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DEAR LSU CAMPUS COMMUNITY:

I would like to present the latest version of the Flagship Information Strategy (FITS 2020). FITS 2020 provides the blueprint for IT advancement for the next few years. It calls for continued innovation on the part of Information Technology Services (ITS), a commitment to superb customer service from every level of the organization, and the flexibility to respond to ever-changing technology expectations from the campus community.

The Flagship Information Technology Strategy (FITS) was initially developed over the course of 2005 and published in 2006. Unlike previous strategic plans for ITS, FITS was developed through a broad community effort coordinated in ad hoc task forces jointly by the Office of the Chief Information Officer and campus faculty. For the first time, ITS had a plan representing the will and priorities of the campus it serves. Subsequent updates and versions followed as the IT environment continued to evolve. FITS 2020 reflects the current feedback from campus constituencies, takes stock of where Louisiana State University (LSU) is regarding its IT environment, and makes adjustments as we continue to progress.

FITS 2020 follows the LSU Flagship Agenda 2020 in format. As LSU evolves to meet emerging opportunities brought forth by LSU’s system unification, the FITS 2020 may be expanded to include other campuses and constituencies.

FITS 2020 comprises 11 goals with 69 action items. These action items serve the following broad functions:

• Actions Providing Baseline Fundamentals: These are items that must be addressed in order to provide Louisiana State University with the foundational elements of information technology necessary to continue to exist and be successful in the second and third decades of the 21st century. Many of these actions involve a process of continued vigilance to maintain and modernize our existing infrastructure and services.

• Actions Creating an Environment of IT Abundance: These are items that, when addressed, will position Louisiana State University to have an environment where IT is abundant - where it is advanced, current, and most effectively and efficiently made available to the students, faculty, and staff of the university to aid in their advancement of the broader strategic vision and mission of the institution.

• Actions Supporting Innovation: These are items that, when addressed, will position Louisiana State University to be at the leading edge as a university that enables scholarly achievement, innovation, and entrepreneurship that comes from discovery and the expansion of knowledge through the use of information technology.

I want to thank all of the volunteers who committed their time to participating in the focus groups to devise this document, as well as the IT Governance Council for their guidance and participation in this process. On behalf of LSU Information Technology Services (ITS), I thank you for your continued support, and look forward to working with you as we embrace the transformative and enabling power of information technology.

Brian T. Nichols
Chief Information Officer

FITS 2020
As the Flagship institution of the state, the vision of Louisiana State University is to be a leading research-extensive university, challenging undergraduate and graduate students to achieve the highest levels of intellectual and personal development. Designated as a Land, Sea, and Space Grant institution, the mission of Louisiana State University is the generation, preservation, dissemination, and application of knowledge and cultivation of the arts.

In implementing its mission, LSU is committed to:

- offering a broad array of undergraduate degree programs and extensive graduate research opportunities designed to attract and educate highly qualified undergraduate and graduate students;
- employing faculty who are excellent teacher-scholars, nationally competitive in research and creative activities, and who contribute to a world-class knowledge base that is transferable to educational, professional, cultural, and economic enterprises; and
- using its extensive resources to solve economic, environmental, and social challenges.

**VISION**

Within prudent and reasonable resources, and in line with institutional priorities, Information Technology Services (ITS) will provide an environment that features “IT Abundance” … wherein IT is advanced, current, and readily available to support faculty, staff, and students in their achievement of the mission of the institution. ITS will be excellent in providing IT abundant infrastructure and services, not as its own end, but as a way in which the mission of the institution is ultimately served.

**MISSION**

Information Technology Services (ITS) provides technology infrastructure and services that advance teaching and learning, enable research, enrich the student IT experience, and effectively manage institutional information, in support of LSU’s pursuit of national prominence as Louisiana’s Flagship University.

**VALUES**

- We value our most prized resource – the people of ITS who pursue excellence and deliver it in terms of IT infrastructure and services.
- We value our relationships with the faculty, students, and staff of LSU – our customers, partners, colleagues, and friends – and thus honor a service culture above all else.
- We value the trust placed in us by university administration, the Board of Supervisors, and the Board of Regents, to be efficient and effective in the use of all resources.
- We value the security of the technology resources and information entrusted to our care, and will be vigilant in maintaining the integrity of these critical items.
FITS
FOCUS GROUP MEMBERS

