Information Technology Summary Report and Recommendations

2013

Eric Denna, Chief Information Officer
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Executive Summary of Recommendations

Information technology exists to support the mission of the university as defined by university leadership. Investments in information technology are driven principally by the desire to improve the way work is done; to improve decision making; to adhere to various laws, regulations, and policies; and to help the organization manage its risks. The recommendations in this document serve as the foundation for strategically investing in IT resources and to facilitate the work of a new IT governance structure for the University of Utah. This effort was initiated by Interim President Lorris Betz in 2011 when he established a subcommittee of the President’s Cabinet to make recommendations regarding information technology governance at the University of Utah. When David Pershing was named as the 15th university president, he requested that Dr. Betz continue this effort during the transition period that followed.

IT governance recommendations were developed and presented to the President’s Cabinet, and later to the Council of Academic Deans. Both bodies charged Eric Denna, Chief Information Officer, with the responsibility to build on the recommendations and continue to develop IT governance concepts, vision, principles, and organizational structures.

Nine major IT themes were identified after interviewing over 50 leaders and influencers across campus regarding IT opportunities for improvement:

- **Theme 1: Establish New IT Governance**
  The university community depends on IT services to conduct research, improve teaching/learning, do community service, and provide administrative support. Making appropriate investments in IT requires effective decision making on the part of university leadership. The university will develop and implement a governance process that provides strategic leadership and oversight of IT resources across the university, establishes university-wide IT priorities, and produces accountability and transparency.

- **Theme 2: Establish a Sustainable IT Cost and Funding Model**
  University leaders need maximum value from each dollar spent on IT. The university will establish a transparent, trusted, and sustainable costing, pricing, and funding model that accounts for the total cost to develop, provide, and maintain local and central IT services across the university and provides a sustainable economic model for IT services. This is a task that will require the involvement of all IT governance bodies.

- **Theme 3: Create a Clear Strategy for Instructional Technologies**
  Faculty and students need access to appropriate IT services to facilitate and improve the range of teaching and learning modalities. The university will establish the desired teaching and learning technology services, costs of teaching and learning technology services, and the appropriate funding model for such services.

- **Theme 4: Create a Clear Direction for Research Computing**
  Researchers need powerful and reliable IT services to create, manipulate, share, analyze, and store data. The university will establish the desired research technology services, costs of research...
technology services, and the appropriate funding model for such services. The viability of private and public “cloud” research computing products and services will be analyzed.

- **Theme 5: Establish a Catalog of IT Services and Timely Service Provisioning, Clarifying Roles of Individual Organizations and Central IT**
  There is confusion on campus regarding the types of IT services that are needed, who is responsible for providing the services, and how such services will be funded. There is no consistent or documented management process for provisioning and de-provisioning IT services. The university will establish a catalog of IT services, define how best to provide the services, and clarify the roles of individual organizations and central IT in providing such services. The university will provide many of these services through automated workflows that require little or no manual intervention.

- **Theme 6: Modernize Administrative Systems to Improve Administrative Work and Decisions**
  The university must cost-effectively deliver student, financial, facilities, auxiliary, human resources, and other support services and data to campus organizations. The university will identify funding models for developing and sustaining critical business applications while reducing the cost of maintenance; partner with campus organizations to identify key services in need of process improvement; develop a comprehensive data warehouse and data analysis tools to support decision making; and position the university to consider implementing community-sourced administrative computing systems.

- **Theme 7: Position Campus Network Infrastructure for the Future**
  Employees and students need a stable and secure network to communicate electronically with other people, organizations, systems, and services. Using best standards and practices to improve wired and wireless infrastructure (including emergency communications), the university will move toward a unified campus network through cooperative agreements with campus organizations.

- **Theme 8: Establish the Proper Balance between Strong IT Security and Increased Access to Information and Services**
  The university community expects sensitive data to be transmitted and stored securely and accessed only by those authorized to do so. Simultaneously, leadership’s demand for organizational data is increasing. This is becoming more and more challenging in an increasingly risky technical global environment. The university will enhance its IT security plan, policies, processes, and services to ensure that sensitive data is protected, while providing appropriate access to those who require data access to make informed decisions and perform the responsibilities of their work.

