

## Chapter 4: Participating in IT Governance

The final chapter of the IT Strategic Report concerns engaged participation in governance and budget, as well as communications and consists of two reports: Redefining Governance and Developing Strategic Communications. Each report focuses on how IT and ITS may best serve campus constituencies and details significant enhancements to an understanding of how IT governance and communication may be conceptualized on campus.

Recommendations involve envisioning and implementing IT advisory committees as well as a campus-wide virtual organization composed of ITS and distributed IT providers to offer a more effective fit between an ITS-provided core infrastructure and a variety of distributed services. In tandem with this recommendation is overt recognition of the expense associated with IT and the need for systematic processes surrounding IT funding. In turn, effectively communicating with students, faculty, and staff is integral to IT governance. Recommendations for developing strategic communications include crafting and distributing a campus IT and ITS mission, redesigning how IT and ITS information is constructed and disseminated, and stronger collaboration between university communications and ITS. Viewing communication as a continuous feedback loop rather than a one-way linear model is an important aspect of establishing open and reciprocal channels of information and in turn, providing an environment wherein IT development may flourish.

## 4.1 Redefining Governance and Fiscal Responsibility: From Services Offered to Services Shared

**Governance: How can the Office of the Associate Vice Chancellor for IT develop appropriate advisory structures that include faculty, students and staff that effectively shape IT direction through engaged participation to better support the core activities of teaching, learning and research?**

**Additionally, how can the AVC for IT define in theoretical and actionable terms the idea of fiscal responsibility and budget transparency through engaged participation of the advisory committees? How can the IT committees draw in other recommendations that derive from other committees to create a campus-wide dialogue regarding IT fiscal responsibility?**

### A. Background/Rationale

This subchapter provides a roadmap to engage all areas at CU-Boulder to select, prioritize, coordinate, budget, measure, and judge IT services, at the level of one specific area, and for all of CU-Boulder.

IT is a strategic service and resource necessary to the support of research, teaching, outreach, and administration. IT services have developed across the campus in a distributed manner, typical and appropriate to an R1 institution. To maximize the quality, quantity, and cost-effectiveness of IT services, governance – advisory and decision-making processes – is needed to coordinate and optimize IT assets across distributed service providers. An IT governance model that engages the campus can form a campus-wide virtual IT organization composed of ITS and distributed IT providers that is guided by, and is responsive to, all campus constituencies. A virtual IT organization can provide a continuum of services, from core infrastructure provided primarily by ITS, to domain-specific IT providers who will then be better able to serve IT needs unique to their areas. No one area at CU-Boulder independently provides all of its IT service and resources. It follows that each area, to maximize its IT services and resources and minimize its costs, must coordinate how it fulfills its IT needs with other areas and with ITS. Further, the more an area can depend on ITS for core services and resources, the fewer core services and resources an area has to provide for itself, freeing resources for IT needs specific to an area, or for non-IT needs; therefore, the campus has an inherent interest in IT governance and finance.

Effective IT governance requires systematic campus-wide advisory input from faculty, students and staff within a decision-making model. The model must be able to distill and prioritize IT projects and directions that support the strategic directions set forth by campus leadership. Governance and fiscal responsibility are sides of the same coin. The governance model, informed by fiscal realities, must identify and, endorse or decline funding for initiatives, projects, and services. Committees within the governance model must be aware of the many-faceted aspects of distributed and centralized IT on campus and how those aspects interdependently form one large-scale IT environment. This new structure needs support from all campus constituencies, including the chancellor and senior leadership.

## B. History and Accomplishments to Date

IT at CU Boulder evolved from four groups. Three formed ITS: Telecom (telephony and physical networking); Computing and Network Services (core and administrative development and services); and Academic Media Services (instructional IT and media services). One developed alongside ITS: distributed IT service providers within the research, administrative and academic areas. A rift and lack of coordination between ITS (the first three groups) and distributed IT service providers (the fourth group) is apparent. ITS offers campus-wide IT services and resources, but generally has not engaged or interactively communicated with other campus IT providers.

For the past few years ITS has operated under the Four Tier support model in which Tier 1 provides broad, self-help communications (the ITS web, end-user support documents, technical information, etc.), Tier 2 provides an outreach component composed of non-ITS staff known as Computer Support Representatives (or CSR's) who provide local IT support functions partly coordinated by ITS, Tier 3 provides ITS support employees, some positioned in academic and administrative departments, and Tier 4 – ITS staff who provide escalated IT support. In addition to about 150 ITS employees, by rough count, there are about 250-300 “IT” staff, who comprise mainly IT professionals, but range from doctoral level scientists to departmental assistants also assigned an IT support role. The primary communication conduit from ITS to campus-wide IT professionals (primarily a one-way channel) is the CSR/Tier 2 community.

The campus recognized the need to develop a senior position overseeing IT functions and created the position of “associate vice provost for academic and campus technology.” This position is now reconstituted as “associate vice chancellor for IT and CIO.” The former AVP formed IT Council, comprised of senior-level administrative staff, faculty, and students. IT Council met monthly during the academic calendar from 1999 to 2005, having eventually degenerated to little faculty participation and interaction. The 2002 campus-wide strategic plan recommended that three additional advisory boards be developed: the IT Infrastructure Advisory Group (ITIAG), the Faculty Advisory Committee for Educational and Information Technology (FACE-IT) and a student advisory committee. ITIAG is still in operation. FACE-IT met for a year and no longer exists. The student advisory committee never developed. ITIAG comprises IT professionals from the schools and colleges as well as the research institutes, academic departments and ITS. ITIAG has met monthly since 2002 to influence technical direction, shape policy, and provide a campus-wide technical perspective.