RICHARD ABBOTT,
SCHOOL OF VETERINARY MEDICINE
SHEANTEL BAKER,
ACCOUNTING SERVICES
STEPHEN BECK,
SCHOOL OF MUSIC AND CENTER FOR COMPUTATION & TECHNOLOGY
MARGARET COFFEY,
VETERINARY TEACHING HOSPITAL
KEVIN DIBENEDETTO,
COMMUNICATION ACROSS THE CURRICULUM
BENJAMIN BOURGOYNE,
STEPHENSEN DISASTER MANAGEMENT INSTITUTE
HOLLY CARRUTH,
OFFICE OF RESEARCH AND ECONOMIC DEVELOPMENT
HANNAH FAULKNER,
UNDERGRADUATE
LORRIE GASCHEN,
VETERINARY CLINICAL SCIENCES
ADAM GRASHOFF,
UNDERGRADUATE
BENJAMIN HOOD,
UNDERGRADUATE
PAUL HOOD,
UNDERGRADUATE
LATOYA JOSEPH,
LIBRARY & INFORMATION SCIENCE
JOSHUA LEDET,
SCHOOL OF MUSIC
LONNIE LEGER,
LOUISIANA OPTICAL NETWORK INITIATIVE
LYNN LIVINGSTON,
RESIDENTIAL LIFE
DUNCAN MACLEOD,
PHYSICS & ASTRONOMY
BRIAN MELANCON,
LSU LIBRARIES
SAI PINNEPALLI,
FACILITY SERVICES
SAMUEL SHAW,
UNDERGRADUATE
JOSEPH TABOADA,
SCHOOL OF VETERINARY MEDICINE
ELLIOTT THOMPSON,
UNDERGRADUATE
DONNA TORRES,
FINANCE AND ADMINISTRATIVE SERVICES

FACULTY IT
GOVERNANCE COUNCIL

MARK BENFIELD,
PROFESSOR, OCEANOGRAPHY & COASTAL SCIENCES
ALICE DAUGHERTY,
ASSOCIATE LIBRARIAN, LSU LIBRARIES
BARRA DUTROW,
A.G. GUEYMARD PROFESSOR OF GEOLOGY, GEOLOGY & GEOPHYSICS
WILLIAM F. GRIMES,
E. & D. WHITE PROFESSOR OF JAZZ MUSIC, SCHOOL OF MUSIC
DANA HOLLIE,
KPMG PEAT MARWICK DEVELOPING SCHOLAR ASSISTANT PROFESSOR, ACCOUNTING
JENNIFER JOLLY,
ASSOCIATE PROFESSOR, SCHOOL OF EDUCATION
JOSEPH LEGORIA,
U. J. LEGRANGE ENDOWED PROFESSOR, ACCOUNTING
SARAH LIGGETT,
DONALD & NORMA NASH MCCLURE ALUMNI PROFESSOR, ENGLISH AND DIRECTOR, COMMUNICATION ACROSS THE CURRICULUM
JUANA MORENO,
ASSOCIATE PROFESSOR, CENTER FOR COMPUTATION & TECHNOLOGY
LU PENG,
ASSOCIATE PROFESSOR, ELECTRICAL & COMPUTER ENGINEERING
SURESH RAI,
PROFESSOR, ELECTRICAL & COMPUTER ENGINEERING
LAWRENCE ROUSE,
CHAIR, OCEANOGRAPHY & COASTAL SCIENCES
KRESIMIR RUPNIK,
INSTRUCTOR, CHEMISTRY
DAVID SENIOR,
ASSOCIATE DEAN, SCHOOL OF VETERINARY MEDICINE
BRUCE SHARKY,
PROFESSOR, ROBERT REICH SCHOOL OF LANDSCAPE ARCHITECTURE
PHILIP TEBBUTT,
ASSOCIATE PROFESSOR, INTERIOR DESIGN
MICHAEL WALKER,
ASSOCIATE PROFESSOR, SCHOOL OF ART
The Flagship Information Technology Strategy (FITS 2020) supports Louisiana State University’s Flagship Agenda 2020 and the emerging re-engineering of the LSU System. FITS 2020 aims to provide the blueprints for the technology, infrastructure, and IT services that will enable LSU’s continued growth for the next few years.

A series of focus groups met through calendar year 2013 and into 2014. The groups discussed what they felt was working well with regard to information technology across campus, what their expectations were for the future, and ways in which their experiences could be enhanced or improved. These comments and suggestions became the basis for new FITS Goals and Action Items.

The FITS 2020 Goals and Action Items are organized in alignment with the Flagship 2020 Goals of discovery, learning, diversity, and engagement.

**GOAL I:** The University shall maintain a modern, state-of-the-art network and infrastructure.

**GOAL II:** The University shall consistently enable research through strategic investments.

**GOAL III:** The University shall ensure the security and integrity of its infrastructure and information.

**GOAL IV:** The University shall maintain a robust and plentiful IT environment to enable faculty teaching and student learning.

**GOAL V:** The University shall provide access to data to make timely and informed decisions.

**GOAL VI:** The University shall provide easy and ready access to IT infrastructure and services.

**GOAL VII:** The University shall provide an agile suite of services to successfully and consistently carry out the day-to-day operations of the University.

**GOAL VIII:** Information Technology Services shall provide an exemplary customer service focus in all of its work.

**GOAL IX:** Information Technology Services shall serve the needs of, and rely upon the input from, the entire campus community.

