

# Planning in a Field That Changes Rapidly and Disrupts Everything

by Michael Hites and Kelly J. Block

*Solving the long-range information technology planning problem  
by cultivating leadership, governance, and integrated planning.*

## INTRODUCTION

As an industry, information technology (IT) innovates constantly. Commercial technologies change rapidly, and consumers adopt and adapt to new technologies with relative ease. As enablers of modern services at educational institutions, IT departments need to maintain existing technologies without interruption and integrate new technologies into teaching, learning, research, and business practices faster and faster each passing year. Additionally, IT departments must transform their services in reaction to the current economic climate and determine how to both position the department for long-term success and address the short-term crises. By pursuing complementary and interdependent processes for IT governance, strategic planning, and leadership development, a university or college can create foundational long-term IT planning capabilities and collaborative successes that support the mission of the institution.

This article describes the opportunities found in a multifaceted approach to establishing long-term IT planning capabilities, explores the components of building long-range IT governance, identifies strategies for leadership development for IT professionals, and demonstrates how collaborative IT planning is a fundamental component of integrated planning for higher education.

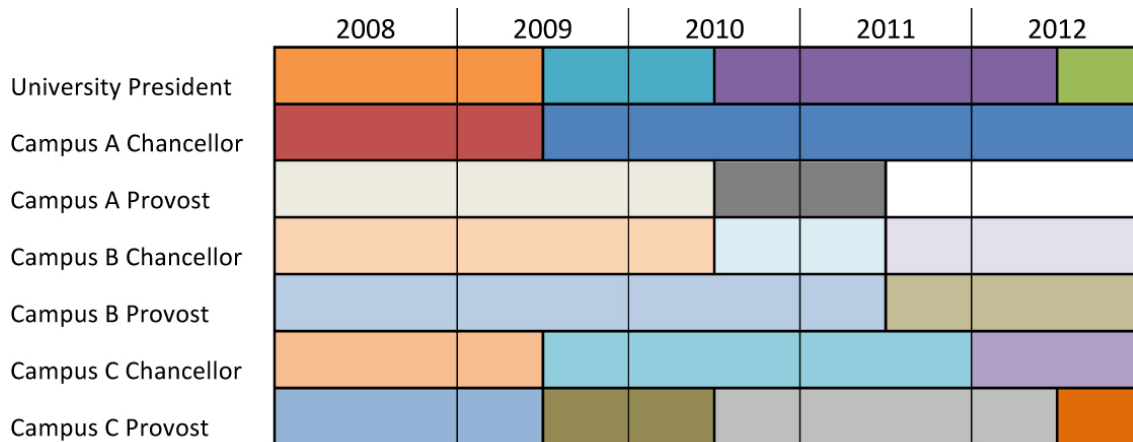
## WHY IT PLANNING IS ESSENTIAL AND COMPLEX

The IT field evolves rapidly, and IT is necessary to support the university's mission and business operations. There are IT systems and services that support online education and brick-and-mortar classrooms as well as those that support innovative faculty and their diverse technology needs. Besides the classroom and laboratory, nearly every business process at an institution, from course registration to payroll, relies on some form of automation to complete it. Finally, there are hundreds or thousands of individuals throughout the organization who use e-mail, scheduling, purchasing, human resources, and many other applications that require IT support of log-in, security, and work flow in order to perform their daily work.

In general, IT is not centralized into a single department or business unit in higher education institutions. Those who work in business offices typically work with local IT staff, college IT staff, and campus IT staff. This can add frustration when faculty or staff members must first understand the complexity of the organization before they can get the service they need.

In addition to IT complexity and organizational complexity, there is complexity created by leadership turnover. Figure 1 illustrates the turnover in leadership at a multi-campus doctoral university. This does not take into account turnover in college-level leadership or in the leadership of the organization's various IT departments.

Figure 1 **Institutional Leadership Turnover**



The complexity of IT itself, the fragmented organizational structure of IT, the deep-rooted dependency on IT in every aspect of a university, and the churn of institutional leadership create an environment where good IT planning is essential to keep the institution running and those who use IT services happy.

