

Emporia State University

**INFORMATION TECHNOLOGY
MANAGEMENT AND BUDGET PLAN**

Plan Date: *August 30, 2007*

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SECTION I ~ AGENCY PROFILE

Mission

Emporia State University is a comprehensive Regents university primarily serving residents of Kansas by providing leadership in quality instruction, related scholarship and service. A student centered institution, its central mission is to develop lifelong learning skills, impart society's cultural heritage, and educate and prepare for both the professions and advanced study. Faculty, staff, students interact in a collegial atmosphere that fosters freedom of inquiry of expression.

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

Organization

Personnel Strength: **809.15 FTE – 322.25 classified; 486.9 unclassified**
486.9 Unclass
322.25 Classified

Locations: Emporia State University
1200 Commercial Street
Emporia, KS 66801
620-341-1200

IT STAFFING

Functions: Agency centralized IT staff allocations by function (approximate):

- All **classified and unclassified** IT positions
- Any positions that may be designated within SHaRP as non-IT classification, but which perform IT functions.

IT FUNCTIONAL AREA	SFY 2008 ACTUAL FTE		SFY 2009 PROJECTED FTE		SFY 2010 PROPOSED FTE	
	Class.	Uncl.	Class.	Uncl.	Class.	Uncl.
General Management & Administration (includes training and cross-agency coordination)	1	3	1	3	1	3
Application Maintenance and Enhancement (in-production systems)	2	1	2	1	2	1
Application Development (includes general and tactical plans, business area analysis, process reengineering, prototyping, application design, coding, integration and testing)	4	0	4	0	4	0
Data Administration, Data Analysis/Validation and Database Administration	1	2	1	2	1	2
Network Engineering, Technical Management and Support	1	1.5	1	1.5	1	1.5
Computer Operations, Management and Technical Support	5	2	5	2	5	2
Web application development and maintenance	2	0	2	0	2	0
IT Security	0	.5	0	.5	0	.5
Instructional Support	1	1.5	1	1.5	1	1.5
Customer Service	4	.5	4	.5	4	.5
Multimedia Services	3	0	3	0	3	0
Telecommunications	2	0	2	0	2	0
TOTAL FTEs	27	12	27	12	27	12

Technology Assets

[Please indicate quantities in appropriate cells in the table below.]

PLATFORMS			
	FY2006	FY2008	FY2010 (est.)
Mainframes ¹	1	1	0
Servers	84	126	163
Desktops	2635	2739	3012
Desktops Replaced	355	619	625
Mobile Devices	25	145	189

Data Storage and Administration: All administrative data for the Student, Finance, Advancement, Financial Aid, Blackboard and departmental applications are stored and managed within SQL Server and Oracle based database management systems hosted in either direct 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 uses Veritas NetBackup as the backup and recovery tool for all University supported data and information resources.

Data Transfer: State and Federal reporting and interfaces have been built to deliver required data elements to respective partners, such as SEVIS and the State of Kansas. Interfaced data are typically delivered through Secure File Transfer Protocol (SFTP).

AGENCY IT ACCOMPLISHMENTS

Provide a brief summary of IT accomplishments for FY 2007.

Summary:

Primary focus during Fiscal Year 2007 has been upon three significant and multi-year initiatives:

- An Enterprise Resource Planning initiative (Banner@Emporia State University) that provides new administrative systems, expanded web access to information, and the implementation of an academic and administrative portal (Buzz In);
- Completing the fourth year of a five year Title III Strengthening Institutions grant that focuses on expanding access to and appropriate use of data for decision making;
- Expansion of the data network to accommodate greater and more ubiquitous access via secured wireless connectivity

Technology and Computing Services (TCS) strives to provide high quality technology services and support to the ESU community. TCS continues to assess and refine the information technology organization and support structure to meet the ongoing information technology needs of ESU students, faculty and staff.

Through a stern focus on three primary IT organizational drivers, Customer Service, Cost Effective IT Strategy, and IT Security, TCS is continuing to improve quality of delivery, integration, security, flexibility and support of all IT services offered to the ESU community.

¹ A mainframe should only be recorded here if the mainframe is owned and operated by your agency. Do not record a mainframe here if you are using a mainframe application that is hosted on another agencies mainframe. Mainframes are distinct from midrange servers. Midrange servers should be listed with the other servers in your agency.