**GOAL X:** Information Technology Services shall effectively communicate with the campus community.

**GOAL XI:** The University shall ensure that campus IT resources are ubiquitous and easy to use.
**DISCOVERY**

*Discovery:* Expand discovery through transformative research and creative activities addressing contemporary and enduring issues that shape the way we live in the world. Information Technology Services (ITS) supports “Discovery” through enabling research activities and student use of technology.

Discovery that leads to innovation, the advancement of research and creative endeavors should be accomplished within a robust and secure IT environment. Discovery relies upon a modern infrastructure, investments in research enablement, and a set of protective policies and practices to keep information and systems secure.

**GOAL I:** The University shall maintain a modern, state-of-the-art network and infrastructure.

**Action Item 1.1:** The University should provide its students and employees with a robust and flexible campus network. Internet connections must be able to easily handle large volumes of traffic and be nearly flawless in availability and reliability.

Continuous investments must be made to ensure the network and infrastructure evolve to meet the changing needs and expectations of the campus community. Dependencies on cloud resources by administrators and networked resources within the classroom by students and faculty alike will only increase in the coming years. Strategic growth beyond mere lifecycle replacements should be anticipated and funded by the institution.

**Action Item 1.2:** Frey Computing Center and the University’s computation-intensive facilities should evolve to meet increased campus demand.

While cloud resources will become increasingly popular, this will not obviate the need to house resources in secure and reliable virtual and traditional server environments within campus’s confines. Specialized computational resources like supercomputers may continue to reside on campus and require extensive infrastructure. An additional data center should be constructed as Frey has reached its power and cooling capacity limits.

**Action Item 1.3:** Wireless must be secure, ubiquitous, and able to readily meet the expanding usage of the campus community.

Recently, the University has seen an overwhelming increase in the number of mobile devices utilized across campus. The campus community anticipates that these numbers will only continue to rise as individuals become increasingly reliant upon multiple mobile devices simultaneously. In addition, wireless usage is increasing within the classroom as instruction evolves to incorporate these resources as learning and assessment tools.

**Action Item 1.4:** ITS should continue to pursue funding opportunities to enhance and evolve the networking infrastructure.

While internal, long-term funding strategies are necessary to continue to provide excellent network resources, so are supplemental investments by funding agencies like the National Science Foundation (NSF) and the National Institutes of Health (NIH). ITS should partner with the Louisiana Optical Network Initiative (LONI), the Center for Computation & Technology (CCT), and others to maximize opportunities for success and create economies of scale.

**Action Item 1.5:** The University should explore the usage of green technologies and environmentally friendly IT best practices where possible.

Technical advancements have not yet resulted in significant and cost-effective energy efficiencies for supercomputers and many of the IT resources needed within the university. As technology evolves, LSU should be ready to adopt green technologies and emerging best practices to reduce its energy usage.
**Action Item 1.6:** The University should rethink its network funding model to budget a standard amount per year, to cover costs for information technology infrastructure and service.

As the University becomes increasingly dependent upon wireless technology and bandwidth needs continue to evolve, the current network funding model, which relies upon charges for wired connections no longer makes sense. A revised financial model should be developed to ensure adequate, fair, and continued funding for infrastructure.

**Action Item 1.7:** The University should facilitate the acquisition and deployment of cutting edge communications tools to enhance research, teaching and learning, and the business functions of the institution.

Communications resources that enable real-time collaboration and high resolution visualization of shared information remain a need across campus. Beyond lecture capture, classrooms could be enhanced by real-time remote instruction and learning capabilities. The School of Veterinary Medicine and the Student Health Center could explore tele-medicine and utilize emerging technologies to develop better diagnoses and securely engage external experts in their fields. In addition, search committees could conduct face-to-face interviews without the expense of travel.

**GOAL II:** The University shall consistently enable research through strategic investments.

**Action Item 2.1:** ITS should continue to partner effectively with the Center for Computation and Technology (CCT) to meet the changing needs and expectations of faculty and their funders.

The CCT and ITS work together to define and deliver high performance computational resources including hardware and training. This partnership must continue in order to maximize efficiencies and minimize duplication of services so that a culture of innovation may thrive at the institution.

**Action Item 2.2:** Researchers need robust, long-term and accessible storage for their federally-funded projects.

The University must work to meet the “big data” needs of research. Affordable, scalable, and recoverable data storage solutions must be centrally provisioned. The current practice of researchers storing data on personal drives has too many inherent risks and is not sustainable. The University should continue to assess the needed technical infrastructure and preservation/curation support necessary for LSU to comply with the January 2011 mandate by the National Science Foundation (NSF) for data management plans accompanying research grants.

**Action Item 2.3:** The University should encourage and support the use of high performance computing resources beyond traditional users.

High performance computing resources are the product of innovation and should, in turn, foster innovation. Through training opportunities and collaborative endeavors, it may be possible to grow HPC usage beyond the current footprint of disciplines. ITS and the CCT need to be ready to support and foster such growth.

**Action Item 2.4:** The University should provide the tools and software needed to support research endeavors.

Just as the University provides commonly used software via TigerWare to faculty, staff, and students, research related software should be available. A support model for these tools and software should be developed, including acquisition and funding for them.