## SOLVING THE LONG-RANGE IT PLANNING PROBLEM

While budget cuts, leadership changes, shifting academic priorities, and emerging technologies can create a strain on the long-term IT planning process, there are foundational capabilities that can simplify planning, create collaboration and continuity, and improve satisfaction with IT services. The idea is to create a sustained, collaborative decision-making process to guide IT resources toward the most important needs of the institution while avoiding a lag in waiting for the next leadership change or the magic bucket of money to appear and resolve IT issues.

By building leadership capabilities, facilitating the planning process, and enabling decision making through IT governance, long-range IT planning can become less challenging. Many institutions have found that corporate partners and consultants can accelerate the process described in this article. However, when using outside help, it should be clear what the ultimate goals are. Many institutions have paid thousands to millions of dollars to find out what they already knew without determining a clear path to better services.

It is important to consider the size and complexity of the organization before implementing a solution. For example, a large research university will require larger committees, more structure, and a longer implementation time line than a small college where most employees and faculty know each other and often take on multiple roles in the organization. What is described here reflects the most complex case; however, every aspect can be simplified and reduced in order to fit any type of organization. This is because the concepts of leadership, governance, and planning are ubiquitous. The challenge is determining where the most advantageous changes can be made.

## RELATIONSHIP TO INTEGRATED PLANNING

IT planning is as important as the other components of integrated planning. Traditionally, integrated planning is defined by institutional direction and academic, financial, and facilities planning. Each of these is supported by IT and informs IT planning. For these reasons, IT is a vital part of integrated planning (Coen and Kelly 2007).

IT does not have a long history, so IT planning may not be as mature as planning in other parts of an institution. Facilities planning can be traced back thousands of years, the use of money goes back to 600 BC, and the University of Bologna was founded in 1088. Meanwhile, the IT discipline has friendly discussions about whether the Electronic Age started in the 1930s or the 1940s. All this is to say that IT does not have the robust history of planning that the other aspects of integrated planning have. Nonetheless, IT planning needs to be conducted with the same rigor as other components of the institution's integrated planning process.

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## DEVELOPING IT LEADERS ACROSS THE ENTERPRISE

Developing IT leadership does not mean simply hiring a chief information officer (CIO). As with every other facet of the institution, leadership is not necessarily conveyed by title. It is earned by creating and implementing strategies that benefit the institution. Preparing and developing the current and next generation of IT leaders will create a network of professionals who can drive IT success. The goal is to create a collective of IT leaders who contribute at all levels simultaneously, that is, within the department, college, campus, and university.

The purpose of IT leadership development is to enhance the professional and personal development of individuals who will play increasingly important management and leadership roles within IT. A focused program can broaden an IT professional's understanding of the strategic and technological issues facing the institution and can strengthen relationships within and across departments and institutions in order to foster collaboration and leverage resources in areas of common interest.

At many universities throughout the United States, programs are in place where professionals from multiple institutions attend leadership training delivered by a single vendor. There are many vendors offering leadership development, and our institution, the University of Illinois, uses MOR Associates. MOR has been an active partner in designing our curriculum and delivering programs that are consistently rated by attendees as some of their most important professional development. We mention this not as an advertisement for MOR, but rather as context for how we believe leadership programs can and should be developed.

IT professional development at the University of Illinois began with a multi-institutional program offered through the Committee on Institutional Cooperation (CIC) in 2007. In this nine-month program, approximately five professionals from several Big Ten universities created a cohort of about 40 people. There were five or six retreats that typically lasted

two days each, and the location rotated among the universities. The attendees were selected by the CIOs of each campus through a competitive process.

The program had three tracks, one for the individual, one for the group, and one for applied learning. The individual track included 360-degree feedback and one-on-one ongoing coaching sessions with program faculty. The group track offered group skills-development coaching among program participants and group active-learning workshops conducted by MOR faculty. Finally, the applied learning of workshop topics was facilitated by charging participants with the task of finding practical applications for their new skills in their jobs. Through these three tracks, personal skills were developed through peer coaching, relationships were fostered among the members of the cohort, and the learning was applied to projects at each participant's home institution.

The program did not focus on management. Rather, the aspects of working across the organization to develop relationships and teams were foremost, and these are now used to influence integrity, trust, accountability, and putting customers first. Not every IT project is successful, and old IT systems eventually need to be retired, so focusing on strategy rather than management allowed participants to practice planning, executing, and adjusting the plan. It is not enough for an IT professional to embrace change. He or she must also have the ability to help the customer feel comfortable with the change management process.