- **Theme 9: Improve Campus IT Communication and Collaboration Service**
  Communicating and collaborating through voice, video, and data are fundamental to accomplishing the work of the university by individuals and organizations. The university will establish a vision for unified communication and collaboration services, identify the desired services to achieve the vision, and develop a plan for implementing the services (including the necessary funding strategy) to improve our ability to communicate and collaborate in a cost-effective way.
Theme 1: Establish New IT Governance

Who are the stakeholders and what do they need to do?

The principal stakeholder for this theme is the leadership of the university, which has responsibility to make sure the IT resources of the university are properly governed. The university community depends on IT services to do its work. Making appropriate investments in IT requires effective decision making on the part of university leadership.

Recommendation Summary

- Develop and implement a process that provides strategic leadership and fiduciary responsibility, establishes campus-wide IT priorities, and produces accountability and transparency.
- Organize investment portfolio committees to empower the strategic, operational and technical decision-making required to ensure that IT enables the university to excel in its mission and accomplish the priorities, goals, and initiatives set forth by university leadership.
- Ensure that information security and privacy concerns are addressed throughout the governance process.
- Provide an annual report to the university regarding progress in addressing the IT themes.

Key Benefits to Campus

- Makes IT decision making transparent.
- Establishes small, focused committees charged with specific roles, responsibilities, decision authority, and accountability for IT investments.
- Establishes a “big picture” fiduciary outlook for IT investments.
- Allocates IT resources and sets IT investment priorities that align with university goals and objectives.
- Aligns IT plans with other strategic plans of the university.
- Brings campus and college/departmental IT plans together into a single coherent campus wide IT strategy.
- Engenders communication, collaboration and trust by representing the diverse interests of campus colleges and administrative organizations.

Theme 2: Establish a Sustainable IT Cost and Funding Model

Who are the stakeholders and what do they need to do?

University leaders need maximum value from each dollar spent on IT services.

Recommendation Summary

- Establish a transparent, trusted, and sustainable funding and pricing model that accounts for the total cost to develop, provide, and maintain IT infrastructure and services.
- Assess the viability of all sources of revenue. Identify and mitigate risks associated with revenue sources.
• Ensure that adequate one-time and ongoing funding sources are identified and available to ensure that the capability, availability, and reliability of campus IT services meet the needs of the campus community.

**Key Benefits to Campus**
• Establishes a culture of financial transparency and accountability.
• Establishes confidence and trust in prices charged for services that are provided on a billed, cost-recovery basis.
• Reduces confusion by clearly identifying services that are funded centrally or through college and department assessments.
• Provides a foundation upon which the value of IT investments may be judged.
• Identifies funding mechanisms to sustain continuous improvement and ongoing effectiveness of campus information technology.
• Ensures that student computing fees directly serve student needs.

**Theme 3: Create a Clear Strategy for Instructional Technologies**

**Who are the stakeholders and what do they need to do?**
Faculty and students need access to appropriate IT services to improve teaching and learning outcomes.

**Recommendation Summary**
• Identify the most significant technology barriers to online and hybrid course teaching.
• Identify core teaching and learning systems and ensure appropriate funding.
• Determine how campus learning spaces need to be adapted to support changing teaching models. Invest in and prioritize the installation of learning space technology and equipment.
• Provide learning resources that allow faculty and students to store and share information.
• Support learning outcomes assessment and post-graduate success by enabling students to develop an electronic portfolio of their academic experiences.
• Determine the type and source of data that are needed to support curriculum mapping, accreditation and learning outcomes assessment.

**Key Benefits to Campus**
• Standardizes and improves ease of adoption of instructional technologies.
• Improves collaboration between students and faculty members.
• Ensures that classroom and lab instructional technologies complement the teaching experience.
• Supports student success by establishing a permanent record of student experiences that will follow students throughout their academic careers and after graduation.
• Provides data to improve instruction and student success rates. Improves success rates for gateway courses.
Theme 4: Create a Clear Direction for Research Computing  
Who are the stakeholders and what do they need to do?
Researchers need powerful and reliable IT services to create, manipulate, share, analyze, and store data.

