Technology continually impacts how Washburn University operates as an institution of higher education, both in its academic and administrative settings. In an attempt to prepare for its future, Washburn University contracted with Kaludis Consulting to assess its technology environment. This assessment occurred during the period February to April 2010, and the results were presented to a variety of campus groups beginning in July 2010.

Washburn’s Technology Steering Committee (hereafter, TSC) carefully reviewed the Kaludis report and agreed that a campus-wide strategic planning process should focus upon implementing the following five key recommendations.¹

1. Improve shared IT governance, planning, and support services.
2. Enhance technology support for teaching, learning, and research.
3. Upgrade the University's network, infrastructure, and core technology resources.
4. Help to improve and streamline Washburn’s student services, operational processes, and reporting.
5. Promote communications, collaboration, information sharing, and stewardship.

The TSC created the Technology Strategic Planning Task Force (the “Task Force”), comprised members from a variety of campus units, to accomplish this goal. The Task Force began meeting late in the Fall 2010 semester and has continued meeting throughout the Spring 2011 semester. Of note, the Task Force chose to divide into a series of subcommittees with each one focused upon a particular recommendation from the Kaludis report. As a whole, the Task Force reordered the Kaludis recommendations and slightly revised #3: “Upgrade the University's network, infrastructure, and core technology resources” moving it to fifth place in this report.

The TSC emphasized the need for the Task Force to use the University’s Strategic Plan and additional campus input to shape a plan for future technology resources and services. Indeed, the importance of technology to the future of Washburn University is clear upon reading the University Strategic Plan, as emphasized in the following Strategic Themes:

Washburn University Strategic Theme I:
H: The University will plan for technology support for its academic mission
   1. Assess and evaluate academic community needs to support the learning and scholarly environment
   2. Provide technological support sufficient for a growing number of on-line course offered nationally and internationally

Washburn University Strategic Theme V:
B: The University will enhance operational excellence, organizational accountability, and functional transparency for academic and administrative units
   1. Improve operational excellence and administrative efficiencies through professional development, greater use of technology, improved communications, and strategic use of data

D: The University will provide effective information systems and other administrative resources to support operational services for students, faculty, and staff
   1. Enhance the technology infrastructure to ensure state-of-the-art instruction capability, scholarly activity, communications, and secure information storage and transfer
   2. Expand necessary infrastructure to support high-quality, high-impact programs and creative and scholarly activities to serve the cultural, economic, educational, and social needs of the region and state of Kansas
   3. Seek more collaborative involvement with corporate, governmental, and international partnerships in order to expand opportunities for programs and scholarly and creative activities

Finally, the TSC stressed that the Task Force was not charged with writing a management plan for Washburn’s ISS department, but to think broadly about the future of all technology at the institution.

The following draft plan is presented by the Task Force to both the TSC and the broader university community as an attempt to promote further dialogue and advance the thinking about and uses of technology at Washburn University in 21st century.
Membership of the Task Force

Lynn Bailey, Staff Council
Alan Bearman, Mabee Library/Chair
Karen Camarda, CAS
Jeanne Catanzaro, School of Nursing
Melodie Christal, Institutional Research
John Christensen, School of Law
John Cummings, Student Life
Kevin Halgren, ISS
Elliott Haugen, ISS/Consultant
Chris Leach, Finance Office
Caley Onek, WSGA
Tim Peterson, Academic Outreach
Carla Rasch, Enrollment Management
Azyz Sharafy, Faculty Senate
Rusty Taylor, School of Applied Studies
Rosemary Walker, School of Business
Brenda White, ISS
STRATEGIC THEME I: 
Improve shared IT governance, planning, and support services

To create and maintain a technology rich environment, Washburn University needs to ensure that communications about and planning for the appropriate uses of technology are occurring in numerous settings. Fulfilling the goals of this strategic theme require the continuation of several committees that already exist at Washburn (A, B1 & B3) and the creation of new structures (B2 & B4).

A. The Technology Steering Committee (TSC) is responsible for ensuring that the strategic development and deployment of University information technology resources, services, and support are guided by planning, priorities and policies. The TSC is an advisory body to the University President.

B. In order to ensure technology collaboration and to create more opportunities in technology planning the subcommittees that report to TSC should include:

1. Faculty IT Advisory Council (“FITAC”) 
   A significant focus of this group is pedagogical uses of technology in 21st century learning, including policies, procedures and best practices.

2. University Information Systems Advisory Council 
   A significant focus of this group is the efficient and effective management and use of university information systems to serve faculty, staff and students. For example, Banner, iAlert, iCard, e-commerce and Web content management.

3. Online Education Committee 
   A significant focus of this group is the development of new curricular offerings, improved faculty and staff training, increased technical support, and the assessment of student learning and program outcomes.