The success of this multi-institutional program led its graduates to create smaller, shorter programs called IT Leadership Workshops that focused on the IT professionals at a single campus. The graduates of the large program became the instructors of the smaller program, and they condensed the nine-month program into a four-day workshop. While four days is not enough time to develop deep camaraderie across the cohort, it does serve to introduce the concept of leadership training and prepare IT professionals for the larger program. It also can help participants understand the work that goes into leadership and give them comfort with their current position in the organization.

The experience with these two programs led to the creation of a university-focused program in which all three campuses of the University of Illinois participated. Also delivered by MOR in the same format as the CIC program, this program's cohort was comprised of ten individuals from the University of Illinois at Chicago, two from the University of Illinois at Springfield, twelve from the University of Illinois at Urbana-Champaign, and six from university administration.

This program was integrated with the institutional strategic planning process. Throughout the program, MOR instructors developed tasks that fostered direct participation in the strategic planning process, including brainstorming, analysis, goal setting, and presentation of ideas in a multi-campus meeting. This created an additional experience for the cohort that was different from the CIC program.

In addition to these facilitated programs, both the Urbana-Champaign and the Chicago campuses offer conference events, called IT Professional Forums, that are created by IT professionals for IT professionals. At these events, several hundred IT professionals share updates about innovative and far-reaching projects, open dialogue, and catalyze networking. Typically, these events feel like an EDUCAUSE regional conference where approximately 25 sessions are delivered in several different tracks.

Combined, the IT leadership programs and workshops have resulted in broad leadership training for over 100 IT professionals and the development of numerous new intra- and intercampus collaborations and ongoing partnerships. The professional forums have brought hundreds more participants to institutionally sponsored IT professional development events designed and delivered by IT experts. Participants have a strong desire to share their skills and experiences with peers, and overall IT leadership capabilities have increased across the organization. It should be noted that the success of the programs was due to the participants. This is important because successful planning requires engagement and commitment at all levels of the institution. It cannot be completely top-down or grassroots and still expect to have the same long-lasting effect as shared success in planning and implementation.

## **DEVELOPING IT GOVERNANCE PROCESSES ACROSS THE ENTERPRISE**

Leadership is important, and how an organization decides its priorities influences user satisfaction and the degree to which IT services enable or inhibit the mission of the institution (Raghupathi 2007). The term “IT governance” is used to describe the processes, components, structures, and participants for making decisions regarding the use of IT. Some governance is lightweight, like a single committee that advises a CIO, and some is heavyweight, like a multi-committee, hierarchical structure that includes faculty, staff, and students. Ultimately, the institution must decide on who makes decisions regarding the highest IT priorities and how success will be measured.

In a higher education institution, there will be three components that influence IT governance: customers like Human Resources or the Department of Mathematics, IT providers at all levels, and the process for selecting who does what and when it gets done. The process must be well known, understood, and effective. If it is, then IT will be a successful partner within the institution (Yanosky 2008).

Regardless of the complexity of the IT governance process, it requires a repeatable, rational approach for collecting ideas, selecting initiatives, and prioritizing. Ideas can come from anyone, but if there is not a process by which they are vetted, then they may not ever provide benefit. IT governance also serves to reject projects and sharpen those that are not fully developed.