Recommendation Summary
- Collaborate with university libraries to establish processes and systems for research data management.
- Identify an appropriate and sustainable funding model to support IT services for non-high performance research and creative scholarship computing.
- Identify an appropriate and sustainable funding model to ensure that high performance computing resources meet the growing and changing demands of researchers.
- Evaluate the viability of private and public “cloud” research computing resources.
- Locate high performance computing resources in “hardened” facilities to ensure reliability and availability.

Key Benefits to Campus
- Provides the means to store and manage vast amounts of research data.
- Provides IT services support to non-HPC researchers who have unmet research IT needs.
- Ensures that computer systems and facilities meet the demands of research grants and contracts.
- Improves the return on research overhead funds.
- Provides an operationally modern computing environment that is robust and reliable.

Theme 5: Establish a Catalog of IT Services and Timely Provision of Services, Clarifying Roles of Individual Organizations and Central IT  
Who are the stakeholders and what do they need to do?
There is confusion on campus regarding the types of IT services that are needed, who is responsible for providing the services, and how such services will be funded. There is no consistent or documented management process for provisioning and de-provisioning services. Information security is at greater risk because the university does not maintain a current central inventory of data, user access, and assets. Documentation is inconsistent and siloed throughout the organization. Failure to identify, authorize, and assign ownership of critical assets decreases the ability to efficiently and effectively secure data and respond to information security breaches.

Recommendation Summary
- Establish systems, work flow processes, authentication, and service authorization infrastructure to automate the timely provision and removal of services.
• Establish a catalog of IT services, define how best to provide the services, and clarify the roles of individual organizations and central IT in providing such services.
• The university will provide many of these services through automated workflows that require little or no manual intervention.

Key Benefits to Campus
• Improves access to quality services to end-users and campus organizations based on the end-user’s unique role(s) and the access requirements of the organization.
• Provides a clear electronic means of ordering and discontinuing IT and other campus services.
• Establishes infrastructure to enable electronic processes and paper reduction.
• Improves efficiency of service-providing organizations and allows scarce resources to be repurposed where needed.
• Improves security by limiting unauthorized access to resources and sensitive services and information.

Theme 6: Modernize Administrative Systems to Improve Administrative Work and Decisions

Who are the stakeholders and what do they need to do?
The university must cost-effectively deliver student, financial, facilities, auxiliary, human resources, and other support services and data to campus organizations.

Recommendation Summary
• Identify funding models and systems to develop and sustain critical business applications while reducing the cost of application maintenance.
• Modernize administrative services through the implementation of electronic work flow and approval processes.
• Position the university to consider new, group-sourced developments in administrative computing for higher education.
• Require business process analysis prior to implementing major new administrative systems or changing existing major administrative systems.
• Propose changes in campus policies and procedures that inhibit electronic approvals and automated work flows.
• Enable decision makers to access well-defined financial, human resources, and student data through the development of a comprehensive data warehouse and the implementation of data analysis tools.
• Provide mobile access to administrative services and data where appropriate.

Key Benefits to Campus
• Improves the readiness of new students by establishing holistic admissions processes as envisioned by President Pershing.
• Improves graduation rates by providing timely feedback regarding student progress to college and department leaders.
• Provides timely data necessary to support accreditation processes.
• Enables research by exposing sponsored research opportunities and improving the efficiency of the grant application process. Decreases time and effort required to administer grants and contracts by delivering timely financial reports and data.
• Improves campus efficiency by replacing manual, paper-based processes with automated workflows.
• Enables fact-based decision making at all levels of university leadership.

Theme 7: Position Campus Network Infrastructure for the Future

Who are the stakeholders and what do they need to do?