**Action Item 2.5:** ITS should support research-related IT needs.

Researchers should be able to rely upon the expertise and services of ITS and CCT personnel to set-up, house, and maintain the resources and specialized IT equipment needed to conduct their research. ITS should partner with its departmental level technical support providers (TSP) to ensure that leading edge technologies are supported to facilitate innovation and research.
Action Item 2.6: The University shall strive to provide its researchers state-of-the-art supercomputing resources. Researchers should have access to evolving and leading edge high performance computing resources. Maintaining an effective level of supercomputing capacity will keep the University competitive within innovative fields of study and exploration.

GOAL III: The University shall ensure the security and integrity of its infrastructure and information.

Action Item 3.1: The University should create, maintain, and enforce policies and procedures designed to protect its infrastructure, information systems, and data.

Protecting data and resources remains a vital institutional priority. While ITS holds the responsibility of maintaining the integrity of its centrally provisioned infrastructure and servers, sensitive data and vulnerabilities exist campus-wide.

Action Item 3.2: The University should provide centralized life cycle replacement for its stock of computers.

Deployed technology should be able to run the most-up-to-date software and have the latest operating system in place to ensure that machines are secure and function well. Outdated technology impacts the security and integrity of LSU’s network. Centralized purchasing may create significant cost savings in both initial purchase and support.

Action Item 3.3: Data and network protection remain critical priorities.

Specific physical mechanisms must be in place, reviewed, and updated as necessary. While network security is important to maintaining the integrity of our data and systems, the security of our data needs to be addressed at the individual and departmental levels as well. Data must be protected from breaches at all levels to the greatest extent possible.

Action Item 3.4: ITS should maintain and regularly test its IT disaster recovery and business continuity plan with input from the LSU community and support from senior-level management at the University.

From the lessons learned following Hurricanes Katrina and Gustav, LSU knows the importance of having in place routinely tested mechanisms to recover from disasters impacting the LSU campus and beyond. This readiness must continue to be a priority for the institution as a whole.

Action Item 3.5: The University should expand its data backup services to ensure that business continuity extends to research and academics within the departments.

While ITS offers centralized backup services, not all departments and researchers take advantage of this service. Instead, many departments back up to in-house servers which are themselves susceptible to loss if those locations suffer a loss.

Action Item 3.6: The University should audit its security processes on a normalized schedule.

With the increasing frequency of breaches and constant discovery of new vulnerabilities, having regular professional, and external assessments of the security infrastructure and processes is vital. An external audit provides guidance for continued evolution of security practices and warns of vulnerabilities not readily evident to university personnel.
**Action Item 3.7:** The University should encourage departments and research faculty to utilize centralized server offerings and house vital systems and data within Frey.

LSU researchers should have the option to house their institutional data, intellectual property, and innovations in secure, backed-up, fully supported, and centrally managed facilities.

**Action Item 3.8:** The IT Security and Policy Advisory Committee should continue to conduct regular meetings in order to guide data administration and access policies for institutional data.

The Family Educational Rights & Privacy Act (FERPA) is a guide for the protection and security of data and information maintained by the University. Additional legislation such as the Health Information Portability and Accountability Act (HIPAA), the Gramm-Leach-Bliley Act (GLBA), and newer federal and state laws continue to evolve and impact the need to update processes for security. The security of information has become much broader than the protection of student information, and requires the involvement of units that manage many different types of data now covered by these additional pieces of legislation.

As credit card and other business transactions become increasingly commonplace, special efforts need to be made to protect this data. Furthermore, data lives in multiple venues including paper files and mobile devices. Policies and procedures that are regularly and consistently practiced and enforced should remain individual as well as institutional priorities. Campus medical facilities should ensure that they follow established best practices and adhere to the professional and legislated standards to ensure patient rights and privacy.

**Action Item 3.9:** The University needs to modernize its identity management system.

Data protection relies, in part, on robust and secure identity management. The University must ensure that individuals are properly vetted and have access to only the information required to do the work of the institution. The current technologies employed to create and maintain accounts and access, while functional, are out-of-date and cumbersome to maintain.

**LEARNING**

*Learning:* Enhance a faculty-led and student-centered learning environment that develops engaged citizens and enlightened leaders. Information Technology Service (ITS) supports “Learning” through robust resources to enable teaching and learning. ITS further supports the sharing of information to enhance not only the learning experience of students, but to empower its faculty and staff to make informed, data-driven decisions in a timely fashion.

**GOAL IV:** The University shall maintain a robust and plentiful IT environment to enable teaching and learning.

**Action Item 4.1:** In order to best meet the needs of the campus, the Faculty Technology Center (FTC) should work with its governance structure to prioritize its workload toward the introduction of new technologies and seek economies of scale where possible.