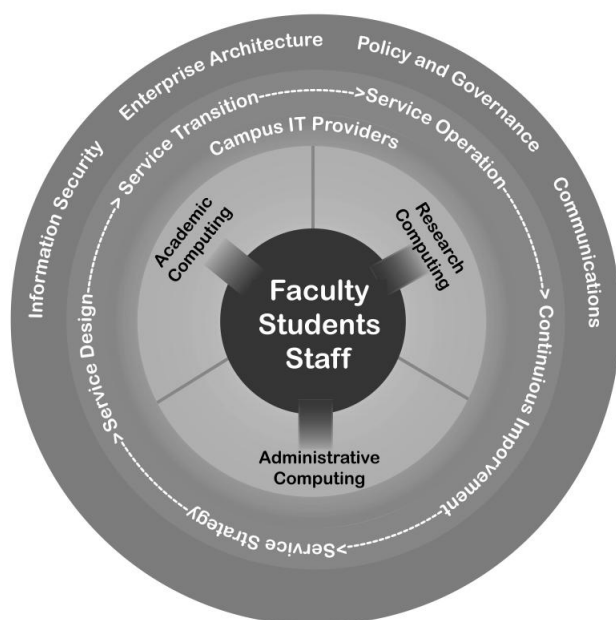
## C. A New Model

Building on past success, lessons learned, and best practices from public and private sectors, the office of the AVC for IT and CIO recently developed a new, integrated model of campus-wide IT focus (academic computing, research computing, and administrative computing), support and process (service strategy, design, transition, and operation, and, continuous improvement) and governance principles (policy and governance, communication, enterprise architecture, and information security).

The diagram below, “Conceptual IT Environment,” shows that the faculty, students, and staff are at the core, or the heart of the IT environment. Close to the constituencies are the three areas of focus in which all IT services and support fall: academic technology, research computing, and administrative computing. The next concentric circle—the campus IT providers—represents all IT providers who support these three focus areas utilizing a collection of campus resources in a variety of ways. The following circle represents how these IT services and support are created,

adopted, managed, and assessed using the most widely accepted approach to IT service management, ITIL, which provides a cohesive set of best practices for IT—strategy, design, transition, operations, and continuous improvement provide the structure to effectively plan and execute IT projects and programs. The outermost circle represents the boundaries, or criteria in which to create structure and order in developing and maintaining campus IT. IT security, enterprise architecture and policy are all critical elements that must be considered to ensure a healthy, functioning IT environment.

### Conceptual IT Environment



### D. Action Plan



#### Specific Recommendations

The Governance committee considered the question: how can campus-wide IT directions and projects identified in the rest of the strategic planning process be endorsed and supported over the coming years? We considered existing and past IT advisory councils and groups, the BFA, the soon-to-be advent of a research computing faculty advisory group, existing IT governance structures across the campus in various schools, colleges, and administrative areas, and the overall governance structure of CU-Boulder. The chair and co-chair also reviewed the ideas in an EDUCAUSE publication with the committee.<sup>i</sup>

Three principles emerged. 1) IT services and resources are necessary to all functions at CU Boulder. 2) How IT is to be conducted requires advisory committee input from all areas of the campus – faculty, students, and staff. Such committees will allow for campus-wide consideration of IT strategies and priorities. 3) An executive committee is necessary to communicate and help shape major projects and directions into recommended decisions and funding needs that can be supported and authorized by the Chancellor, his executive team, and the faculty leadership. (Area specific IT service providers would remain responsible to their existing management, and would participate alongside ITS to help shape and participate in campus-wide IT directions, specific projects, and policies.)

