned Initiatives: Replacement within 2 years.

Application 17: TouchNet Payment Gateway
Purpose: Secure acceptance and transmission of online payments
Planned Initiatives: Will be moved to ASP solution during FY2010.

Application 18: Blackboard Learning Management System
Purpose: Online course delivery, course content management.
Planned Initiatives: Possible integration of Web 2.0 technologies as well as video-capture and play-back for course lectures.

Part II: New/Modified Applications

Application 1: Microsoft Active Directory (AD)
Purpose: Use of an Active Directory infrastructure will improve Identity Management services and will provide improvements in the single-sign-on user experience and the security of authenticated applications.
Planned Initiatives: Continued expansion to 3rd-party apps for authentication via LDAP.
Hosted: ESU internal

Application 2: Microsoft Sharepoint
Purpose: Online interface for content distribution, sharing, and collaboration
Planned Initiatives: Expanded application for departmental collaboration
Hosted: ESU internal
Application 3:   **Banner Enrollment Management Suite**

*Purpose:* Constituent relationship management for tracking and corresponding with prospective students, tracking and performance reporting.

*Planned Initiatives:* Currently being implemented. Go-live date is January, 2010.

*Hosted:* ESU internal

*Functions:* Constituent relationship management, prospective student portal, performance management

*Interaction:* Prospective students, enrollment services and admissions staff

*Technical Environment:* Part of existing Banner ERP environment

*Implemented:* Currently in test, go-live in January 2010.

Application 4:   **Adobe Connect Pro**

*Purpose:* Online meeting / collaboration software

*Planned Initiatives:* Newly implemented in June, 2009

*Hosted:* ESU internal

*Functions:* Web-conferencing for eLearning, web seminars

*Interaction:* ESU students, faculty, and staff

*Technical Environment:*

  - **Hardware:** Intel
  - **Network Protocols:** tcp/ip; http; https
  - **System s/w:** Windows Server
  - **DBMS:** SQL Server
  - **Client:** web-based
  - **Special s/w:** <n/a>
  - **Language:** <n/a> commercial product

*Implemented:* June, 2009

*Revision:* 7

*Maintenance:* TCS

Application 5:   **Point and Click**

*Purpose:* Student Health Services Administration Software

*Planned Initiatives:* Implemented Spring, 2009

*Hosted:* ESU internal

*Functions:* Account management, patient records, scheduling

*Interaction:* ESU students desiring health services

*Technical Environment:*

  - **Hardware:** Intel
  - **Network Protocols:** tcp/ip; https
  - **System s/w:** Windows Server
  - **DBMS:** SQL Server
  - **Client:** <n/a>
  - **Special s/w:** <n/a>
  - **Language:** <n/a> commercial product

*Implemented:* Spring, 2009

*Revision:* TCS

Application 6:   **Rave Alert**

*Purpose:* Emergency Messaging System

*Planned Initiatives:* Implemented August, 2008

*Hosted:* Externally hosted by vendor

*Functions:* Emergency emailing; emergency text messaging
Interaction: ESU students, faculty, staff
Implemented: August, 2009
Revision: unknown
Maintenance: Vendor

**Part III: Retired Applications**

Application 1: Horizon Wimba  
Retirement Reason: Replaced with Adobe Connect Pro.

Application 2: PyraMed  
Retirement Reason: Replaced with Point and Click.

**SECTION III~ IT PLANNED PROJECTS**

Emporia State University currently has no Information Technology projects planned that will cost $250,000 or more.
### SECTION IV ~ BUSINESS AND TECHNOLOGY RADAR CHARTS

