The Future of IT at Texas A&M University

Introduction
Public universities face significant challenges in today's society. The cost of higher education, its perceived effectiveness for all students who enroll, the lack of a strong narrative about the role of research in education and the larger community are just three of the challenges we need to find ways to overcome. Simultaneously, changes in our culture have fundamentally altered the technological landscape in which universities operate. The rise of mobile computing, social media, cloud computing, and the digitization of information have permanently changed our society and the nature of education. Consumerization of technology has ratcheted expectations of our faculty and students to an unprecedented level.

In this new environment, innovative technological solutions are needed to help address the challenges public universities face. An engaged, integrated information technology (IT) strategy must enable Texas A&M to create a competitive advantage in teaching, research, and outreach. Innovative IT can augment existing research, enable new types of research, attract superstar faculty, allow new forms of student engagement, enhance student success, increase public access to common goods, and help the university impact the local community, state, nation, and world.

As stated in the Action 2015 strategic plan:

[We must] make new, original decisions and investments that will knit together the traditional elements of Education First [teaching, research and service] and enable the innovations required to take Texas A&M to new levels of performance, productivity and impact.¹

The External Landscape
Radical changes have greatly affected the external IT landscape. These changes include:

- **An explosion in mobile devices:** Smartphones and tablets were uncommon devices just ten years ago; today students and employees frequently carry multiple wireless devices with them regularly.² ³

- **The ubiquity of online information:** A decade ago, research for a student meant a trip to the library. Today, a student is more likely to hop on Google or Wikipedia and the library is seen as a place to hangout and work on group projects.⁴ ⁵

- **The changing social landscape:** The rapid growth of social networks like Facebook and Twitter have dramatically changed how students engage with others -- leading to dramatically changed expectations regarding classroom interaction.⁶ ⁷ ⁸

- **The consumerization of technology:** IT services like storage, email, or video conferencing no longer require permission or assistance from IT support staff. Students and faculty can simply create a free account with Dropbox, Gmail, Skype, or many other cloud services to fulfill their needs.⁹

The Organizational Landscape
Currently, Texas A&M University has a highly distributed model of IT which has led to a proliferation of self-sustaining silos of service. These silos have historically been characterized by valuing:

- Local unit, budget, and resources
- Local management of infrastructure and commodity services
- Stability and status quo over rapid change and flexibility
- Communication within the local unit over inter-unit communication

These values have resulted in a culture with many duplicated services and little incentive to cooperate. Efforts to provide centralized services are viewed with skepticism, distrust, and lack of mutual respect. Distributed IT resources make the coordination of services at the university level difficult. Although some commodity services have been successfully moved to central operations, many centralized services have low adoption rates (e.g. email, virtual machines) or poorly defined operational boundaries (e.g. NetID vs. SSO identity models). The distributed nature of our operations is more expensive to maintain, and inhibits a unified IT vision. This reduces our ability to devote a greater portion of our capacity to innovation at a time when our users and the environment demand it.

In 2013, The Texas A&M University System contracted with Deloitte to assess IT across all universities and agencies. In their 29 recommendations Deloitte consistently advised the consolidation of commodity IT services, and a shift to cloud services where appropriate. The System has implemented a number of these recommendations already, and is moving forward with others.

Our Vision: A Culture of IT Innovation
Our vision is to create a competitive advantage for Texas A&M through a culture of collaborative IT innovation. We believe innovative IT can provide the university with a distinct competitive advantage in many of its key priorities, such as recruitment, student engagement, graduation rates, and research that impacts the state, nation and world.

The level of innovation we envision requires a genuine strategic partnership between IT and our customers. By working with the entire community to create effective solutions, we leverage IT to create a world-class institution.

References

³ Mobile growth is about to be staggering. By Kevin Kelleher. (20 Feb 2013). In CNN Money.
⁴ Students’ Use of Research Content in Teaching and Learning: A report for the Joint Information Systems Council (JISC). (September 2009).
⁵ The digital age is forcing libraries to change. By Andrea Peterson. (7 Aug 2013). In The Washington Post.
The Information Technology Advisory Committee (ITAC) at Texas A&M

Overview
The IT Advisory Committee was initiated by Dr. Pierce Cantrell, Vice President and Associate Provost for IT. The committee is charged to:

- Increase communication across the campus IT community
- Collect input from members’ departments and collaborate to identify common IT issues on campus
- Review and evaluate solutions and methods to help mitigate specific risks.
- Provide recommendations to help form security policy and operational decisions.
- Relay information to their represented areas and to the IT Forum.

You may send questions or comments to the committee at itac@tamu.edu

FY 2014 Goals
1. Create a strategic plan for IT at Texas A&M University that is aligned with the university priorities of teaching, research and service.
2. Create and implement an IT communications plan.
3. Create and recommend an IT Governance model for Texas A&M University.
4. Create a common Tier 1 service desk for campus using new service desk software and VoIP.

ITAC Members
ITAC members are appointed by their units, and represent every academic college and major administrative division. Additionally, Texas A&M IT is represented by four ex-officio members.

Colleges
Bush School of Government and Public Service
Ron Szabo

College of Agriculture and Life Sciences
Tom Lyster

College of Architecture
Adam Mikeal (Vice-Chair)

College of Education and Human Development
Becky Carr

College of Geosciences
Jim Rosser

College of Liberal Arts
Carl McKneely

College of Science
Henrik Schmiediche

College of Veterinary Medicine
Rick Young

Dwight Look College of Engineering
Mike Nelson

Health Science Center
Scott Honea

Mays Business School
John Norton

School of Law
Chad Ballenger

University Libraries
Bill Chollett (Secretary)

Campuses
TAMU at Qatar
Kevin Davis

TAMU at Galveston
John Kovacevic

Administrative Divisions
Department of Athletics
Mark Harris

Division of Administration
Jim Culver

Division of Finance
Andy Bland

Division of Marketing & Communications
Erick Beck

Division of Research
Aaron Brender

Division of Student Affairs
David Sweeney (Chair)

Office of the Provost
Juan Garza

Ex officio
Texas A&M IT Computing & Information Services
Cheryl Cato

Texas A&M IT Networking & Information Security
Willis Marti

Texas A&M IT Computing & Information Services
Allison Oslund

Texas A&M IT Instructional Technology Services
Jim Snell