Employees and students need a stable and secure network to communicate electronically with other people, organizations, systems, and services. Using best standards and practices to improve wired and wireless infrastructure, the university will move toward a unified campus network through cooperative agreements with campus organizations. Information security is at greater risk because network vulnerability management has been informal and accountability for failure to comply with policy has not been enforced. The network is vulnerable to common attacks aimed at disrupting the availability of the network (Denial of Service). Many servers and network devices are not set up to send log files to a central repository. The current network architecture is not adequately segmented to enforce basic network security precautions. Documentation of the network infrastructure is inconsistent and incomplete. In 1999 and again in 2011, external security assessments identified the decentralized network architecture and management as a significant security risk. In 2011 a University of Utah Hospitals and Clinics HIPAA compliance assessment came to the same conclusion.

Recommendation Summary

• Prepare the campus wired and wireless network infrastructure to provide the secure bandwidth capacity needed to sustain research, teaching/learning, administrative, social, and health services computing and communication.
• Implement network “security zones” to limit access to critical and sensitive information to those with the need to know.
• Move toward a single campus network through technology standards, best practices, and cooperative agreements with campus colleges and departments.

Key Benefits to Campus

• Positions the university to enhance efficiency using new technologies including high quality, high definition IP voice, video and data.
• Establishes network security zones to ensure that only authorized individuals are accessing the sensitive data that they need to be productive.
• Ensures role-based access to information and services to all members of the campus community.
• Enhances the university’s ability to deliver mobile applications to the university community.
• Provides reliable access to university “cloud” infrastructure, platform and applications services provided from the new downtown data center, and public “cloud” services that will allow the university to take advantage of new applications and services in a timely manner.
• Ensures that central campus and local college or department network needs are met through cooperative service agreements between central and local service providers.

**Theme 8: Establish Balance between Strong IT Security and Increased Access to Information and Services**

*Who are the stakeholders and what do they need to do?*

The university community expects that sensitive data and IT resources will be protected, that confidentiality will be maintained, and that access will only be granted to those individuals who require access to perform the responsibilities of their positions. Conversely, as mentioned in Theme 6, the concern mentioned most often during interviews with campus leaders was that data are not readily available in a form that helps them make important decisions. This is becoming more challenging in an increasingly risky technical global environment. A balance between security and access is required.

*Risks*

**Governance**
The university has not formalized processes for complying with policies outlined in the security policy. Current processes are inconsistent across the organization and there is no established mechanism for reporting and monitoring compliance.

**Asset and Data Inventory**
The university does not maintain a current inventory of data and assets. Documentation is inconsistent and siloed throughout the organization. Failure to identify, authorize, and assign ownership of critical assets decreases the ability to efficiently and effectively secure data and respond to information security breaches.

**Vulnerability Management**
Network vulnerability management has been informal and accountability for failure to comply with policy has not been enforced.

**Network**
The network is vulnerable to common attacks aimed at disrupting the availability of the network (Denial of Service). The current network architecture is not adequately segmented to enforce basic network security precautions. Documentation of the network infrastructure is inconsistent and incomplete.

**User Access Management**
The university lacks consistent and documented user management processes. In addition, the university has not formally defined role based access for key organizational application and there is no process for
reviewing access on a periodic basis. This lack of standardization creates an environment where requesting and granting access to resources and data is time consuming and cumbersome and logical access to university IT resources is not terminated in a timely fashion after an individual’s official capacity with the university has ended.

**Logging**
Various logging utilities have been implemented to provide administrator with actionable alerts as well as capabilities to dynamically respond to specific attacks. However, a significant number of servers and network devices are not currently configured to send log files to a central repository and the storage of log data is primarily to support forensic work after a breach has been identified.

**Regulatory Compliance**
The issues identified above significantly impact the university’s ability to comply with various regulatory requirements related to information security (PCI, HIPAA, FERPA, FISMA, etc.), creating a significant financial and reputation risk to the university.

**Recommendation Summary**
- Enhance and implement the campus IT security strategic plan, policies, processes, and services to protect critical IT resources and sensitive information.
- Ensure that personal and sensitive patient, student, faculty, and staff information is secure.
- Implement measures to comply with the university’s Information Security Policy 4-004.
- Ensure compliance with all privacy and information security laws and regulations.
- Provide appropriate and secure access to those who require access to data and information to make informed decisions and perform the responsibilities of their work.