The FTC supports faculty-driven deployment and training of emerging technologies for use in the classroom and in research endeavors. Mechanisms for acquiring, reviewing, and prioritizing these initiatives must be put into place. The already existing Faculty IT Governance Council could be utilized in part to assist with the governance of this process.
Action Item 4.2: Moodle development should continue to be guided by the Moodle Development Advisory Committee (MDAC) in response to community needs.

Moodle was initially selected by the campus as its learning management system (LMS) because it was open-source and LSU faculty and students would have the ability to evolve the product as expectations change. The MDAC was created to prioritize change requests on behalf of the customer base.

Action Item 4.3: Faculty and students should have ready access to the software and technologies they need to produce industry-ready graduates.

While it is important that TigerWare and resources like the virtual lab and public access computers continue to provide free access to a commonly used set of software, attention should also be paid to providing discipline-specific software that graduates will be expected to be able to expertly use within their given industries.

Action Item 4.4: Classrooms and labs should have standardized multimedia functions that are “the latest and greatest technologies,” upgraded regularly, and well-maintained.

Classroom technologies enhance student learning. Faculty must be assured that any classroom assigned will have a basic set of functioning tools that are ready for use. Maintaining standardized equipment will facilitate seamless transitions from room to room, and should ensure that lessons are not delayed by technical difficulties.

Action Item 4.5: The University should support innovative teaching efforts through inclusion of leading edge classroom technologies as expectations advance.

Increasingly, faculty want and need the ability to utilize emerging technologies within the classroom. The latest desire to untether and have the ability to use tablets to direct content to a video screen while emerged within the classroom is such an example. While we cannot adopt every new technology that arises, changes that positively impact the teaching and learning experiences should be explored.

Action Item 4.6: The University should strategically build upon its online learning efforts.

The University should develop a strategic plan for its online learning and degree programs. The planning process should include faculty and ITS representation but be led through Academic Affairs’s Online Learning administration. The plan should provide a vision for how these programs should evolve and be supported in keeping with a changing marketplace and technology landscape.

GOAL V: The University shall provide access to data to make timely and informed decisions.

Action Item 5.1: The University should work to enable faculty and administrators to use information without relying upon “shadow systems” and duplication of efforts across departments.

As the University makes investments in new enterprise and departmental systems, it is important that they include mechanisms for routine and customizable reports. Departments should not have to establish and maintain their own resources in order to have ready access to the information they need to make timely, informed decisions.

Action Item 5.2: The University should provide a robust, enterprise data warehouse environment.

An enterprise data warehouse would store official data extracted from the new university information systems as well as integrated departmental systems. The data warehouse should include tools for extracting and utilizing data to empower institutional decision making at multiple levels.

Action Item 5.3: The University needs to provide secure ways to work collaboratively, and share and process documents.
While there are a number of ways in which to collaborate via online tools, not all of these solutions are appropriate for use by the University. Security measures and search-ability are two aspects that must be accounted for in the decision making process. A single, enterprise level solution for document management and workflow should be identified and deployed for campus use. As collaborations happen across countries and across campus, mechanisms for securely utilizing these resources with external partners should be prioritized.

**Action Item 5.4: Availability of technology should not be limited to the campus. Faculty, students, and staff should have access to information and resources while traveling or at home just as they would on campus.**

The work of the University is not always completed during business hours and within the confines of the campus; this is increasingly true as the institution expands its LSU Online learning opportunities. Routinely, employees and students work on projects from home or while traveling. Mechanisms such as remote desktop, myLSU, and Moodle provide ready remote access to a number of campus resources, but they are not sufficient. Mechanisms to easily work securely from abroad should be explored and put in place where possible. It is also vital that resources be available to mobile devices. Such advances will enable the work of the University to be successfully completed without time and space limitations.

**DIVERSITY**

*Diversity:* Strengthen the intellectual environment by broadening the cultural diversity of the LSU community. Information Technology Services (ITS) supports “Diversity” by providing premier IT resources to attract and retain quality students, staff and faculty.

Retention and recruitment of quality students, staff, and faculty require a robust, accessible and well-supported IT environment with exemplary customer service.

**GOAL VI:** The University shall provide easy and ready access to IT infrastructure and services.

**Action Item 6.1: Efforts should be made to increase accessibility to software used by the campus community.**

While TigerWare has improved the availability of commonly used software across campus, and the public access labs and virtual lab make software accessible to students, there remains a gap as not everything is readily available to all. This gap is becoming wider due to licensing changes and the closure of public access labs. Efforts should be made to pursue campus licenses for all of the commonly used software beyond Microsoft Office.

Where site licensing or campus-wide licensing is neither possible nor affordable, ITS should promote and support the use of alternatives such as open source software, at-cost acquisition, or single-lab licensing. ITS should be open to suggestions from all members of the community for identifying the software and tools they need and where they may be accessed. ITS will maintain in its Web site a warehouse of information about the availability of licensed software, open source software, and specialized hardware tools.