Banner@Emporia State University

Much of the activity in FY2007 continued to center on the implementation and maintenance of the Banner@Emporia State University initiative – the replacement of the University’s legacy administrative information systems with a commercial product designed specifically for higher education. Three major project milestones were met during this Fiscal year: The Financial Aid and Student systems with all system integrations/interfaces went live in March 2007; the Human Resources system went live in June 2007.

The execution of the decision support strategy, utilizing the Operational Data Store and the Cognos Business Intelligence Suite continues to progress as system reporting and decision support goals and objectives are set and verified. The successful completion of Operational Data Store and Cognos Business Intelligence Training for the Sungard HE Banner Student, Financial Aid and Human Resources systems occurred during Fiscal Year 2007.

Throughout the Banner @ Emporia State University initiative, a strategic focus on improving identity management integration was established. Utilizing the campus portal, Buzz In, access to ESU technology services/resources has been simplified through the rollout of Secure Single Sign On.

No substantial modifications were made to the University’s mainframe-based legacy systems over this fiscal year. ESU’s Student legacy system was retired and replaced with SunGard Higher Education Banner Student – version 7.3 ESU’s Financial Aid legacy system was retired and replaced with SunGard Higher Education Banner Financial Aid – version 7.3. ESU’s Human Resources legacy system was retired and replaced with SunGard Higher Education Banner HR – version 7.3. Though the mainframe-based legacy systems have been operationally retired, the system supporting data and code are being maintained for data migration verification and historical reference. The complete decommission of all legacy systems will occur in July of 2008.

Title III Strengthening Institutions Grant - \$350,000 per year

This five-year initiative continues to provide significant resources toward the implementation of the Emporia State University decision support strategy. After receiving support from the Department of Education, this initiative continues to be programmatically aligned with the Banner @ Emporia State University initiative which provides a robust and long-term support mechanism for expanded data-based decision making across the University utilizing the Sungard HE Banner Operational Data Store, Enterprise Data Warehouse and the Cognos Business Intelligence Suite.

During this fiscal year substantial expansion of available reports was made in order to meet the operational needs of university departments and administration.

Progress in Academic Technology Areas

Blackboard continues to be used as the University’s Learning Management System (LMS). Nearly 243 faculty use Blackboard in 492 courses supporting 4725 unduplicated students per semester. Wimba Live Classroom, supporting synchronous multimedia communication via the Internet, was used to support more than 2000 users over the duration of the fiscal year.

SafeAssignment, a plagiarism prevention service, was deployed in Fall 2006 and integrated within the Blackboard Learning System interface. During FY07, approximately 164 instructors used SafeAssignment to check 1872 papers for plagiarism.

The campus-wide Higher Education model of the Classroom Performance System (CPS) (A.K.A "Clickers") was implemented in Spring 2007. Thirty-three smart classrooms were equipped with

a CPS receiver. Eighteen classes used the Classroom Performance System resulting in 523 CPS Response Pad registrations in one semester.

Substantial efforts have been applied towards the integration of the Blackboard Learning Management System, the Sungard HE Banner Student System and the Buzz In Portal. These efforts will continue through FY2008 in order to improve quality of service integration, security and data lifecycle management.

Substantial work was completed in multimedia, particularly in video production including live-streaming. Six events were streamed live over the internet, including two home football games, the Lieutenant Governor Debates, two home basketball games, and ESU's May commencement ceremonies. For a three camera setup, each live streaming production requires a minimum of five employees to operate the equipment for the entire event. In addition, a Windows Media Streaming Server was implemented in October 2006 to support pre-recorded video or audio. During the FY07, there was a total of 11, 276 hits on 509 files from 16 directories. The streaming server supports both on-campus and distance faculty, staff, and students.

All of these items were supported with four full-time employees, three graduate assistants and one student assistant.

Progress in Voice and Data Networks

The University continued to manage its Internet 1 bandwidth, currently 30 MB/sec using the Packeteer device and by segmenting its residence hall traffic.

Twenty switches have been purchased to begin the floor switch replacement. This will allow us to replace the bulk of the aging switches. Campus network closets are being evaluated on which are the best candidates for refresh.

Equipment was purchased to begin switching over to a new wireless management system. One-third of our wireless was moved to this system during the first months of FY08. New ways of authenticating wireless users were researched and equipment was identified that is sufficient for the needs of this project. During the first month of FY08 the odyssey client was removed from campus computers and the new authentication method was put into place.