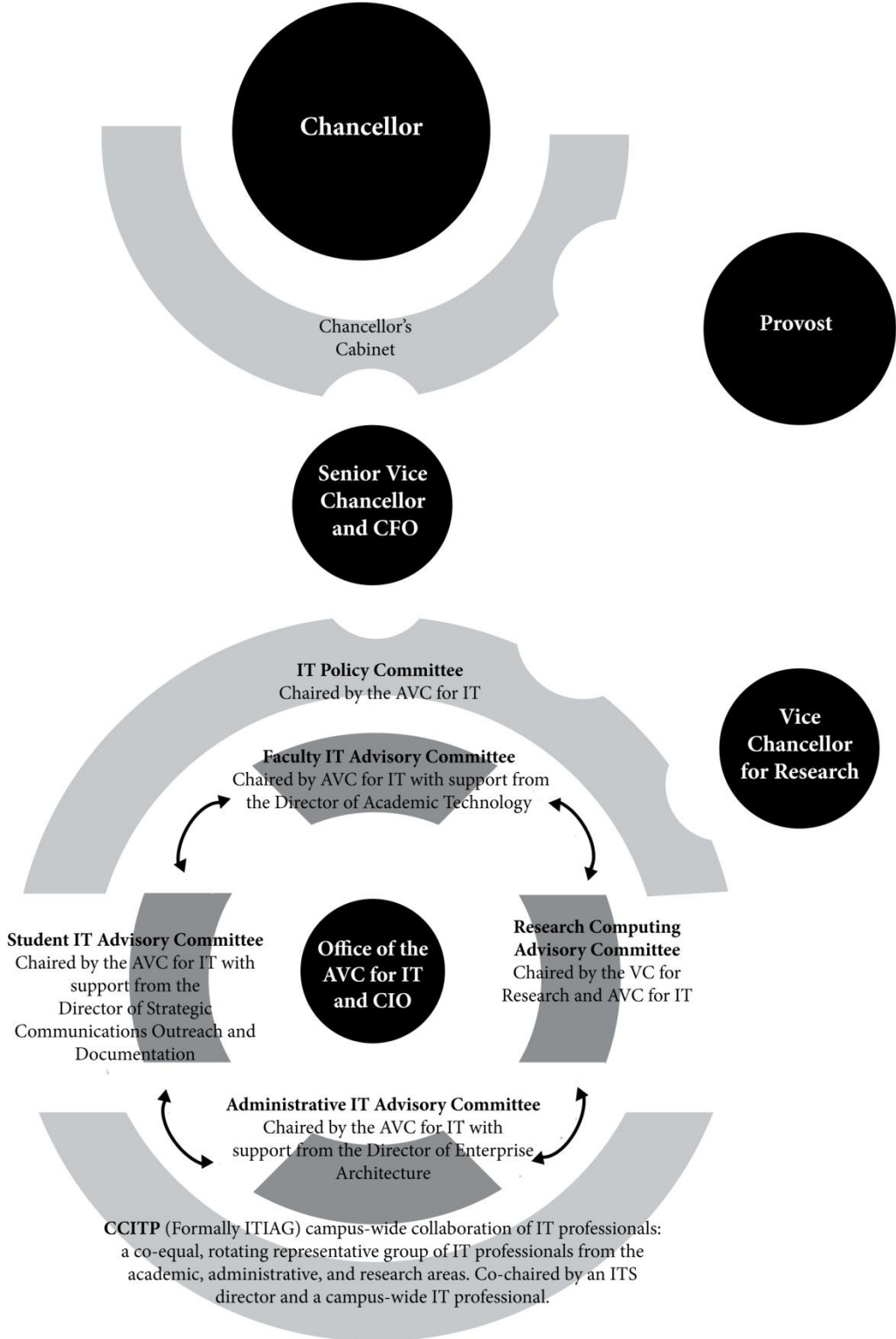
The next diagram, “Shaping IT direction through engaged participation and shared services” depicts a structure to implement these three principles, basically, a campus-wide advisory layer and an executive group tied to the Chancellor’s Cabinet. The structure will also maintain ties with the BFA through joint members, and with various academic groups such as the Council of Deans, the Chair’s Breakfast, and various meetings of Associate Deans and Associate Vice Chancellors.

Specifically:

- Recommendation 1: Create the suggested governance structure.
- Recommendation 2: Use the suggested structure as an integrative approach to develop IT strategies and associated funding requests, and as an intake mechanism for requests from individuals, other committees, and group entities for IT strategies and projects, and their associated funding requests.
- Recommendation 2a: Develop campus-wide communication methods for individuals, other committees, and group entities to provide input into the new governance structure (see section 4.2: Developing Strategic Communications).
- Recommendation 3: Develop a review process to measure the effectiveness of the advisory boards (process to be determined).

# Shaping IT direction through engaged participation

Draft  
July 2010



## Description of the Committees:

**Executive IT Policy Committee** – This committee (name subject to change) will comprise of five members, at the associate dean level or higher. Each of the following offices will nominate one member; final decision will be determined by the Chancellor: Provost, VC for Budget & Finance, VC for Administration, VC for Student Affairs, and University Counsel. Each member initially will serve either 2-3 years to create a mixed rotation schedule. This committee will be chaired by AVC for IT/CIO, supported by Director of Strategic Communications, Outreach and Technology. This small group of senior leadership will review and “own” strategy, policies, and directions developed by the four advisory committees. Initially, this group will meet quarterly with the potential of twice per year with select members with the Chancellor’s Cabinet (see schedule chart at end of the report). Additionally, this committee will apprise CEC regarding campus-wide IT issues as requested by the CEC.

**Faculty IT Advisory Committee** – This committee will have approximately 15 members: three nominated from A&S, one member from each of the other Schools and Colleges in addition to the chair of the BFA Administrative Services and Technology committee and possibly two at-large BFA members, nominations determined by Deans for Schools colleges, BFA for BFA members. Each member initially will serve either 2-3 years to create a mixed rotation schedule. This committee will be chaired by AVCIT/CIO, supported by the Director of Academic Technology. This influential and representative group of faculty may develop additional subgroups (e.g. Faculty Evaluating Educational Technology, or FEET) as necessary. This committee will meet every other month (September through May). This group ensures that IT services and support enhance learning, teaching, and research; meet instructional and research needs of faculty and instructors; and are coordinated across academic and service units. Members will provide advice and help evaluate issues associated with: the deployment of new technology services and spaces; the evaluation of the effectiveness of technology in teaching and learning; the support of academic technologies. Additionally, this committee will apprise CEC regarding academic technology issues as requested by the CEC.

**Administrative IT Advisory Committee** – This committee will also have approximately 15 members from administrative areas and administrative support from at least A&S and Engineering, Continuing Education, and UIS. The various administrative areas: Enrollment Services, Human Resources, A&S Administration, Engineering Administration, Faculty Affairs, Housing & Dining Services, UIS, Continuing Education, Institutional Research, Public Health and Safety. Nominations determined by the head of each administrative area. Members should be appointed by the department head/chair, participation should be part of the job duties of the role, and should be on-going according to role (not served terms). In many cases, the member should be the department head (HR, Registrar, Faculty Affairs, Housing & Dining Services) – not the senior IT person. This committee will be chaired by AVC for IT/CIO, supported by the Director of IT Service Engineering. The three main functions of the committee:

- Provide “business owner” direction to central IT services where active concerns have impacts across multiple business areas (such as identity management practices)
- Provide campus input to be brought to UIS governance
- Develop and recommend policy related to how campus IT assets (systems and data) are to be deployed and managed to meet campus administrative needs.