<table>
<thead>
<tr>
<th>University Initiatives</th>
<th>FY2009</th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing Academic Excellence</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>To enhance academic excellence by providing opportunities that lead to even higher levels of student success through excellence in curriculum development and delivery, facilities, and technologies that meet the educational requirements of members of the Emporia State University community.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Building Mutually Beneficial Partnerships</td>
<td></td>
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</tr>
<tr>
<td>To increase the number of opportunities for students, faculty, and staff to work with local, regional, and national entities to develop and manage mutually beneficial partnerships.</td>
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<td></td>
</tr>
<tr>
<td>Enhancing Opportunities to Engage in International Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To enhance the opportunities for the Emporia State University community to engage in international learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improving Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve communication among all University stakeholders.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Provide a Welcoming and Sustainable Learning and Working Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To provide an attractive, welcoming, and sustainable learning.</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### Technology Infrastructure

| Improve technical infrastructure to meet campus academic, research, service and operational requirements | | | | |
| Continue to develop, adopt and promulgate security policies, practices and technologies | | | | |
| Upgrade / Replace desktop, server, and classroom systems as necessary | | | | |
| Expand wireless network accessibility | | | | |
| Review and update the comprehensive disaster recovery and business continuity procedures. | | | | |
| Voice / Data Wiring Infrastructure Refresh | | | | |
| Migrate from Novell-based e-mail, calendaring, and account provisioning to Microsoft based on hosted technologies | | | | |
| Establish comprehensive Information Security Plan | | | | |

### IT Business System Initiatives

| Ongoing development of Banner applications | | | | |
| Expand operational and analytical administrative reporting capabilities and access | | | | |
| Migrate from Novell based e-mail, calendaring, and account provisioning to Microsoft based on hosted technologies | | | | |
| Banner Enrollment Management Suite | | | | |
| Business Process Automation / Workflow | | | | |
| Test / Pilot Voice over IP and explore implementation | | | | |
| Pay for printing solution | | | | |
| Expanded online document storage / imaging | | | | |
| Establish comprehensive Information Security Plan | | | | |
| Expanded / Enhanced training in online teaching / learning technologies | | | | |

### Online-Enabled Service Initiatives

| Website Redesign | | | | |
| Achieve and Maintain PCI-DSS and PA-DSS Compliance | | | | |
| Expand Initiatives in Accessibility Technology | | | | |
| Redesign / Reimplementation of Prospective Student Portal | | | | |
| Expanded online payment services | | | | |
| Web-based video capture / playback | | | | |
| Web 2.0 [Blogs, Wikis, etc] integration into LMS (Blackboard) | | | | |
| Expanded online course offerings | | | | |
## Section V - Enterprise Business Partners Model