Voice and Data Network staff have been heavily involved in preparations for the KanRen Sonet Ring network upgrade.

Progress in User Support Services and Operations

The following new services and supports were deployed during this fiscal year:

- Substantial server consolidation was accomplished through the use of virtual server technologies (VM) - however, additional servers were necessary to keep pace with expanding expectations.
- Deployment of Enterprise Self Service Applications for the Student, Financial Aid, HR, Finance and Advancement Banner Systems.
- Automated Identity Management Processes driven by the Sungard HE Banner System.
- Extended Buzz In Single Sign On for Blackboard, Cognos, Right Answers, and Self Service Banner Applications.
- Deployed Banner connector to FSA/Atlas.
- Deployed TouchNet payment gateway.

- Automated transfer of Banner payroll data to State of Kansas.
- Deployment of Right Answers - Student and Staff Self Service IT Knowledgebase.
- Deployment of Blackberry Enterprise.
- Extended Wireless Network and Authentication Model.
- Developed and deployed Password Self-Service components for Buzz In.
- Developed and deployed 3 different models of kiosk workstations.

The Operations group continued to provide support to more than 100 servers including:

- X86 (Windows NetWare; Linux): 66;
- VM (Virtual Machine): 45;
- Sun Sparc: 15;
- Tserver (mainframe): 1.

AGENCY IT STRATEGIC DIRECTION

This section summarizes agency direction in several key areas of information technology and business system management.

Summary:

The refinement of the new administrative business software, Enterprise Resource Planning software, together with refinement of an academic/administrative portal, and expanded data-based decision support, will continue to offer the university new and expanded opportunities to make its information resources available to its stakeholders anytime and anyplace via the World Wide Web. Through a strategic focus on the expansion/customization of self-service functions and features of the new administrative software ESU will continue to meet the expanding expectations of University stakeholders for anytime anyplace secure access to relevant information and information services. Advances into wireless connectivity will also continue to be expanded. Currently the University has one primary Information Technology-focused grant: a Title III Strengthening Institutions Grant, the focus of which is on expanding decision support strategies, reporting, access to data and related capabilities.

An approach to IT Asset Management, in terms of desktop, smart classroom technologies, voice and data network infrastructure and server infrastructure is being defined in order to standardize technology support and implementation/maintenance processes.

The Banner@Emporia State University project officially closes out in March of 2008. Throughout the lifecycle of the project, ESU has realized significant change in both business process and the supporting technology. Over the next three years, the strategic emphasis for IT services will primarily be on the stabilization of our new administrative systems environment and supporting hardware/software/processes, academic technology services, customer service processes, voice and data network and server infrastructure.

Please also include the following areas when producing this summary:

- **Agency Architecture:** Emporia State University is in compliance with state agency architecture requirements as set forth in policy. Future directions include the implementation of Microsoft Active Directory and Exchange Email Systems to support the authentication and authorization services of Emporia State University supported enterprise applications. The planned environment will be hosted in a blade based architecture.

- **IT Security Staff:** Emporia State University currently has one staff member who serves as the University Security Officer. The Security Self Assessment and associated narrative are planned to be completed and submitted to the Board of Regents in October of 2007.
- **End User IT Security Training:** IT Security Awareness materials are distributed to the campus community throughout the year. Plans to formalize an End User IT Security Training program are in place. The focus of the End User IT Security Training program will be to raise community awareness of security policies and best practices in IT security management, focusing on concepts such as Identity and Password Management, Virus and Computing Security Threats, and Appropriate Use of Technology.
- **Technology Infrastructure:** The University currently supports a mixed platform environment including Netware, Windows 2003, Linux, Solaris (Sun Microsystems Unix), and VSE/VM, running on the mainframe to support the University's legacy systems for data migration verification and historical reference.

Emporia State University is currently pursuing an initiative to replace all Novell based identity management, email, file and print services with Microsoft based technologies to support a fully integrated federated identity and service/content authentication/authorization environment. This initiative supports the primary goal of Emporia State University Technology and Computing Services in providing the right data, to the right people at the right time in a convenient and secure manner.