4. Student Technology Advisory Council 
   A significant focus of this group is to serve as a forum for communication with students regarding their role as end-users of technology at Washburn University.

C. Each campus unit (both academic and administrative) should develop the appropriate structures for its technology planning and communications.

D. The CIO/Director of ISS should regularly meet with the Academic Deans and Directors to discuss the technology needs of their units.

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2 See Appendix I for a list of the current and/or proposed membership of each subcommittee.
STRATEGIC THEME II: Enhancing technology support for teaching, learning, and research

To develop technology-enabled scholars and students for the 21st century, Washburn University should commit to enhancing the use of technology in supporting teaching, learning, and research. Accomplishing this goal includes, but is not limited to, providing resources and funding in support of sustainable faculty development, educational technology, research support, student services, and the acquisition of new and maintenance of existing technologies. Careful consideration must be given to match appropriate technologies to willing and appropriate end-users to optimize our resources. Additionally, the University should recognize innovative faculty use of technology in the educational process as scholarly activity.

In order to achieve excellence in this theme, we recommend the following initiatives be implemented and assessed at least every three years:

A. Develop a comprehensive faculty development plan for instructional technology.

Washburn University should review existing development resources for effectiveness and sustainability and modify as necessary. Additionally, a commitment should be made toward continuous improvement of Faculty/Adjunct competency in the pedagogical use of technology. This can include faculty and staff technology orientation, support of instructional design and technical support.

B. Develop a comprehensive administration, faculty, and staff development plan for existing and new enterprise services and online technologies.

In order to be able to effectively support the faculty and teaching mission of the university, the University should ensure that administrative and staff personnel are provided opportunities for professional development and training in existing and new technologies. Additionally, the University should develop a technology orientation program for new hires.

C. Perform or review a needs analysis of existing facilities and commit to maintaining, improving or expanding identified resources.

Development and improvement of physical facilities (e.g., classrooms, labs, and other learning and living spaces) should be a collaborative effort involving academic departments, Student Life, Facilities, FITAC, and designated personnel from ISS. We strongly encourage collaboration with faculty in developing standards for new and existing teaching and learning spaces, in particular selection of hardware, software, equipment interfaces, and connectivity (except where specialized needs are identified).
D. **Perform a technology literacy needs assessment on incoming students.** Create a list of core competencies that are essential to student success and retention.

Current trends in higher education suggest that the University should continue, and further explore, the support of student learning with technology. In support of this, we recommend developing student competencies in the use of Washburn educational and administrative computing resources, such as learning management systems, student enrollment systems, collaborative tools, and other student information systems. Additionally, the University should develop student competencies in the use of common technologies, such as Internet use, basic software skills, and so on.

E. **Perform a needs assessment on current research and potential research activities and provide a process for tracking and technology support.**

F. **Develop an equitable intellectual property policy that will protect and encourage scholarly activity, including the use of technology.**

In order to promote the development of new teaching and learning paradigms, the University should develop an intellectual property policy that will protect and encourage scholarly activity and evolving teaching methods.

G. **Review, revise, or develop a plan and process for academic units and others for establishing and communicating an x-Year technology plan.**

Each campus unit, both academic and administrative, should develop mechanisms for technology planning and means of communicating their needs to the applicable governance committee.

H. **Review and discuss funding strategies for technology classrooms, labs and the development of technology literate faculty.**

The TSC should work with the Washburn University Foundation to demonstrate the need to support and develop of technology classrooms, labs, and other facilities as well as the develop of technology literate faculty, to potential donors.

I. **Identify standards and recommendations for student-owned equipment.**

We strongly recommend that on an annual basis FITAC, the proposed Student Technology Advisory Council, and ISS jointly identify standards and/or recommendations for student-owned equipment and what level of support for student-owned equipment will be provided by the University.
J. Demonstrate our technology usage, successes, and talents with the community, other constituents, Washburn faculty and staff, and current and prospective students.

Interaction with community in relation to the University’s use of technology should be ongoing, and highly valued. Technology should be leveraged to promote student recruitment, learning, community service, and internships for career-building.
STRATEGIC THEME III:
Help to improve and streamline Washburn’s services for students, operational processes, and reporting

The accomplishment of many goals in the Washburn University Strategic Plan can be achieved through the assistance of technology, specifically the improvement and streamlining of Washburn’s services for students, operational processes, and reporting. By using and embracing technology in all of these areas, the University can improve student success and retention through efficient and effective contacts with the University.

Washburn University should commit to enhancing the use of technology for seamless, intuitive, secure, and innovative services for students, operations, reporting, and sharing of information in support of the University’s decision making and policy and program development. In order to achieve excellence in this theme, we recommend the following strategic goals be implemented and assessed at least every three years.