**Key Benefits to Campus**
- Maintains confidentiality of personal, sensitive data.
- Reduces risks associated with data loss or information system downtime.
- Complies with the campus Institutional Data Management and Information Security policy which states:
  - The value of institutional data is increased through its widespread and appropriate use; its value is diminished through misuse, misinterpretation, or unnecessary restrictions to its access.
  - Data users will be granted secure access to view or query all institutional data based on the “need to know” in order for the individual or campus organization to perform all legitimate administrative, health care, research, academic and other official responsibilities pertaining to the mission of the university, examples of which include but are not limited to planning, decision making, official reporting, etc.
- Empowers decision making at all levels of leadership at the university.
Theme 9: Improve Campus IT Communication and Collaboration Services

Who are the stakeholders and what do they need to do?
Communicating and collaborating through voice, video, and data are fundamental to the individuals and organizations accomplishing the work of the university.

Recommendation Summary
- Establish a vision for unified communication and collaboration services.
- Identify the desired services to achieve the vision.
- Create a plan for adopting new technologies (including the necessary funding strategy) that improves our ability to communicate and collaborate in a cost-effective way.

Key Benefits to Campus
- Fosters existing and future collaborations in research, teaching/learning, and administrative functions, on campus and off campus.
- Provides resources to analyze and improve communication and collaboration processes.

Conclusion
These themes represent the best thinking of UIT leadership and are consistent with the feedback received through interviews with campus leaders. With IT governance established, efforts related to the themes are prioritized based on the strategic, operational, or technical direction of the governance committees. This represents a significant change in the way IT resources have been allocated and how projects were prioritized. This change requires the commitment and collaboration of campus leaders to responsibly govern the investment of IT resources to accomplish the university’s mission, vision, strategies, and initiatives.

All themes are closely related to one another. Implementation of the IT governance structure and the successful implementation of the new IT funding model are necessary to accomplish the recommendations presented in this report. Existing university monies funds the recommendations. This includes redirecting limited resources to higher-priority needs. Under the auspices of the IT governance structure, the university may decide to seek new funding for IT services that benefit the entire campus.

Acknowledgements
UIT wishes to acknowledge the contributions and consultative direction of Elizabeth Aebersold, Director of the Office of Communication and Strategy Management at the University of Texas at Austin. We also express gratitude for Ms. Aebersold’s willingness to liberally share her experience and documentation from establishing IT governance at UT Austin. This document mirrors and sometimes, where appropriate, quotes her work.
Appendix A - Background

The reason for a new IT governance model can best be established through a brief review of the history of IT governance on the University of Utah campus since roughly 2000.

Many IT services and systems did not develop as centrally provided or managed campus services. With changes from the mainframe computing era through the personal computing era, IT services were developed, implemented, and maintained in a distributed manner. Each college and department developed IT solutions based on their particular needs and requirements. For example, in 2000, virtually every department on campus was running its own email system. Today, a number of academic departments operate their own networks and computing systems, and own and manage the physical infrastructure associated with those networks and systems.

Attempts to coordinate distributed IT efforts began with the establishment of a Chief Information Officer and two oversight committees, the Information Technology e-Commerce committee (ITeC) and the Information Technology Council (ITC).

Central Coordination and Local Control
The CIO reported to the Senior Academic Vice President with the primary responsibility to facilitate IT development applying the principles of “Central Coordination and Local Control.” The CIO served as a consensus builder across campus IT organizations.

ITeC was originally organized to investigate and develop technologies to facilitate on-line transactions. At the same time, a committee known as the Information Technology Council (ITC) was organized as a way to coordinate efforts between “centralized” IT organizations and college and departmental IT managers. These two committees were duplicative in many aspects. The membership of the groups overlapped to a large extent. The meeting agendas for the two groups mirrored each other. Both committees met monthly, which resulted in considerable duplication of effort.

The Senior Academic Vice President and the Council of Academic Deans were approached in 2002 with a proposal to eliminate one of these committees. Because there was a strong desire to maintain academic oversight, ITeC was disbanded and reconstituted as a part of the Information Technology Council (ITC). The membership of the ITC consisted of representatives from each college, and key leaders from across campus, representing each of the vice presidents and their functional areas of responsibility.