**Action Item 6.2: The University should identify and support cost-effective measures like LSU specific contracts, campus-wide licenses, virtualization, and cloud services to ensure ready usage of resources.**

After several years of budget cuts, LSU recognizes the importance of cost-savings that make sense. Where possible, efforts should continue to be made to identify and pursue cost-savings endeavors. Any cost-savings realized should be reinvested to build and maintain a sound, advanced, secure, and productive information technology infrastructure capable of supporting broad and effective use by students, faculty, and staff throughout the institution.
Action Item 6.3: The University should provide its employees with the modern information technology needed to be productive, including a standard level of personal computers.

While the level of sophistication in hardware may vary depending on the user, all LSU employees that conduct work on a personal computer or mobile device should have the technology they need to be productive. Additional cost savings for the institution could be realized through common build options of desktops and laptops for regular administrative usage, as an example.

Action Item 6.4: New faculty and staff should have voice services, e-mail, Internet access, and a suitable personal computer in place upon hire.

Currently, there is a semi-automatic process in place providing basic services to a new employee. ITS should consolidate its processes so that departments need only complete one form in order to expedite telephony, access to enterprise resources, network connections, a logon ID and account password, e-mail, and a new computer’s placement in an office. An institutional, rather than departmental, computer program would facilitate this process as well.

Action Item 6.5: The University should support the use of multiple and diverse computing platforms (hardware systems and operating systems).

Users should not be limited in their capabilities and abilities to access LSU resources by the platform they are using. ITS should have staff trained and available to resolve technical issues with hardware, including University-owned Windows, Apple, Linux and Android devices. Innovation and the assimilation of new technologies should be supported. ITS should collaborate with researchers and provide venues for the beta-testing of technologies that may directly benefit LSU’s IT environment. ITS should also ensure that university information systems are available to diverse technology environments.

Action Item 6.6: The University should ensure established and emerging technologies, such as wearables, smartphones, and tablets interface well with common LSU applications.

In addition to being available to well-established platforms, applications should be accessible via emerging platforms. LSU community members want to be able to access their calendars, course management systems, and myLSU information from wherever they are. ITS must assess the state of the interface market, and base its decisions for application development tool sets, in part, on the availability of mobility-enhancing capabilities.

Action Item 6.7: A one-stop shop for all IT related issues should be developed and properly staffed. Support should be available 24 hours a day, 7 days a week, and 52 weeks a year.

While the ITS Help Desk with its extended hours and 24/7 Network Operations Center are a good starting point for IT assistance, the campus would benefit from a fully developed one-stop shop for all IT support. A centralized customer relations center to address hardware, software, and telephony queries and services would make acquiring services easy and would streamline currently segregated telecom and computing assistance. Ease of use and effective user-support are integral to an IT abundant environment.

Use of information technology at LSU takes place outside of the 8:00am to 4:30pm Monday-Friday work schedule, and so does the need for assistance. Mechanisms for trouble-shooting and solving errors must be in place to serve the user community when the users need them. GROK, our online, searchable Knowledge Base, should remain easy to navigate, up-to-date, robust, and centrally available to the entire community.
Action Item 6.8: The University-wide deployment of wireless network infrastructure should remain ubiquitous and pervasive.

LSU should continuously upgrade and expand its wireless network on campus to a level that meets or exceeds coverage seen at any institution in the nation. Wireless networking frees users to be truly mobile and access the world of Internet-based information resources and services wherever they are on campus.

GOAL VII: The University shall provide an agile suite of services to successfully and consistently carry out the day-to-day operations of the University.

Action Item 7.1: Interfaces with information systems should be intuitive and personalizable.

As information systems are selected and deployed, it is important that they are easy to use. In addition, customers should be able to self-select the resources they use most often in a dashboard-type of interface. The portal, as an example, could evolve to meet such customizable, dashboard expectations.

Action Item 7.2: As the new enterprise systems are selected and deployed, it is important that they be easy to use.

The selection of a new enterprise system should be guided by its usability and ability to meet the needs of the campus community. Enterprise systems may reside in ITS, but they must be utilized by the remainder of campus. Usability is an important factor in ensuring the successful deployment of the next generation of enterprise systems.

Action Item 7.3: The University should pursue Software-as-a-Service (SaaS) solutions which enable configurations and updates without excess costs for its enterprise resource planning (ERP).

Cloud based enterprise services such as Software-as-a-Service (SaaS) for enterprise resource planning (ERP) serve as a cost-effective and efficient alternative to the traditional ERP model. Some customers are familiar with the strains and challenges their peers have experienced in transitions to ERPs as well as with the subsequent upgrades necessary for maintenance. The SaaS model appears to protect current business practices, reduce the downtime for future updates, and is more disaster resistant.

Action Item 7.4: As new IT products or services are selected, attention should be paid to ensure that they follow scalable common standards in order to be used across campus if necessary.

Too often solutions are sought in vacuums without considering their applicability to other departments or uses. It is important that common standards for software be determined and adhered to by the campus so that we can ensure products are easily deployed. It is further important that these products are as scalable as possible to realize cost savings and meet increasing needs campus-wide.