**Student IT Advisory Committee** – This committee will seek to have seven consistent members, four from undergraduates, including one representative from University of Colorado

Student Government (UCSG) as well as three graduate students, includes one representative from UGGS. Nominations determined by UCSU and UGGS. Given the difficulty in getting student representation, the term limit is five years for this committee, which makes it possible to have a student member sit on this committee for that length of time. This committee will be chaired by AVC for IT/CIO, supported by the Director of Strategic Communications, Outreach and Documentation and will meet three times a year. This committee advises the AVCIT/CIO on student IT strategic, priority, and policy matters. Additionally, this committee could apprise the CEC on IT issues as they relate to the student experience as requested by the CEC.

**Faculty Research Computing Advisory Committee** – This committee is yet to be formed, name is subject to change. This committee will be chaired by the Director of Research Computing who will report to VCR in collaboration with AVCIT/CIO and instantiated and charged by the Provost. This committee will provide oversight for the development and management of a campus-wide collaborative research-computing environment. This committee is a singularly focused group reporting to the VCR. Frequency of meetings has not yet been determined.

**Campus-wide Collaboration of IT Professional/Partners** (formerly ITIAG, new name subject to change) – This group will be composed of approximately 20 members from the schools and colleges, research institutes, and administrative departments, including auxiliaries (each area has approximately five representatives with four additional ITS employees serving). This cross-representative group will have members rotate on a 3-4 year cycle depending on the schedule (see appendix A for the schools and colleges, research institutes and administrative departments).

This group of IT professionals would replace both ITIAG and the Tier 2/CSR Advisory Board. This group is co-chaired by an ITS representative and campus IT professional and meets monthly. (Note – various subsets of members of the CCITP group would advise and consult with the four advisory committees on both an ad-hoc and regular basis, e.g., Security and/or Enterprise Architecture.

<b>Proposed Meeting Schedule</b>	<b>Exec Policy Committee</b>	<b>Faculty</b>	<b>Admin</b>	<b>Research Computing</b>	<b>Student</b>	<b>CCITP (ITIAG)</b>
January		X		?	X	X
February	X		X			X
March		X				X
April			X	?	X	X
May	X	X?				X
June			X			X
July						
August	X		X			X

September		X		X	X
October			X	?	X
November	X	X			X
December					

### E. Fiscal Responsibility:

Linking the advisory committees to a flexible, yet systematic process of funding enhances the transparency surrounding IT initiatives, programs and services. The budget committee, as part of this IT strategic planning process, led by Steve McNally and David Chittenden, recommends integrating systematic conversations regarding funding priorities into the advisory committees' agendas.

Integrating the consideration of IT strategies and directions with funding: These examples would not necessarily occur in a prescribed order, and would iterate across five major aspects of the proposed governance model:

1. Campus members at large, individuals, other committees, other entities, who forward requests, questions, complaints, and criticism to the advisory committees and to individual members of the advisory committees;
2. The advisory committees (including the CCITP);
3. The IT Executive Committee;
4. Other campus committees; and
5. Chancellor's Cabinet/senior leadership.

The consideration of IT strategies, directions, and funding must also recognize the budget cycle of:

- May/June final approval of budget for next FY by Regents;
- Close of the previous FY;
- Early fall budget census, which helps determine the overall budget for the FY that will follow the current FY;
- Circa late-fall considerations for the upcoming FY, whether it will be a growth or a retraction year; and the late spring end-process in which the budget for the following FY is finalized May/June, ultimately, with the Regents.

Proposed Budget Cycle Conversation:

1. Summer/ongoing. Beginning in summer, as much as is possible for committees to meet, and continuing into the new academic year, the advisory committees, likely picking up themes and matters from the previous year, consider whether elements of the IT environment need to be maintained as-is, discontinued, decreased, increased, and whether new elements need to be developed.
2. Post fall budget census. The AVC for IT provides an early distillation and reviews this ongoing development of possible initiatives with various senior officers, including the

SVC/CFO, the Provost, and various associate (vice) provosts and chancellors for their input and as a “heads-up.”

3. Ongoing process. The CCITP and other technical venues around campus, in collaboration with ITS program managers, through their work, will posit changes to existing or new IT initiatives. Ultimately the AVC for IT will hear about these new initiatives in a variety of ways, will bring them to the advisory committees, and will bring advisory committee considerations to the CCITP. (There will also be cross-memberships among the advisory committees, the CCITP, and the BFA.)
4. Late winter/early spring. Based on their considerations to date, the advisory committees and the Executive Committee discuss a distillation of possible strategic IT initiatives for the upcoming budget cycle. These initiatives will derive from the ongoing momentum of the governance committees, ongoing assessments of the performance of the IT environment, and the ongoing evolution of technology. Again, as feasible, the AVC for IT provides further distillation and reviews this ongoing development of initiatives with various senior officers, including the SVC/CFO, the Provost, and various associate (vice) provosts and chancellors for their input and as a “heads-up.”
5. Spring and/or ongoing. The SVC/CFO in conjunction with the Provost and Chancellor’s Cabinet, reacting to proposed IT directions, begin the effort of determining possible new projects and funding levels as well as identifying from a senior leadership perspective areas that should be discontinued and/or areas where efficiencies can be realized.
6. Spring. The AVC for IT and the Executive Committee, based on input from senior leadership, provide some high-level parameters for the advisory committees, the CCITP, and ITS regarding funding parameters to be applied in support of IT directions identified by the ongoing governance process.
- 7a. Ongoing. Culminating for spring use by the advisory committees and executive committee discussions will continue. Projects and formal funding requests may then be initiated in a variety of ways, most commonly: a) through program direction statements from ITS program directors; b) with endorsement from the CCITP; c) presented as recommended program directions to be vetted, depending on the domain of the statement, by one or more of the advisory committees. Standard formats will be developed which includes high-level project description and funding requests.
- 7b. The direction statement and standardized funding requests will be discussed and reviewed by the various committees, with the final product being a prioritized list of funding requests that is given to the Executive Committee. It will be the responsibility of the AVC for IT/CIO to prepare the prioritized list and support the presentations to the advisory committees.
8. The Executive Committee will finalize the funding priorities and present the information to the Provost and the Chancellors’ Cabinet.