ESU has successfully implemented new ERP systems (SunGard Higher Education Banner). Sun Microsystems provides the hardware and extensive SAN storage solutions. The Banner systems have been deployed utilizing the Oracle database management system. The University purchased an Oracle campus agreement as a part of this initiative in order to standardize on a single database management system product suite for enterprise application data management.

The entire campus is connected via Ethernet networking – via copper to the desktops and fiber between buildings and between building segments. The campus network backbone is planned to be fully analyzed in order to develop plans to adequately refresh aging wiring, wiring closets and Ethernet switching equipment.

Over the next three years, Emporia State University will place a significant amount of effort and resources into developing IT disaster recovery plans and hot site hosting to ensure business continuity.

- **Data Sharing:** ESU will continue to strengthen its very close working relationship with Wichita State University which has also successfully implemented the Sungard HE Banner software. This has yielded significant benefit to Emporia State University and Wichita State University. It is anticipated that this collaboration will continue to provide benefit to both Universities in the future. Indeed, the required interfaces between Banner and multiple State of Kansas information systems have been developed collaboratively saving both institutions significant fiscal and human resources.

ESU participates actively as a member of the Regents Information Technology Council that meets monthly and provides an avenue for communication and coordination of IT related activity across the Regent system. ESU is also a member of KanREN and ESU participates actively in member meetings. Additional communication and coordination

with the staff of the Kansas Information Technology Office (KITO) and the Executive Branch CITO (Denise Moore) also continue to support expanded opportunities for collaboration and coordination.

- **Collaboration Software** Emporia State University utilizes multiple programs to support collaboration. Novell GroupWise, version 7.0, is the standard e-mail and calendaring system used across the university. 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. Horizon-Wimba provides desktop-based synchronous real-time web-based teleconferencing capability utilizing the commercial Internet. The University supports several teleconferencing sites on its campus and routinely provides locations for satellite downlink programming.

Over the next three years ESU Technology and Computing Services will expand services and content delivered through the Luminis Portal in order to foster an environment of open collaboration and convenient service delivery.

- **Data Management:** Currently, all University centralized administrative information is stored, for operations purposes, in the Oracle 10g relational database management system. All reporting and analysis activities use the Sungard HE Banner Operational Data Store, an isolated Oracle instance for reporting purposes. A grant supported data warehouse holds legacy data for data migration verification and historical reference.

An Enterprise Data Life Cycle Management plan will be developed to ensure appropriate classification, retention and security control of University information and data resources.

- **E-Government:** The continued maintenance of Banner, its self-service modules, as well as the Luminis portal, appropriately named Buzz In, provides significantly expanded opportunities to provide on-line service and support to University stakeholders.
- **Identity Management:** Future directions include the implementation of Microsoft Active Directory and Exchange Email Systems to support the authentication and authorization services of Emporia State University supported enterprise applications as defined within the enclosed application map.
- **Business Contingency Planning:** The development of business contingency planning is a part of our on-going focus on security and disaster recovery.
- § **IT Disaster Recovery:** Over the next three years, Emporia State University will place a significant amount of effort and resources into developing IT disaster recovery plans and hot site hosting to ensure business continuity.
- **Electronic Records Retention:** The University will follow state guidelines regarding adoption and promulgation of electronic records retention policies and processes. Enterprise Data Lifecycle Management Planning is a priority for this fiscal year.

SECTION II ~ AGENCY IT OBJECTIVES AND GOALS

Part One: IT Objectives and Business Goal(s) Alignment

IT Objective 1: Fully implement a new administrative system

Business Goal(s) Supported: This IT objective reflects a specific ESU Strategic Goal: Goal IV, The University will support its learning and living environment with high quality infrastructure: Objective C: Implement Enterprise Resource Planning Software.

IT Objective 2: Provide high quality IT service and support to the entire ESU community

Business Goal(s) Supported: This IT objective supports Goal V: The University will support its learning and living environment with high quality students, faculty and staff. Objective C: Support professional development for faculty and staff.

IT Objective 3: Support and enhance a robust, secure, and responsive network environment

Business Goal(s) Supported: This IT objective supports Goal IV: The University will support its learning and living environment with high quality infrastructure. Objective A: Continually update classrooms, laboratories, and other institutional facilities to provide a state of the art learning environment.