GOAL VIII: Information Technology Services (ITS) shall provide an exemplary customer service focus in all of its work.

Action Item 8.1: The Help Desk should continue to provide exemplary service.

The Help Desk is usually the first, and sometimes the only, interface the campus community has with ITS. It is vital that the students and professional staff of the Help Desk receive superior training in their field as well as in customer service practice. The Help Desk model should continue to evolve with changing expectations and newly established best practices.
Action Item 8.2: The Faculty Technology Center (FTC) should continue to provide one-on-one support to faculty and advance the utilization of technology to support teaching and learning.

The FTC provides valuable assistance to the faculty across campus. Their support includes the training on and deployment of classroom technologies and direct support of the Moodle learning management system. The FTC also provides venues for faculty to share their classroom innovations with one another.

Action Item 8.3: Satellite support centers should be available to better serve the campus.

While the Help Desk has two locations across campus, the FTC currently does not. It would be beneficial for faculty to have closer access to FTC personnel on the southern half of campus and not have to walk all the way to Middleton in order to receive assistance. While phones and e-mail are useful, many faculty would rather have hands-on, immediate face-to-face service.

Action Item 8.4: The ticketing systems currently utilized by ITS should be consolidated into a one-stop-solution.

Customers find the dual systems for requesting assistance and requesting services confusing and redundant. ITS should continue to monitor the available solutions in order to one day provide a solution that meets the ITS administrative needs for both groups and functions.

Action Item 8.5: ITS personnel should be experts in their fields and up-to-date on available solutions.

Customers depend upon ITS to provide suggestions and solutions to solve problems as well as enable the work of the university. ITS personnel must remain up-to-date on the technologies in their specific areas of purview. Continued training and exposure to evolving practices must be priorities for ITS and its people.

Action Item 8.6: Training for customers and IT staff in the technologies they support should be available.

It does little good to provide technologies without the necessary support and training to properly utilize them. The training and continued professional development of IT professionals must be an institutional priority. As technologies continue to advance and new products reach the market on a quarterly basis, IT professionals must stay ahead of the curve. Similarly, our customers must have ready access to training in order to utilize technologies deployed across campus.

Action Item 8.7: The knowledge base GROK should continue to evolve to serve the campus community.

GROK provides current, step-by-step instructions to enable IT usage across campus. GROK’s value lies in the timeliness of its content and its accessibility to the community. Continued expansion of this content and the mechanisms for content deployment (e.g., mobile, video, audio) should continue to be funded. Departments needing to house specialized knowledge for their students or researchers should have the ability to utilize a secured portion of GROK for these purposes.

Action Item 8.8: Investments in on-demand, online training resources like Lynda Campus should continue to be provided to the campus community and their availability publicized.

On-demand, online training enables the campus community to learn what they want when they want. This type of training also provides value-added supplemental instruction for students on software necessary for classroom and post-graduate industry use, freeing classroom instruction time.

Action Item 8.9: ITS leadership should foster an organizational culture that values and exhibits exemplary customer service at all points.

ITS leadership should promote and encourage customer service training for all employees, and include customer service in their personnel evaluation metrics. Excellent customer service should be celebrated and recognized whenever possible.
Engagement: Promote engagement of faculty, staff, and students in the transformation of communities. Information Technology Services (ITS) supports “Engagement” through secure and ready access across technologies. As technology may be a tool for the transformation of communities, ITS wants to ensure the campus community remains engaged in the evolution of technology and IT services in real-time.

**GOAL IX:** Information Technology Services shall serve the needs of, and rely upon the input from, the entire campus community.

**Action Item 9.1:** ITS should continue to rely upon regular input from an established governance structure which is representative of the campus.

Ensuring that the real needs of our campus are being met remains a priority. ITS should not make decisions in a vacuum, but rely instead on established governance groups for advice and guidance. Efforts should be taken to ensure that governance groups remain active, engaged, and representative of the campus.

**Action Item 9.2:** ITS should be inclusive of all of its customers in its decisions regarding the software and solutions it supports.

It is vital that solutions meant to resolve issues faced by personnel in departments, match the actual needs of those personnel. Customers, who include LSU students, faculty, and staff as well as other users within the LSU community (visitors, collaborators, area residents, etc.) must continue to be involved in software and technology purchases.

**Action Item 9.3:** In addition to the existing governance structure, ITS should seek input from campus constituencies through focus groups, social media, and surveys.

While the governance structures provide an external, representative perspective for ITS input, it is a good idea to supplement these views with broader input from across campus. Ensuring that we have multiple perspectives and input from the campus community will provide for ease of campus deployment of new initiatives.

**Action Item 9.4:** ITS should continue to update and revise the Flagship Information Technology Strategy (FITS) as a community-driven document.

The campus community should continue to establish the vision for their use of IT at the university for years to come. By continuing to develop FITS from community-input, we will ensure that IT evolves in ways to meet or exceed changing campus needs and expectations.