The funding process is meant to be iterative, dynamic—with requests being generated from the bottom up and expectations and funding levels being communicated down from the highest levels of the university. The focal point is the Office of the AVC for IT who, through engaged IT participation from the faculty, students, and staff, create requests that provide the broadest IT perspective. Additionally, it is the responsibility of the Office of the AVC for IT to critically

examine the entire campus-wide IT budget, providing recommendations that will gain efficiencies and savings.

Conclusion:

Implementation of this governance process will result in visible, campus-wide, participatory, and ongoing process for faculty, students, staff, and senior leadership to engage together in shaping the nature and directions of the CU-Boulder IT environment, both in terms of services and spending.

DRAFT

## **Appendix A:**

### Schools & Colleges:

Arts & Sciences  
Architecture & Planning  
Business  
Education  
Engineering  
Graduate School  
Journalism  
Law  
Libraries  
Continuing Education

### Research Institutes:

ATLAS—Alliance for Technology, Learning & Society  
Center for Humanities and the Arts  
CIRES—Cooperative Institute for Research in Environmental Sciences  
Energy Initiative  
IBG—Institute for Behavioral Genetics  
ICS—Institute of Cognitive Science  
INSTAAR—Institute of Arctic and Alpine Research  
JILA  
LASP—Laboratory for Atmospheric and Space Physics  
University of Colorado Museum of Natural History  
Institute of Behavioral Sciences

### Administrative Units:

Bookstore & Imaging Services  
Budget & Finance  
Enrollment Management  
Environmental Health and Safety  
Facilities Management  
Housing and Dining Services  
Human Resources  
ITS  
Public Safety, Parking & Transportation  
Recreation Center  
UMC

## Appendix B

### Sample of Meeting Agendas

Each committee will need to establish a baseline of common knowledge/understanding of the IT issues the committee will encounter. Largely, this will be accomplished at the discretion of the AVC for IT by bringing in IT experts to speak on a particular topic. To launch the structure, all committees will review the campus-wide IT strategic plan.

#### Draft Agenda for Executive Policy Committee

- **August 2010:** skip because this committee will build from the work of the other committees
- **November 2010:** kick-off orientation with utilizing the campus-wide IT strategic plan as foundation
- **February 2011:** policy review—Computing & Network Resources, Security Policies
- **May 2011:** review of proposed budget considerations

#### Draft Agenda for Faculty Advisory Committee

- **September 2010:** Introduction to the academic technology committee; technologies available; spaces available; support available; organization of IT organization and services on campus
- **November 2010:** Rolling out the new Learning Management System: timeline, needs, migration of courses, review of draft C&NR policy
- **January 2011:** Prioritizing LMS functions and Security policies
- **March 2011:** review of proposed budget considerations
- **May 2011:** classrooms (centrally- and departmentally-scheduled); labs; instructional computer spaces, review of evaluation and assessment metrics specific to teachers and learners

#### Draft Agenda for Administrative Advisory Committee

- **August 2010:** kick-off orientation with utilizing the campus-wide IT strategic plan as foundation and definition of POI/university roles
- **October 2010:** review of cloud computing, mobile computing and possibly ISIS implantation also, review of draft C&NR policy
- **February 2011:** review of support for teachers and learners and Security policies
- **April 2011:** review of proposed budget considerations
- **June 2011:** review of evaluation and assessment metrics specific to teachers and learners

## 4.2 Developing Strategic Communications

**Major Issue: As users of technology faculty, staff and students need to stay informed of changes to IT services on our campus. These constituencies also need a way to join in the conversation about the future of IT services. IT communication should not be viewed as a one-way conversation between ITS and its customers but rather should be an inclusive loop. In the end, the conversation about IT services should make all parties more successful consumers and providers of IT services.**

### A. Background/Rationale

IT communication on the CU-Boulder campus is mainly driven by Information Technology Services and is largely one-way. ITS provides documentation and service information on a website that is dated and difficult to navigate. Other ITS communication vehicles include a once-a-semester newsletter to faculty and staff, an IT security awareness campaign, and an orientation program called ITS Quick Start. ITS also makes use of campus communication channels such as E-memos, Buff Bulletins, and Inside CU to communicate service changes.

ITS established the Tier 2 program in 2001 to better connect with the IT needs of departments, schools and colleges across campus. While the program has been successful in leveraging Tier 2 Computer Support Representatives (CSRs) to relay information from ITS to their respective departments, CSRs have been underutilized as a feedback mechanism to ITS. Some CSRs are IT professionals while others may have little or no IT background. This leads to difficulties utilizing CSRs as IT points of contact within campus units.

Another factor that contributes to the lack of feedback to ITS is the lack of IT governance structures on the campus. Our campus has both a strong central IT organization and strong campus IT but lacks the governance and communication structure to support the two. A dynamic communication structure needs to accommodate both central IT and decentralized IT needs.

Our campus needs to evaluate current IT communication strategies and identify new communication processes and vehicles that will successfully engage all campus constituents in dialogue about IT services and support and their future on our campus.