IT Objective 4: Expand data based decision support strategies

Business Goal(s) Supported: This information technology objective reflects a specific ESU Strategic Goal: Goal IV, The University will support its learning and living environment with high quality infrastructure: Objective C: Implement Enterprise Resource Planning Software: Strategy 1 and 2: Increase efficiency in the gathering of student/program information for purposes of making decisions about academic programs; Improve interfaces that help faculty and staff acquire and access data to make decisions.

SECTION III ~ MAJOR IT APPLICATIONS

Unmodified Applications

Application 1: EMAS – Enrollment Management and Admission System

Purpose: Used to manage undergraduate recruitment and admissions processes and procedures. Interfaced with the Banner Student System.

Planned Initiatives: Expected to upgrade to a new version that will be released from the vendor. Refine batch interface to the Banner Student System.

Application 2: Banner Finance

Purpose: Support business and finance needs of the University

Planned Initiatives: Expand reporting and incorporation of finance information in the University's portal

Application 3: Banner Advancement

Purpose: Support information needs of development and alumni relations

Planned Initiatives: Expanded reporting and incorporation of advancement information into the University's portal

Application 4: Banner Operational Data Store

Purpose: Support information reporting needs of Banner users.

Planned Initiatives: Expanded reporting and analysis of Banner data.

Application 5: Cognos 8 BI (Business Intelligence)

Purpose: Support information analysis and reporting needs of Banner users.

Planned Initiatives: Expanded reporting and analysis of Banner data.

Application 6: e~Print

Purpose: Reporting; decision support; data analysis

Planned Initiatives: Expanded reporting and analysis of Banner data.

Application 7: Blackboard Learning Management System

Purpose: Manage on-line teaching and learning environment

Planned Initiatives: Full integration with Banner Student module.

New/Modified Applications

Application 1: Banner Student

Purpose: Supports the management of academic programs, faculty, advising and registration services.

Planned Initiatives: Expand reporting and refine baseline implemented business rules

Functions: Support the management of student records, recruitment, admissions, registration catalog, schedule, degree audit, faculty load and advising

Interaction: Students, Faculty, Registration Staff, Academic Departmental Staff, Accounts Receivable Staff, Financial Aid Staff

Technical Environment:

Hardware: *Sun Microsystems*

Network Protocols: *TCP/IP*

System s/w: *Solaris*

DBMS: *Oracle*

Client: *Web browser only needed*

Special s/w: *None*

Language: *NA –Commercial product*

Implemented: *2007*

Revision: *7.3*

Maintenance: *Vendor supported*

Application 2: Banner Financial Aid

Purpose: Supports the management Financial Aid Services and Processing Requirments.

Planned Initiatives: Expand reporting and refine baseline implemented business rules

Functions: Support the management of Student Financial Aid records, packaging, awarding, disbursement, loan certification, student self service

Interaction: Financial Aid Staff, Students, Foundation Staff, Registration Staff, Academic Departmental Staff.

Technical Environment:

Hardware: *Sun Microsystems*

Network Protocols: *TCP/IP*

System s/w: *Solaris*

DBMS: *Oracle*

Client: *Web browser only needed*

Special s/w: *None*

Language: *NA –Commercial product*
Implemented: *2007*
Revision: *7.8*
Maintenance: *Vendor supported*

Application 3: Banner Human Resources

Purpose: Supports the management of ESU Human Resources services

Planned Initiatives: Expand reporting and refine baseline implemented business rules

Functions: Support the management of HR and Payroll , budgeting policies and workforce

Interaction: Employees, HR Staff, Payroll Staff

Technical Environment:

Hardware: *Sun Microsystems*
Network Protocols: *TCP/IP*
System s/w: *Solaris*
DBMS: *Oracle*
Client: *Web browser only needed*
Special s/w: *None*

Language: *NA –Commercial product*
Implemented: *2007*
Revision: *7.23*
Maintenance: *Vendor supported*

Application 4: Right Answers

Purpose: Personalized solution-driven self service IT knowledgebase

Planned Initiatives: Continued Development of customized solutions

Functions: Supports self service IT knowledge management

Interaction: Employees, Students and Faculty

Technical Environment:

Hardware: *Dell*
Network Protocols: *TCP/IP*
System s/w: *Windows Server 2003*
DBMS: *SQL Server*
Client: *Web browser only needed*
Special s/w: *None*

Language: *NA –Commercial product*
Implemented: *2006*

Revision: 4.0
Maintenance: *Vendor supported*

SECTION IV ~ IT PLANNED PROJECTS

No major project(s) planned.