**Action Item 9.5:** ITS should continue to ensure transparency in its costs and charges to the campus community.

The campus community should know what the services they use cost. ITS should continue to employ Activity-based costing (ABC) cost tracking mechanisms for all of its services. Efforts should be made to ensure that charges to the campus are fairly and consistently apportioned. As new services are requested, ITS should be able to project with reasonable accuracy the actual cost for the proposal.

**Action Item 9.6:** ITS should regularly undergo an organizational efficiency review.

ITS should continue its efforts to identify efficiencies through the regular review of its services with the intention of using projected cost-savings to fund new IT initiatives. This process should take place every 2-3 years and be coupled with the FITS 2020 and its updates.
**GOAL X:** Information Technology Services shall effectively communicate with the campus community.

**Action Item 10.1:** ITS should effectively utilize social media and e-mail resources like ITWire and listservs to communicate new services, outages, and alerts.

Social media and other online resources provide valuable mechanisms for communicating outward to the campus community. It is important that these resources be utilized fully and consistently, in line with established best practices. Clear, concise communications drafted to specific audiences should have the correct blend of technical and non-technical language to be most effective.

**Action Item 10.2:** ITS should provide mechanisms to encourage two-way communication with the campus community.

While outward communications are useful, it is critical that ITS receive feedback and have mechanisms in place to encourage and solicit dialogue with its customers in order to fulfill its mission. These dialogues should be in addition to established governance and FITS focus group practices.

**Action Item 10.3:** Communications between central and distributed IT staff should continue to be strengthened.

ITS should develop programs that provide improved communication and coordination between the key providers of IT support on campus in a leveraged support model. A strong distributed support model relies upon connections to central IT. In order to reduce redundancies, provide first-rate client support, and mitigate strains between distributed departmental support and ITS, mechanisms for effective communication must be in place. ITS must be responsive to the challenges facing departmental support personnel, and distributed support personnel must be informed of what institutional changes and policies will impact them.

**Action Item 10.4:** The University should support mechanisms for sharing IT-related advances, innovations, and best practices across campus.

Symposium and technology fairs like TechPawLooza provide valuable opportunities for sharing IT innovations that may be replicated campus-wide. These events promote IT advancement through recognition of and feedback on emerging practices.

**Action Item 10.5:** ITS should facilitate opportunities for collaboration in IT acquisition.

In light of fiscal limitations and the unique needs of a few departments, ITS should facilitate collaboration among departments with aligned, yet specialized IT needs, to share costs including deployment, support, and updates. Not every department has the need for a specific technology, but sharing the technology and its associated costs between the departments that do, may prove cost-effective, and encourage inter-disciplinary advancement.

**GOAL XI:** The University shall ensure that campus IT resources are ubiquitous and easy to use.

**Action Item 11.1:** The University should provide a one-stop-shop mobile application.

LSU’s mobile application should continue to evolve to meet the changing needs and expectations of the campus community. It is vital that mechanisms for campus feedback and further development be put into place to ensure the application’s continued success.
**Action Item 11.2:** The University must ensure the number of IT professionals on campus—both centrally in ITS and distributed within the colleges and departments on campus—is sufficient to meet the needs of the campus community.

In order for IT to be truly ubiquitous, IT support must be reliable and readily available. Too often, student workers provide the bulk of technical support for departments. Student workers, while talented, are, first and foremost, at the University to study for a limited time period. Departments have professional needs that must be met, and there is a need for continuity of support and IT services that cannot be provided by a transient student staff.

Field support within ITS is not adequately staffed to meet all of the specialized needs of campus. Departments that have IT staff with areas of expertise should be encouraged to loan out or share that expertise to fill the gaps campus-wide. Efforts should also be made to increase the training and availability of IT staff both centrally and within the departments.

Furthermore, a lack of sufficient IT professionals also puts the security of data and systems at risk. The University should ensure that best practices in IT security are in place, and that servers and sensitive data are secured. These responsibilities should not be placed upon students, but on professional IT staff.

**Action Item 11.3:** The University should provide convenient and plentiful mechanisms for recharging mobile devices.

Increased reliance upon mobile devices (i.e., campus-wide) has resulted in the need to regularly re-charge mobile batteries. Charging stations should continue to be made available. Studies on their usage and potential areas for additional placements should be an ongoing process.

**Action Item 11.4:** Information stations with a minimum of Internet access should continue to be available strategically across campus.

Students, staff, and faculty should be able to check e-mail or access myLSU while on the go or without mobile usage. As the availability of traditional lab computers declines, it is important to provide convenient alternatives for this sort of usage so that labs can be utilized for their specialized software.

**Action Item 11.5:** Secure personal storage solutions and file-sharing mechanisms should be robust and easy to use.

Accessibility of files and the ability to easily collaborate remain integral to the notion of IT ubiquity. Students, staff, and faculty should be able to securely access their files from any other computer across campus or across an ocean. Investments in secure and adequate space and resources for securely sharing and collaborating must be made.