### B. Accomplishments to Date – Efforts to Improve Communication

- The following communication vehicles and support structures have been created to better inform the campus of IT initiatives and service changes:
- Tier 2 organization and the IT Support Community Event, Tech Talks & Forums
- ITS Quick Start for students
- Oneonone newsletter for faculty and staff
- Security awareness campaigns
- ITS website
- 5-HELP Service

## Action Plan

### A. Explicit Assumptions

The term "campus IT" is considered to be all people who perform some sort of IT work on the CU Boulder campus, including people outside of ITS.

For item "Campus IT Mission," we assume that a body of constituents will be available to garner input for creation of a campus-wide IT mission. This body will most likely be formed out of the IT Governance committee as part of the overall strategic planning process.

The term "The committee" in this chapter refers to the IT Strategic Plan's Strategic Communications Committee.

## B. Specific Recommendations

### 1. Define and Communicate the Mission of IT

**Problem:** The committee recognizes the perception on campus that there is a lack of IT strategic direction. Currently there are no clearly communicated IT governance structures and IT organizations are largely autonomous with few standards. There is no common campuswide understanding of how to fulfill the mission of supporting faculty, staff and student computing and communication needs or requirements as set by university leadership. ITS does have a mission statement but is insufficient to describe the mission of the organizations that fall outside of ITS' domain or services.

**Recommendation:** Campus IT, in conjunction with faculty, staff, students, and the Associate Vice Chancellor of IT, perform the following tasks:

- Create a campus-wide IT mission statement, ensuring the mission is up-to-date with the most recent campus vision (currently Flagship 2030), and
- Communicate the campus-wide IT mission through appropriate campus channels to appropriate campus IT constituents.
- Also ITS leadership should perform the following tasks:
  - Review and revise the ITS mission statement to ensure the mission is up-to-date with the campus-wide mission, and
  - Communicate the revised ITS mission through the appropriate campus channels to appropriate campus IT constituents.

### 2. Campus IT Roles and Responsibilities Inventory

**Problem:** A significant gap exists in the understanding of the breadth and depth of campus IT service, support and expertise currently provided by different organizations on campus. This gap in understanding means incorrect assumptions could be (and most likely are) made about departmental expertise and communication needs.

**Recommendation:** The Associate Vice Chancellor of IT should commission a periodic inventory of campus organizations that maintain IT structures (including ITS) to guide campus IT strategic planning and leverage IT expertise on our campus. This inventory should be used to help the sharing of IT expertise between departments. Specifically, the inventory should identify the following:

- People performing IT activities on campus and the organizational requirement they fulfill. This includes all roles from the IT professional responsible for system administration of hardware, software and security to the administrative assistant with no technical expertise who was elected to update the department website,

- Assets (hardware/software) managed within campus organizations (outside of ITS) and the requirements they fulfill,
- Services which organizations provide using internal resources,
- Services which organizations rely on ITS to provide and maintain as either a common-good or purchased service,
- Services which organizations rely on other campus organizations to provide and maintain, and
- Services which organizations purchase from outside vendors.
- For more specifics and examples on the inventory collection, please see Appendix A.

### 3. Expand Face-to-Face Communication

**Problem:** Face-to-face communication with faculty, staff and students about IT issues is underutilized. Additionally the committee recognizes as new faculty, staff and students arrive at the university, not all new people have access to or are pointed to the pertinent information to effectively access campus IT services shortly after their arrival. An extensive amount of information is available online and through phone help, but this information may not be disseminated appropriately and can overwhelm users.

**Recommendation:** ITS, being in the best position to begin this dialogue, should expand the existing ITS Quick Start orientation program and departmental support meetings to:

- Include all faculty, staff, undergraduate and graduate students,
- Provide faculty, staff, and students with vital services in the first 48 hours on campus,
- Host "in person" events to connect new faculty, staff, and students with IT resources, documentation and providers on campus,
- Engage campus organizations with frequent open support meetings, narrowly focused on a specific department or organization, to interact with organizational personnel, faculty, staff, and students.

### 4. Evaluation of Campus Communication Technologies

**Problem:** The committee recognizes that the campus utilizes many different technologies such as email, mailing lists, and wikis to disseminate information to the campus for various topics or events. The volume of information sent to campus personnel is large and widely varied, and new technologies could exist that may better facilitate targeted communication.

**Recommendation:** ITS Communications, being in the best position to begin this dialogue, perform the following:

- Evaluate technologies and processes that will allow individuals to participate in IT dialogue or notifications at the level they determine appropriate, and
- Make recommendations to ITS leadership and campus IT regarding common-good services that would improve campus communication.
- For more specifics and examples on the types of technologies and processes to evaluate, please see Appendix B.

### 5. Evaluation of Student Support Process and Systems

**Problem:** Students often adopt new technology trends more rapidly than other campus constituents, leading to difficulties for inflexible support organizations.

**Recommendation:** The committee suggests that ITS partner with student-facing organizations

(Student Affairs, Orientation, Alumni Affairs, Housing, etc) to conduct an assessment of student IT support needs (including preferred methods of seeking support). The committee suggests that the results of such an assessment be made available to all campus organizations expressing interest, and be used by ITS as the basis for a program to educate ITS staff, faculty, and graduate students regarding student support preferences and any complimentary programs available.

## 6. Restructuring of the Tier 2 Computing Support Representative (CSR) Program

**Problem:** The Tier 2 CSR program, while effective in building a campuswide network to help inform departments of IT service changes, lacks campuswide recognition and standardization of roles and responsibilities. CSRs are in a prime position to represent departmental IT needs to ITS leadership for the purpose of strategic planning but are not formally recognized as such. Also, the current lack of uniform definition regarding the required skills of a CSR means that IT support is non-uniform across campus institutions.