Meeting bi-monthly for over 10 years, the ITC functioned as a coordinating and oversight body for campus-wide IT initiatives. ITC reviewed and approved IT policies and an annually-updated project oriented IT plan. ITC approved the expenditure of student computing fees that, over the years, have been administered by the central IT organization under the direction of the CIO. The ITC reviewed plans and budgets to implement major campus network and IT systems infrastructure projects.

The ITC also reviewed proposals presented by colleges and administrative departments for the implementation of software systems, if (a) the system required access to or integration with institutional data resources; (b) the system potentially exposed sensitive and critical information; (c) the
implementation of the system required the use of central IT personnel; (d) the system could possibly duplicate existing IT systems; or (e) the system presented an opportunity for a solution that would benefit the campus community beyond the proposing department.

**What if the ITC said “NO”**
During the ITC meeting held in June 2011, the Human Resources department presented a proposal for an employee recruiting system called PeopleAdmin. A few months earlier, Hospital Human Resources had presented a different recruiting system that they selected for hospital employee recruiting. Members of the ITC questioned why the campus was implementing two different recruiting systems. A lively and somewhat heated discussion ensued, ultimately resulting in a motion to support the implementation of the PeopleAdmin system. The vote was very close, a result which was historically unusual. The system implementation was approved by a narrow margin, but the question was raised: *What if the ITC had voted against approval of the recruiting system?*

After considerable discussion, campus IT leadership and many ITC members recognized that the ITC vote was ambiguously authoritative and non-binding. There was nothing in official university policy that required a campus department to abide by the decisions of ITC.

This event highlighted the need for a governance process that could offer strategic direction and make decisions that had a real and binding impact on campus IT investments.

**Other Committees**
The ITC promulgated sub-committees for various purposes. A committee was organized that consisted of “data stewards,” the individuals who were charged with the ownership and management of institutional data. This committee evolved to include other leaders and became the Information Technology Executive Committee (ITEC). The ITEC met monthly and, among other duties, reviewed, influenced, and approved ITC agenda items.

Several other sub-committees developed over time, usually with a limited or specific technology and/or operational focus. Topics included subject areas like wireless networks, video streaming infrastructure, IPv6 implementation, etc. At one point the number of identified committees that dealt with IT in some way exceeded 26. Some of these committees operated under the direction of ITC, others were ad hoc and formed around a specific IT issue or problem.

**Why Change the Governance Model?**
As the more than 26 committees were analyzed, it became clear that virtually all had little or no decision authority. Most could be classified as advisory or informational committees. While the committees had provided valuable input to the operation of campus IT, a lack of clear decision authority and the absence of a clear campus IT strategy limited the effectiveness of these committees in driving the campus agenda for IT investments.

**Campus Feedback Regarding IT Governance**
Interviews were conducted with academic and administrative leaders throughout campus in an attempt to capture concerns regarding campus IT governance and to identify substantive themes for early
governance committee meetings. The comments below came from interviewees and are not necessarily the opinions of UIT. In some cases the comments expressed are based on impressions that interviewees have regarding current IT governance processes.

**What was wrong with the previous portfolio management structure? What needed to be fixed?**

- Campus strategic plans need to be broadly understood and policies need to “stick.” With the intent of providing flexibility for campus organizations, exceptions to policy and plans were granted without regard for the unintended consequences to the entire campus. Exceptions had become the rule.
- The previous portfolio approach was perceived as successful for those who had the closest control of the agenda. Several interviewees expressed a perception that the portfolio agendas were controlled by functional units e.g. Human Resources, Financial and Business Services, Student Affairs.
- Well-funded organizations could preempt rules and priorities in ways that were or were not in the best interest of the campus community as a whole.
- Midlevel directors and managers appeared to have veto power over projects that had vice presidential sponsorship.
## Appendix B - Interviewees