**Develop a comprehensive faculty development plan for instructional technology.**

**A. Services for Students**

1. Develop a University assessment tool to review changes to and improve the technology services provided to students. This should be a collaborative effort with all major stakeholders (e.g., FITAC, Student Technology Advisory Council).

2. Develop a virtual “one stop student services center” to mirror the one described in the University Strategic Plan.

3. Develop a virtual “one stop student services center” to mirror the one described in the University Strategic Plan.

4. Monitor present and future trends in technology to understand how students are using technology in their daily lives and how it impacts interactions with the University.

**B. Operational Processes**

1. Develop secure, reliable systems with appropriate access for various stakeholders.

2. Evaluate Banner modules and other alternatives for improving operations such as tools to automate repetitive tasks, workflow tools, electronic signatures and/or modification to baseline Banner code.

3. Assess the technology use and needs of different units, by reexamining business processes and practices and identify mechanisms for automating processes.
4. Analyze training needs and provide relevant training for faculty, staff, and students in the use of technology.

5. Ensure the availability of assistive technology (hardware and software) to ensure the functional capabilities of individuals with disabilities.

6. Develop a University document retention policy to assist employees in making decisions related to retention of electronic documents.

C. Reporting

1. Provide distributed reporting and management reporting (reports that help managers make appropriate decisions) capability to end users.

2. Develop, acquire, or effectively utilize applications for extracting data from Banner and other institutional systems (e.g., iCard, electronic lock system, ACEware) easily and securely.

3. Review, analyze, determine, and publish core data element definitions.

4. Utilize existing data entry standards (and develop additional standards as needed) and review/develop a process for cleansing the data.

5. Provide and regularly review appropriate access to data for units/staff by job function.
STRATEGIC THEME IV: Promote communications, collaborations, information sharing, and stewardship

Technology continues to evolve and change the way people communicate and collaborate. Rapid sharing of and access to information is an expectation in the 21st century. Students, faculty, peers, and other constituents expect the University to keep current with developments in technologies outlined here.

In order to address these needs while also achieving the goals outlined in the University’s Strategic Plan, it is important for the University to promote and utilize technologies that improve its ability to communicate, collaborate, and share information in a secure and responsible manner.

Accomplishing this goal includes, but is not limited to, developing policies and procedures that facilitate the flow of information, providing resources and funding in support of sustainable tools and technologies, and training in and stewardship of their use.

In order to achieve excellence in this theme, we recommend the following initiatives be implemented and assessed at least every three years.

A. Communication

1. All portions of the web presence of the University should provide easily accessible, relevant, and timely information to past, present, and future stakeholders.

2. The University should establish and effectively use of social networking.

3. Assess the current email and calendaring systems, and then implement improved systems that specifically take into account feedback from end-users regarding ease of use, flexibility, and functionality.

4. Develop, periodically review and update a policy outlining the duration and deletion of email accounts.

5. Develop policies regarding University support of mobile devices and applications, and explore effective uses of those devices and applications.

B. Collaboration

1. Develop a policy, process, and procedure including secure access for allowing external collaborators appropriate access to the University’s technological resources and educate faculty and staff about the policy.
2. Provide a secure platform for the online sharing of documents and data with both internal and external collaborators.

3. Identify, implement and support technologies for virtual meetings between geographically separated collaborators.

C. Information Sharing

1. Complete a needs analysis of the different types of data requested by end-users, such as student personal records, student course records/progress, academic records, and financial information.

2. Develop the processes, strategies, and policies for sharing of data and information both internally and University based on the analysis noted above. The sharing should occur on multiple levels keeping in mind all types of users (e.g., non-technical, ADA, super-users).

D. Stewardship

1. Coordinate and communicate a needs analysis of existing technology resources (for example, review the currently used technological resources and policies to ensure their effective and appropriate use). This review should heavily involve end-user feedback.

2. Develop security policies relating to technology.

3. Identify new streams of funding and review existing resources to sustain and fund the current and future secure technology environments.

4. Develop policies and procedures regarding the rights to intellectual property as referenced in Theme 2-G.

5. Identify and cultivate key lines of communication between stakeholder groups, such as FITAC, and the proposed Integrated and Enterprise systems, Distance Education, and Student Technology Advisory Council committees.

6. Provide a clear communication strategy regarding network status, system changes, pending and emerging technology projects and their progress.

7. Review the entire University Technology Strategic Plan every three years.

8. Develop policies and procedures to ensure the continuation of essential services and safeguarding of core technology resources following a technological failure or disaster.
STRATEGIC THEME V: Upgrade the University’s information and communications technology infrastructure and identify core technology resources

Students, Faculty, Staff, and other constituents expect a 21st century university to embrace technology to provide ubiquitous access to educational resources and university services. Developing, maintaining, and upgrading these resources and services requires an institutional commitment to ongoing technological improvement. To effectively meet these needs, robust, reliable, flexible, and scalable technology infrastructure and core technology resources, as well as the financial resources to maintain these are required.