**Recommendation:** ITS and the campus must formalize the role of the Tier 2 CSR program and those that serve in the role of CSR. The committee recommends that this include:

- Investigate changing the name and mission to provide IT professionals outside of ITS with a more meaningful and appropriate identity within the campus community.
- Develop a formal structural framework, including keeping minutes of Tier 2 Advisory Board meetings, development of a Tier 2/CSR website and creation of a formal process to fill board positions.
- Implement a Tier 2 mentoring program to help new CSRs rapidly become proficient in campus/ITS specific process and culture.
- Retool the CSR certification program to be more campus oriented and include information regarding campus services such as: website hosting, network management, software licensing, etc.
- A process and transparency needs to exist to allow CSRs to directly engage the appropriate ITS subject expert to resolve service and support issues.
- The committee suggests that ITS leadership, working with the ITS Tier 2 Liaison, investigate building a formal process by which the Tier 2 Advisory Board can make proposals directly to ITS leadership (or Campus IT leadership).
- ITS, working with representatives from the Colleges, departments, and campus constituents, identify guidelines that provide for CSRs to have a certain baseline of IT skills.
- Explore methods for departments to pool resources to appoint a shared CSR in instances where the department need is below levels that would provide for the hiring of qualified staff.
- For more information, please see Appendix A.

## 7. Stronger Collaboration Between University Communications & ITS

**Problem:** Communication between campus organizations and external entities is often non-uniform and varies depending on the parties involved. Few enterprise-level communication tools exist on campus and those that do exist are dated and inefficient. Many departments are forced to turn to third-party solutions and there is very little uniformity on campus.

**Recommendation:** Committee would direct ITS to partner with (and provide strong support for) University Communications in order to provide technical expertise and critical leadership in enhancing public communications. This partnership will likely require strong support from Campus IT. Examples of areas ITS could provide support are:

- Develop effective, consistent, and easily managed departmental, college, faculty, and university web sites.
- With input from faculty, staff, and students, build scalable infrastructure to support outreach efforts (educational and research oriented) that can be easily accessed by specific public and private constituencies.
- Development of flexible web "conversation" tools for students, faculty, staff, and members of the community.

## 8. ITS Website Reorganization and Redesign

**Problem:** The current ITS website is difficult to use and poorly organized for the role it has grown to play in supporting campus IT.

**Recommendation:** The committee recommends that ITS undertake a redesign of the website with the following goals:

- Strive to incorporate modern usability standards.
- Enable simpler navigation.
- Examine methods of providing solution based information.
- Examine role based portal technologies as possible replacements.
- Provide greater dynamic content to advise users of outages or current conditions.

## C. Long & Short Term Objectives/Timeline

The target completion times of the above recommendations are listed here.

Immediate:

Define and Communicate Campus IT Mission  
Define and Communicate ITS mission

Short Term (3-6 months):

Expand ITS Quick Start to include faculty, staff and graduate students - Could target for Fall 2010 or Spring 2011.  
Host "in person" events to connect new faculty, staff, and students with IT resources, documentation and providers on campus.

Long Term (1-2 years):

Establish recurring schedule for Campus IT Roles and Responsibilities Inventory - Highest priority after defining the campus IT mission.  
Redesign of the ITS Website.  
Evaluation of Campus Communication Technologies  
Evaluation of Departmental/Organizational Support Meetings  
Evaluation of Student Support Process and Systems  
Restructuring of the Tier 2 computing Support Representative (CSR) Program  
Create a uniform definition of the Tier 2 CSR Representative  
Stronger Collaboration between University Communications and ITS

## D. Possible Risk

The Campus IT Roles and Responsibilities Inventory would help assure that campus IT personnel are meeting campus IT policies related to security and private data.

## E. Resource Allocation

The Campus IT Roles and Responsibilities Inventory may require additional or reallocated staffing. It will also impact all department personnel as they take time to participate in the inventory.

Expanding IT Quickstart will require additional or reallocated funds and time.

External communication tool development and implementation of new public communication technologies will require additional or reallocated funds.

## F. Responsible Parties

There is not just one responsible party. These recommendations must be accomplished through campus coordination. How that will be done is contingent on specifics of implementing the above recommendations, as well as responsibilities resulting from the definition of the Campus IT Mission.

## G. Evaluation

The ultimate goal of this chapter is not easily measurable as it concerns communication between humans. A general evaluation of the main goal may be accomplished by answering the primary issue addressed in this chapter: Are campus users of technology part of an inclusive communication loop involving ITS, faculty, staff, and students? This broad question can be partially answered by evaluating the committee's ample specific recommendations through answering the following questions:

- Has the *Campus* IT Mission been established and communicated within 6 months of adoption of Strategic Plan?
- Has the *ITS* Mission been established and communicated within 6 months of adoption of Strategic Plan?
- Has the *Campus IT Roles and Responsibilities Inventory* been implemented within 6 months of adoption of Strategic Plan?
- Has the IT Quickstart program been expanded by Spring 2011.
- Has the ITS Website been redesigned and deployed within 6 months of adoption of Strategic Plan?
- Does the *Campus IT Roles and Responsibilities Inventory* have a periodic schedule for renewal and updates?
- Has there been an evaluation of Campus Communication Technologies performed within two years of adoption of the Strategic Plan?
- Has there been an evaluation of Departmental/Organizational Support Meetings within two years of adoption of the Strategic Plan?
- Has there been an evaluation of Student Support Process and Systems within two years of adoption of the Strategic Plan?
- Has the Tier 2 computing Support Representative (CSR) Program been restructured within two years of adoption of the Strategic Plan?
- Has two-way communication between ITS and Tier 2 Representatives increased within two years of adoption of the Strategic Plan?