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Cathy Anderson</td>
<td>Associate Vice President, Budget and Planning</td>
</tr>
<tr>
<td>David Blackburn</td>
<td>IT Director, David Eccles School of Business</td>
</tr>
<tr>
<td>Martha Bradley</td>
<td>Dean, Undergraduate Studies</td>
</tr>
<tr>
<td>Frank Brown</td>
<td>Dean, College of Mines and Earth Sciences</td>
</tr>
<tr>
<td>Richard Brown</td>
<td>Dean, College of Engineering</td>
</tr>
<tr>
<td>Thomas Cheatham</td>
<td>Associate Professor, College of Medicinal Chemistry and Pharmacy</td>
</tr>
<tr>
<td>Hiram Chodosh</td>
<td>Dean, S. J. Quinney College of Law</td>
</tr>
<tr>
<td>Annie Nebeker-Christensen</td>
<td>Associate Vice President, Student Development and Research</td>
</tr>
<tr>
<td>Dean Church</td>
<td>Director, Financial Solutions</td>
</tr>
<tr>
<td>Kari Ellingson</td>
<td>Academic Senate President; Professor, Department of Pathology, School of Medicine</td>
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<tr>
<td>Robert Fujinami</td>
<td>Dean of Students</td>
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<tr>
<td>Cynthia Furse</td>
<td>Associate Vice President, Research Administration; Professor, Department of Engineering</td>
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<tr>
<td>Sarah George</td>
<td>Director, Utah Museum of Natural History</td>
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<tr>
<td>Bruce Gillars</td>
<td>Director, Space Planning</td>
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<tr>
<td>James Graves</td>
<td>Dean, College of Health</td>
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<tr>
<td>Michael Hardman</td>
<td>Interim Senior Vice President, Academic Affairs</td>
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<tr>
<td>Chris Hill</td>
<td>Athletics Director</td>
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<tr>
<td>Chris Ireland</td>
<td>Dean, College of Pharmacy</td>
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<tr>
<td>Maureen Keefe</td>
<td>Dean, College of Nursing</td>
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<tr>
<td>Jeffrey Kentor</td>
<td>Associate Dean, College of Social and Behavioral Science</td>
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<tr>
<td>Vivian Lee</td>
<td>Senior Vice President, Health Sciences, Professor, Clinical Radiology</td>
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<tr>
<td>Nancy Lombardo</td>
<td>Librarian, Spencer S. Eccles Health Sciences Library</td>
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<tr>
<td>Joyce Mitchell</td>
<td>Associate Vice President for Health Science IT; Professor, Biomedical Informatics</td>
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<tr>
<td>Jannah Mather</td>
<td>Dean, College of Social Work</td>
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<tr>
<td>Tom Millbank</td>
<td>Associate Director, Space Planning Knowledge Management</td>
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<tr>
<td>John Morris</td>
<td>Vice President, General Council</td>
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<tr>
<td>Tony Murillo</td>
<td>Computing and Technology Operations, Huntsman Cancer Institute</td>
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<td>Robert Newman</td>
<td>Dean, College of Humanities</td>
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<tr>
<td>James Parker</td>
<td>Director, Procurement</td>
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<tr>
<td>Mary Parker</td>
<td>Associate Vice President, Enrollment Management</td>
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<td>Thomas Parks</td>
<td>Vice President, Research Administration</td>
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<td>Michael Perez</td>
<td>Associate Vice President, Facilities Management</td>
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<td>Jason Perry</td>
<td>Vice President, Government Relations</td>
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<td>Taylor Randall</td>
<td>Dean, David Eccles School of Business</td>
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<tr>
<td>Barbara Remsburg</td>
<td>Director, Student Services, Housing and Residential Education</td>
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<tr>
<td>Patricia Ross</td>
<td>Chief Strategy Officer</td>
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<tr>
<td>David Rudd</td>
<td>Dean, College of Social and Behavioral Science</td>
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<tr>
<td>Wayne Samuelson</td>
<td>Vice Dean of Education, School of Medicine</td>
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<tr>
<td>Marty Shaub</td>
<td>Managing Director, Environmental Health and Safety</td>
</tr>
<tr>
<td>Brenda Scheer</td>
<td>Dean, College of Architecture + Planning</td>
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<tr>
<td>Jean Shipman</td>
<td>Director, Spencer S. Eccles Health Sciences Library</td>
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<td>Laura Snow</td>
<td>Special Assistant to the President</td>
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<td>Barbara Snyder</td>
<td>Vice President, Student Affairs</td>
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<td>Pierre Sokolsky</td>
<td>Dean, College of Science</td>
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<td>Sylvia Torti</td>
<td>Dean, Honors College</td>
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<td>Raymond Tymas-Jones</td>
<td>Dean, College of Fine Arts</td>
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<td>Randy Van Dyke</td>
<td>Assistant Vice President, Internal Audit</td>
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<td>Chuck Wight</td>
<td>Dean, Graduate School</td>
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<td>Amy Wildermuth</td>
<td>Associate Vice President, Academic Affairs</td>
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<td>Gordon Wilson</td>
<td>Assistant Vice President, Auxiliary Services</td>
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<td>Bill Warren</td>
<td>Chief Marketing and Communications Officer</td>
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<td>Jeff West</td>
<td>Associate Vice President, Financial and Business Services</td>
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<tr>
<td>Joanne Yaffe</td>
<td>Associate Professor, College of Social Work</td>
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Appendix C - Committee Charters