SECTION V ~ BUSINESS AND TECHNOLOGY RADAR CHARTS

Emporia State University				
	FY 2007	FY 2008	FY 2009	FY 2010
Business Initiatives				
Initiative #	Description			
1	Fully Implement New Administrative Systems			
2	Provide High Quality IT Service and Support to the Entire ESU Community			
3	Support and Enhance a Robust, Secure, and Responsive Network Environment			
4	Expand Data Based Decision Support Strategies			
Technology Infrastructure Initiatives				
Initiative #	Description			
1, 2, 3, 4	Support Technical Infrastructure to meet campus operational, research and service requirements			
1,2,3,4	Expand Operational and Analytical Administrative Reporting Access			
2,3	Continue to develop, adopt and promulgate security policies, practices and technologies			
2, 3	Replace and Upgrade desktop and server systems as necessary			
2, 3	Expand Wireless Network Access and Ubiquitous Computing			
2, 3	Migrate away from mainframe towards Sun Infrastructure			
2, 3	Refresh Campus Network Wiring Closets and Floor and Building Switches			
2, 3, 4	Migrate away from Novell based identity, email, file, print and application delivery infrastructure towards Microsoft based technology			
1,2,3	Design and Implement Disaster Recovery Hot Site and Production Systems Redundancy			
IT Business System Initiatives				
1,2,3,4	Ongoing Development of Banner Applications			
2,3	Buzz In Portal and Ongoing Single Sign On Development			
2,3,4	Implement Operational Data Store and Ongoing Development			
2,3,4	Combination of Title III and ERP Initiatives (ODS/EDW/Cognos)			
2, 3, 4	Migrate away from Novell based identity, email, file, print and application delivery infrastructure towards Microsoft based technology			
2,3,4	Deploy and Maintain IT Asset Management Plan			
2,3,4	Implement Banner Enterprise Data Warehouse and Ongoing Development			
2,3	Deploy Blackboard - Banner Interface			
1,2,3	Banner Workflow Implementation and Ongoing Development			
2, 3	Deploy Hosted Email Service for Students and Alumni			
2,3	Expand Distance Learning, Blackboard and Horizon Wimba Services to include portfolio/content system, Blogs, WIKIs, voice and video services			
2,3	Voice over IP Pilot			
2	Channel 8 - Deploy and maintain extended broadcasting			