A. Identify the core technology resources necessary to support and enhance teaching, learning, research, and student life via a collaborative process.

B. Identify the core technology resources necessary to support and enhance the business operations of the University and establish policies to limit outages of essential services. This may be accomplished by providing test environments, adequate redundancy, and disaster recovery procedures.

C. Commit to planning for and the development, acquisition and maintenance of equipment and local, hosted, or cloud-based services required to support a reliable, robust, scalable, and secure infrastructure, as well as the staff and training necessary to support this infrastructure.

D. Develop disaster mitigation and disaster recovery expectations for infrastructure and core resources, and encourage the development of both University and departmental business continuity plans.

E. Determine the scope of services to be provided for wireless and mobile computing.

F. Develop and sustain the use of technology in support of the physical security of the campus and its community, with a special focus on maintaining and enhancing student safety.

G. Develop fiscal and operational strategies to optimize the use of scarce technology resources (e.g., development of effective prioritization procedures and investigation of innovative cost saving measures such as cloud services, offsite hosting, and outsourcing).

H. Develop sustainable funding models for the capital, operating, and personnel costs associated with developing and maintaining technology infrastructure and core infrastructure.

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See Appendix II for a list of potential implementation elements.
Appendix I
Membership of Committees

A. Technology Steering Committee

Faculty Member, Faculty Senate representative (appointed annually)
Faculty Member, FITAC representative (elected annually by FITAC membership)
Faculty Member, VPAA representative (appointed annually)
Faculty Member, VPAA representative (appointed annually)
Vice-President for Academic Affairs
Vice-President for Administration and Treasurer
Vice-President for Student Life
Special Assistant to the President
President, Washburn University Foundation
Executive Director, Enrollment Management
Dean, University Libraries
CIO/Director of ISS

B. Faculty IT Advisory Council (2-year terms, appointed by Dean; Chair elected by membership)

Faculty Member, University Libraries
Faculty Member, School of Applied Studies
Faculty Member, School of Business
Faculty Member, School of Nursing
Faculty Member, School of Law
Faculty Member, College of Arts & Sciences: Natural Sciences
Faculty Member, College of Arts & Sciences: Social Sciences
Faculty Member, College of Arts & Sciences: Fine Arts
Faculty Member, College of Arts & Sciences: Humanities
Faculty Member, College of Arts & Sciences: Education and Kinesiology
CIO/Director of ISS (ex-officio)
Assistant Director of Instructional Services (ex-officio)

C. University Information Systems Advisory Council (suggested representatives from the following areas; Chair elected by membership)

Enrollment Management (representatives)
Faculty Senate
Institutional Research
Staff Council
Student Life (representatives)
VPAA (representatives)
VPAT (representatives)
Washburn University Foundation
WSGA
CIO/Director of ISS (ex-officio)
Assistant Director of Enterprise Systems (ex-officio)

D. Online Education

   Chaired by Dean of Academic Outreach
   Faculty members appointed by Deans
   ISS membership appointed by CIO/Director of ISS

E. Student Technology Advisory Council

   Determined by WSGA and Vice-President for Student Life

F. Campus Units

   Determined by individual units
Appendix II
Potential Implementation Elements

A. Provide web-integrated, on-demand, and archival video and audio services

B. Secure remote access services for learning environments (e.g. labs, classrooms), applications (e.g. SPSS, computational modeling software), and unique technology resources (e.g. HiPACE)

C. Identify and provide resources required for substantial deployment and support of fully on-line courses

D. Commit to funding salaries for attracting and retaining high quality technology support staff

E. Commit to providing ongoing training in the use of technology to faculty and staff

F. Develop seamlessly integrated services and resources, utilizing technologies such as Single Sign-On and common user interface design

G. Develop an Identity Management strategy to permit greater integration of disparate technology services and resources

H. Develop disaster recovery and disaster mitigation strategies to address threats to critical university technology resources and data

I. Commit to providing test and develop resources for new services in order to enhance reliability and support

J. Develop strategies for effective prioritization of technology replacements and upgrades

K. Developing a needs analysis process to effectively match available resources to strategically and operationally important needs

L. Consider outsourced services where substantial cost savings may be realized

M. Encourage the use of open standards to reduce vendor lock-in

N. Encourage the evaluation and open source software where practical and when total lifecycle costs may be reduced
O. Develop sustainable financing of technology through funding models that provide ongoing support for upgrades and replacements (as is currently provided for the telephone system)

P. Work with the Washburn University Foundation to develop additional revenue sources

Q. Consider broad-based or focused student technology fees

R. Commit a greater percentage of university general funds and/or capital funds to technology