**Strategic IT Committee**
The Strategic IT Committee meets on a regular basis as needed to approve the enterprise IT plan and overall IT funding model, set key IT priorities for campus, endorse IT principles and policies, resolve enterprise-wide strategic IT issues, and establish accountability for enacting decisions. The Board consists of executive-level positions from the President’s Cabinet and hospital and serves as the definitive decision-making body for IT on campus. The Chair of the OITC will serve as an ex-officio member of the Strategic IT Committee. Chair: David Pershing.

**Faculty IT Council**
The Faculty Information Technology Council is elected by the Academic Senate. It is advisory to the Strategic IT Committee (SITC). Chair: to be announced.

**Operational IT Committee**
The Operational Information Technology Committee (OITC) works closely with the Strategic IT Committee and with the portfolios. The OITC responsibilities include translating strategic direction from the Strategic IT Committee to the appropriate portfolio; coordinating cross-portfolio priorities; propose resource allocations across portfolios; and requesting additional resources when necessary from the Strategic IT Committee.

The Operational IT Committee will be the Data Management Policy (Policy 4-001) governing body as well as the University Information Security Policy (Policy 4-004) governing body. The OITC will ensure that the Data Management Policy is meeting the needs of the data stewards and data users. The OITC will also make decisions related to the treatment of risk concerning university technology and data. Chair: Michael Hardman.

**University Research Portfolio**
The University Research Portfolio focuses on advanced information technology to support research across campus. This portfolio has primary responsibility to establish priorities, identify initiatives, and allocate seed money to innovative technology projects that support the advanced information technology needs of research at the university. Chair: Tom Cheatham.

**University Support Services Portfolio**
The University Support Services Portfolio identifies and prioritizes technology-enabled solutions for shared business needs and ensures effective use of information technology resources across all support services organizations of the university. The University Support Services Portfolio has primary governance over all custom-developed, application-packaged administrative software, and unified communications applications. The committee consists of the leaders of university support services organizations. Chair: Michael Kay.
Teaching and Learning Portfolio
The University Teaching and Learning Portfolio focuses on technology to support teaching and learning across campus. This portfolio has primary responsibility for the learning management system, classroom technology, teaching and collaboration tools, and other teaching and learning technology tools. This portfolio will prioritize projects, identify initiatives, and allocate seed money to innovative technology projects that support teaching and learning at the university. Co-Chairs: Martha Bradley and Wayne Samuelson.

University IT Infrastructure Portfolio
The Information Technology (IT) Infrastructure Portfolio oversees data, video, and voice networks; data storage; administrative computing infrastructure; and security investments. This portfolio identifies and prioritizes IT infrastructure requirements for the University of Utah and ensures appropriate IT infrastructure exists to support the mission of the University. The portfolio will also review the funding structure for IT infrastructure services. Chair: Cynthia Furse.

Patient Care Portfolio
The Patient Care Portfolio will be defined by Sr. Vice President of Health Sciences Dr. Vivian Lee. Patient Care Portfolio agendas and membership will be available once the portfolio is formalized and begins meeting.