SECTION VI ~ ENTERPRISE BUSINESS PARTNERS MODEL

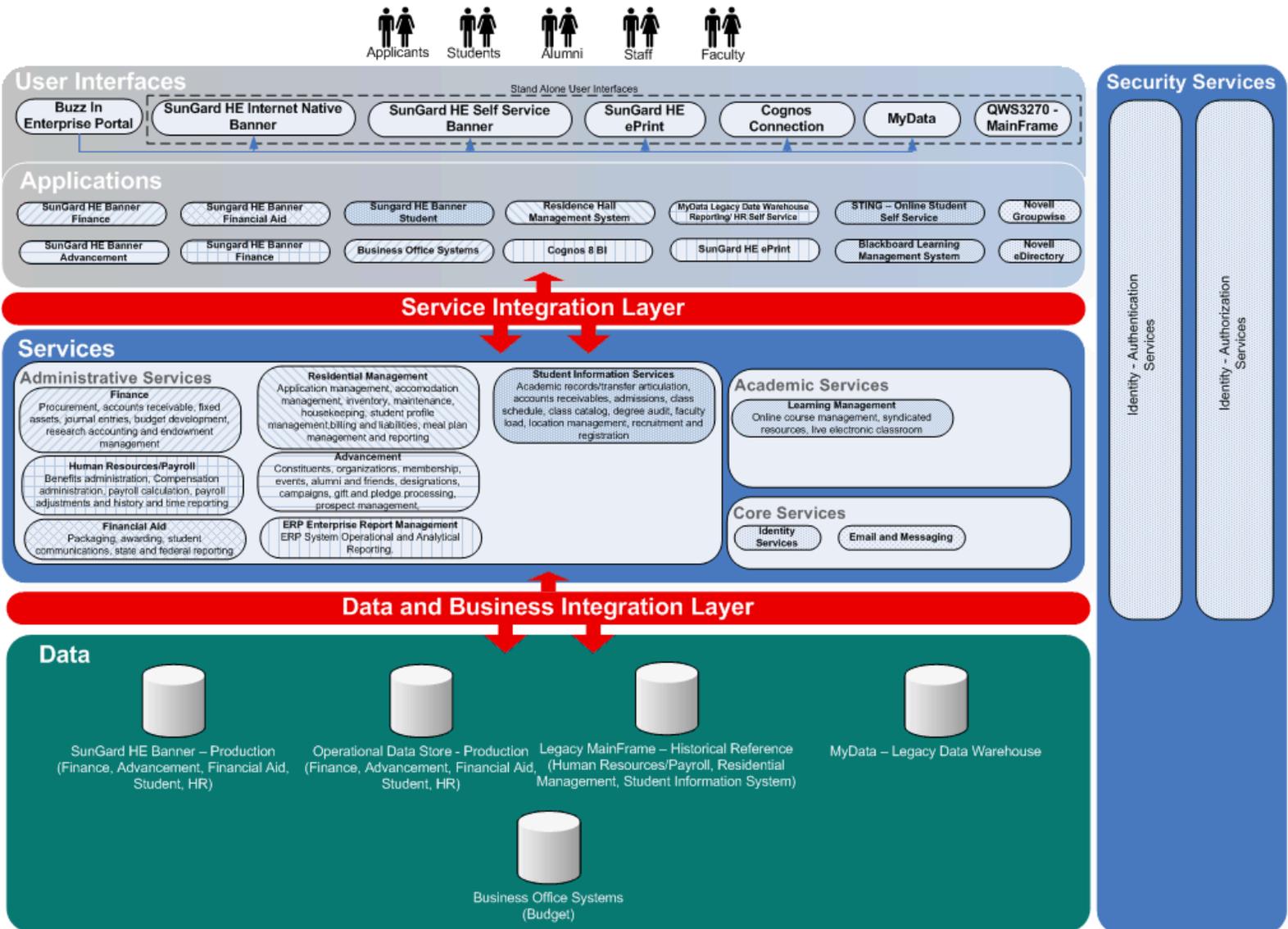
Business Partner	INPUT		AGENCY
	←	→	
Students		Tuition Payments, Coursework, Enrollment Requests, Applications, Financial Aid Requests	Emporia State University
	←	Bills, Grades, Enrollment Info, Transcripts, Financial Aid Information/Awards, Education	
Parents of Students		Tuition Payments, Financial Aid Information	
	←	Bills	
General Public		Financial Support	
	←	General information on the University, Research Information, Service	
System Vendors		Software Applications, Hardware, Bills, Bids, Contracts, Licenses, Documentation, Training	
	←	Requests for Proposals, Fix Requests, Payments	
Data Vendors		Bills, Bids, Contracts, Licenses, Documentation, Training, Data Access, Books, Journals	
	←	Requests for Proposals, Fix Requests, Payments	
Other Kansas Universities		Shared Planning Information	
	←	Shared Planning Information	
State Agencies		Shared Services	
	←	Research Information, Planning Information, Reports, Service	
Contractors		Bids, Invoices, Deliverables, Status Reports	
	←	Requests for Bids/Proposals, Contracts, Plans, Change Orders, Payments	
Federal Agencies		Research Grants, Financial Aid Funds	
	←	Research Proposals, Reports	
	←		

SECTION VII ~ ENTERPRISE VALUE CHAIN

Emporia State University Value Chain



SECTION VIII ~ ENTERPRISE APPLICATION MAP



* The Shading of objects in the Applications section defines the object's associated service(s)
i.e. The SunGard HE Finance Application is directly associated with the Finance Administrative Service

- The Services layer represents the separation of re-usable services from application logic. The service layer will thus consist of services with clearly defined contracts that can be used by any application. The services have initially been classified in to three major groupings: Core Services for technical and basic services, Administrative for services that provide access to administrative data or processes and Academic Services for services specific to the education and research domains.
- The Service Integration layer is responsible for exposing the services in the architecture in a consistent manner while enabling services to be implemented in a variety of technologies.
- The Applications layer shows groupings of applications that are built for specific purposes.
- The User Interfaces layer conveys the concept of users having a single point of access for user related application functions.