- Has a new clear definition of the Tier 2 CSR representative been written and communicated within two years of adoption of the Strategic Plan?
- Is there stronger collaboration between University Communications and ITS within two years of adoption of the Strategic Plan?

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## Appendix A - Campus IT Roles and Responsibilities Inventory Suggestions

The following are suggestions for acquiring the necessary information for the recommendation of Campus IT Roles and Responsibilities Inventory. This is not an exhaustive list of what should be asked, but is tailored to communication-related items. While this inventory is occurring, it would be useful to ask questions related to all IT activities to drive decision making and planning for all ITS projects. Some questions that have arisen from discussion have motivated the need to do the inventory, such as:

How many departments are duplicating services already provided by ITS, and why?

What percentage of people listed as responsible for IT in their organization (such as desktop support, email support, etc) are non-technical people (either not trained or no background)?

What percentage of IT faculty/staff/students surveyed/interviewed know that 5-HELP exists and is available to them?

How many people use the website to obtain IT information versus calling people around campus?

There are many useful data points to be considered from such an inventory to identify both strategic communication channels as well as information that could be used for other strategic purposes for the campus. The following is a list of initial IT roles that are identified to exist, and more than one role is typically applied to a single person:

Server administrator

hardware monitoring/replacement

Service administrator

email

web manager/webmaster

dns

custom room reservation

user authentication

Desktop administrator (hardware)

hardware monitoring/replacement

Desktop administrator (software and support)

backups

interface with campus AD (user authentication)

pslite

MS office

email client

other software

Software management (Updates, imaging, security, etc.)

Network administrator

hardware

configuration

wiring

network liason with ITS

Content administrator

website

email list (subscription management and/or sending out email to lists)

ITS contact person

security notifications from Dan Jones et. al.

Tier2 notifications

IT support community notifications

### General IT Coordinator

Position requires information and notifications from all systems IT services (UIS, HR, ITS, others?)

Each of these roles will need targeted communication depending on the kind of setup of systems. For example, if a server is configured to authenticate to the campus Kerberos server, the person responsible for that server will need communications from ITS whenever that authentication service will be changed or be under maintenance, etc. These dependencies must be identified and the appropriate communication channels must be developed to meet the communication needs for these roles.

Another example is that if an Office Administrator is responsible for updating the department website and he/she uses ITS web hosting, she will need communications from ITS regarding service downtimes, changes, or upgrades. However, if an Office Administrator from another department uses off-campus web hosting or a solution within the department, he/she does not need to be on the ITS communication channel for the web hosting.

What is critically important is that all questions in the inventory be asked of all campus IT personnel in order to garner stable and defensible statistics for planning and decision making processes.

A sampling of questions to the main IT support person is listed here. These are by no means exhaustive, but hopefully will give guidance:

How many people (in terms of FTE) who are not employed by ITS provide IT support in your dept/office? (Can be partial numbers, i.e. 1.5 FTE)

What roles does each person play (refer to roles above)?

Do you or your support personnel have formal training outside of ITS?

Have you or your support personnel been trained through ITS-supported training modules?

Do some or all faculty support their own computing?

If yes, how many servers/desktops (listed separately) does each manage?

Is management shared by your IT personnel and the faculty?

If yes, what support roles are filled by IT personnel and what roles are filled by the faculty?

Do you know what IT policies exist?

Do you know where to find information about IT policy?

How does ITS communicate to you regarding new projects, updates on existing projects, or status of critical services on which you depend?

Do you always receive communication about all the services on which you depend from ITS?

How would you like to receive communication from ITS about services, projects, or changes?

How do you or your personnel obtain information on campus services (website, initial hiring materials, co-workers, word of mouth, etc)?

Are you able to reach out for help from other campus IT personnel (even those outside of ITS) regarding non-standard problems that may not be documented?

Do you attend IT support events?

Why do you go?

Are they useful?

How could they be changed?

Ideally, other administrative staff would also be interviewed to understand the perception of IT services, availability, and also to understand the needs of the general faculty, staff and students as they experience on a day-to-day basis.

## Appendix B - Evaluation of Campus Communications Technologies Suggestions

The following are suggestions of different technologies that may be used to more effectively communicate to all campus individuals, including faculty, staff and students. This list is not exhaustive, but may be used to guide decisions.

Currently communication to campus personnel occurs over email via Administrative E-memos from many different groups, Buff Bulletins, and group-specific email lists. The volume of information is vast, and varied, and tends to overwhelm individuals to the point where important messages are ignored. An idea is to deploy a system with 'channels' or an equivalent feature that allows people to elect what communication they wish to receive. Some communication will be mandatory, such as emergency notifications from the campus about events or weather. A sample of technologies that could be pursued to give targeted communication include RSS feeds and email list subscriptions.

Other technologies for user support exist that are already being prototyped by the libraries such as live chat. This allows a user to receive almost immediate help from someone who is able to assist with their specific problem, and could be deployed to multiple departments within ITS (and outside). An example would be if a user had an email issue beyond standard password and access issues, they could request a chat which would be directed to the email escalated support person within ITS to answer the person directly, avoiding a potential long wait from calling 5-Help.

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<sup>i</sup> Chapter 2: Building an Effective Governance and Decision-Making Structure for Information Technology, James I. Penrod. In Organizing and Managing Information Resources on Your Campus, Polley Ann McClure, Editor. A Publication of EDUCAUSE, Copyright 2003 Jossey-Bass Inc. Published by Jossey-Bass, A Wiley Company.