<table>
<thead>
<tr>
<th>Business Partner</th>
<th>INPUTS TO UNIVERSITY</th>
<th>OUTPUTS TO PARTNER</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Applications; Enrollmen; Requests; Financial Aid Requests; Tuition/Fee Payments; Engineering/Involvement; Participation (Course, University Life)</td>
<td>Program of Study; Education; Internships; Grades; Transcripts; Enrollment Info; Financial Aid/Scholarships; Information/Awards</td>
<td>--&gt;</td>
</tr>
<tr>
<td>Parents of Students</td>
<td>Financial Aid Information; Tuition Payments</td>
<td>News / Information; Bills</td>
<td>--&gt;</td>
</tr>
<tr>
<td>Alumni / Foundation</td>
<td>Funding; Scholarships; Enhanced public relations; Continuing relationship with alum; Public and private support; Information; Career services; Continuing relationship with the university</td>
<td>--&gt;</td>
<td></td>
</tr>
<tr>
<td>Service Agencies</td>
<td>Opportunities for student involvement; Services (Food, banking, books, housing); Scholarships; Enhanced university experience; Funding; Student Involvement; Student Information;</td>
<td>--&gt;</td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>Student Teaching Opportunities</td>
<td>--&gt;</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>Experienced Teachers; Student Teachers</td>
<td>Work Experience Opportunities</td>
<td>--&gt;</td>
</tr>
<tr>
<td>General Public</td>
<td>Financial Support</td>
<td>--&gt;</td>
<td></td>
</tr>
<tr>
<td>System Vendors</td>
<td>General Information; Research Information; Service</td>
<td>Software Applications; Hardware; Bills; Bills; Contracts; Licenses; Documentation; Training</td>
<td>--&gt;</td>
</tr>
<tr>
<td>Data Vendors</td>
<td>Bills; Bills; Contracts; Licenses; Documentation; Training; Data Access; Books Journals</td>
<td>RFPs; Fix Requests; Payments; User Feedback</td>
<td>--&gt;</td>
</tr>
<tr>
<td>Other Regents Schools</td>
<td>Collaborative Planning; Shared Experiences; Volume purchasing power</td>
<td>--&gt;</td>
<td></td>
</tr>
<tr>
<td>Higher Ed Institutions</td>
<td>Collaborative Planning; Shared Experiences; Volume purchasing power</td>
<td>--&gt;</td>
<td></td>
</tr>
<tr>
<td>State Agencies</td>
<td>Partnerships; Opportunities for current students</td>
<td>--&gt;</td>
<td></td>
</tr>
<tr>
<td>Contractors</td>
<td>Research Information; Planning Information; Reports; Service</td>
<td>Bids; Invoices; Deliverables; Status Reports</td>
<td>--&gt;</td>
</tr>
<tr>
<td>Federal Agencies</td>
<td>Research Grant Opportunities; Financial Support; Compliance Guidelines</td>
<td>Research Proposals; Reports;</td>
<td>--&gt;</td>
</tr>
<tr>
<td>KBOR</td>
<td>Research Information; Planning; Funding; Policies; Research Planning Guidelines</td>
<td>Assessment (Performance Indicators)</td>
<td>--&gt;</td>
</tr>
</tbody>
</table>
**SECTION VI ~ ENTERPRISE VALUE CHAIN**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Process Management</th>
<th>Teaching</th>
<th>Research Activity</th>
<th>Administration, Management, &amp; IS/IT Services</th>
<th>Financial Management</th>
<th>Facilities Management</th>
<th>Supporting/Financial Aid, Research, &amp; Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Research/Outreach</td>
<td>Library Instruction/Research</td>
<td>Academic Support Services</td>
<td>Administration, Management, &amp; IS/IT Services</td>
<td>Financial Management</td>
<td>Facilities Management</td>
<td>Supporting/Financial Aid, Research, &amp; Assets</td>
</tr>
<tr>
<td>Faculty</td>
<td>Proposals</td>
<td>Administration</td>
<td>Research</td>
<td>Library Instruction/Research</td>
<td>Academic Support Services</td>
<td>Administration, Management, &amp; IS/IT Services</td>
<td>Financial Management</td>
</tr>
<tr>
<td>Industry</td>
<td>Commissioning</td>
<td>Enterprise Service</td>
<td>Community Service</td>
<td>Research</td>
<td>Library Instruction/Research</td>
<td>Academic Support Services</td>
<td>Administration, Management, &amp; IS/IT Services</td>
</tr>
<tr>
<td>Professional Societies</td>
<td>Design</td>
<td>Professional Service</td>
<td>Research</td>
<td>Library Instruction/Research</td>
<td>Academic Support Services</td>
<td>Administration, Management, &amp; IS/IT Services</td>
<td></td>
</tr>
<tr>
<td>Communities</td>
<td>Development</td>
<td>University Service</td>
<td>Student Services</td>
<td>Library Instruction/Research</td>
<td>Academic Support Services</td>
<td>Administration, Management, &amp; IS/IT Services</td>
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<tr>
<td>Students</td>
<td>Administration</td>
<td>Professional Service</td>
<td>Recruitment/Financial Aid</td>
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<td>Administration, Management, &amp; IS/IT Services</td>
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</tr>
</tbody>
</table>

**Supporting Activities**
- Quality Improvement
- Student Services: Assessments, Graduation Rate, Placement
- Research: Research Services, Grant Management
- Administration, Management, & IS/IT Services: Human Resources, Information Technology, Information Security
- Facilities Management: Facilities Planning, Construction Management
- Supporting/Financial Aid, Research, & Assets: Grants Management, Sponsored Research

**Primary Activities**
- Student Services: Admissions, Enrollment, Student Life, Student Services
- Research: Research Services, Grants Management
- Administration, Management, & IS/IT Services: Human Resources, Information Technology, Information Security
- Facilities Management: Facilities Planning, Construction Management
- Supporting/Financial Aid, Research, & Assets: Grants Management, Sponsored Research

**Supporting Process**
- Budgeting
- Project Management