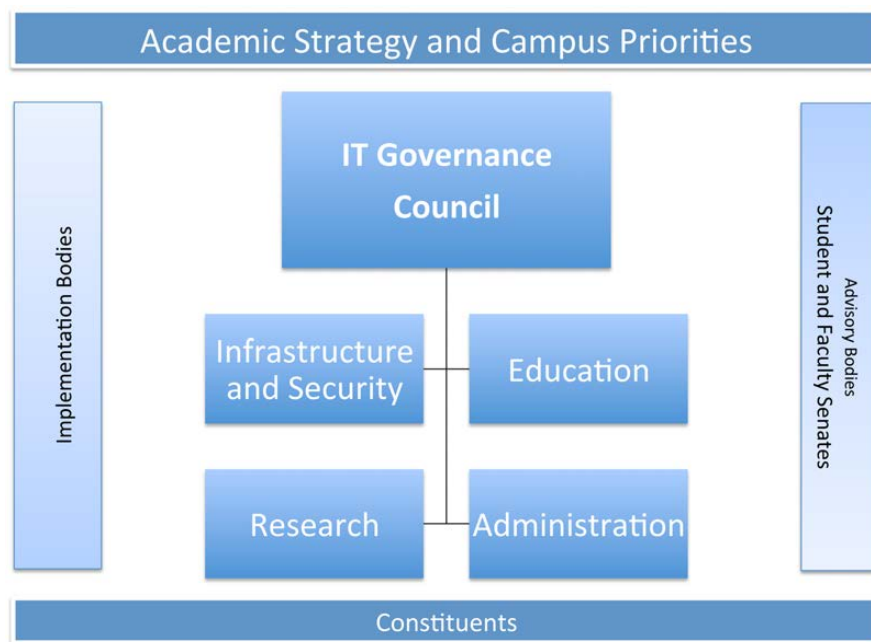
There are many reasons to implement or revise IT governance. A transparent process for resource allocation and management encourages decisions that benefit those projects that are most valuable in aligning IT with the institution’s strategies and goals. Standards and policies around IT governance make it easier to share, reuse, integrate, and improve interoperability of services (Xue, Liang, and Boulton 2008). The opportunity for collaboration increases, and there is a greater focus on performance management to ensure that shared goals are reached.

There are some basic guidelines for the development of IT governance, and, as with the IT leadership program, there is assistance available to facilitate the process. Typically performed as a group exercise, an institution must first decide what needs to be governed based on institutional priorities. Some IT services will be fine the way they are, but others may require significant changes, and IT governance should celebrate the successes while focusing on the needs. Next, the structure of IT governance and the participants involved should be determined thoughtfully. By answering the question of who makes decisions and determining the correct amount of faculty representation, groups can be constructed to maximize their effectiveness. The structure of IT governance will depend on the size and scope of the institution as well as the degree of IT centralization or decentralization. The structure does not need to be overwhelmingly complex, and it

should match the complexity of the services that need to be governed. Finally, good communication and coordination are needed to ensure effectiveness. Depending on its size and scope, an institution may need to reallocate staff to run meetings, create agendas, maintain websites, generate performance measures, and make sure decisions are being made and the subsequent work is being performed to standards (Gerrard 2010).

At the University of Illinois, there are five primary IT governance groups: one for each campus, one for university administration, and one coordinating body with membership from the campus and administrative committees. As an example, the University of Illinois at Chicago's basic structure is shown in figure 2. The figure shows how the various committees fit with campus priorities, other advisory groups, and the department tasked with implementing the identified priorities.

Figure 2 **Basic IT Governance Structure at the University of Illinois at Chicago**



As part of the institutional integrated planning process, IT governance recommends IT policy and assists with recommendations for resource allocation. IT governance groups also promulgate standards and policies and foster collaboration among all sectors of the institution. When combined with the leadership program, IT governance is a key player in establishing strategic priorities and providing consultation to other strategic plans and planners.

## DEVELOPING IT STRATEGIC PLANNING PROCESSES ACROSS THE ENTERPRISE

There are three basic questions that IT departments can ask themselves to assess their current position with respect to IT strategic planning: Do we know the highest priorities of the institution over the next three to five years? Do we know how IT will help to accomplish these goals? Do we have a mature and repeatable process for IT planning in place at our institution? For the most part, if an IT department knows the answers to these questions, then it is in the highest echelon of IT departments in terms of planning. If not, then perhaps the current planning process can be improved.

Before revising a strategic plan, a planning-to-plan process can help focus attention on the biggest issues. Some institutions may have had a failed planning process in the past or only have minimal support from executive leadership in developing their plans. Since some planning processes fail not because of the participants but because of how the logistics are managed, it should be determined if there is enough support in place to complete the process. In addition, planning in a vacuum does not help the institution, so understanding other institutional planning initiatives is important in informing the IT planning process.

In a typical large university environment, there will be a wide variety of planning methodologies, and some departments may have old or non-existent plans. In IT, the term “old” is relative: IT infrastructure may be considered “old” in three to five years whereas a facilities master plan may have a 20- to 30-year life span. Depending on the size of the IT unit, the strategic planning process may be as simple as management revising last year’s plan, or it may be so complicated as to require having a planning framework in advance of creating the actual plan. Having a framework allows many different units to use the same methodologies and vocabulary while giving each the freedom and flexibility to create the IT goals that are most relevant.

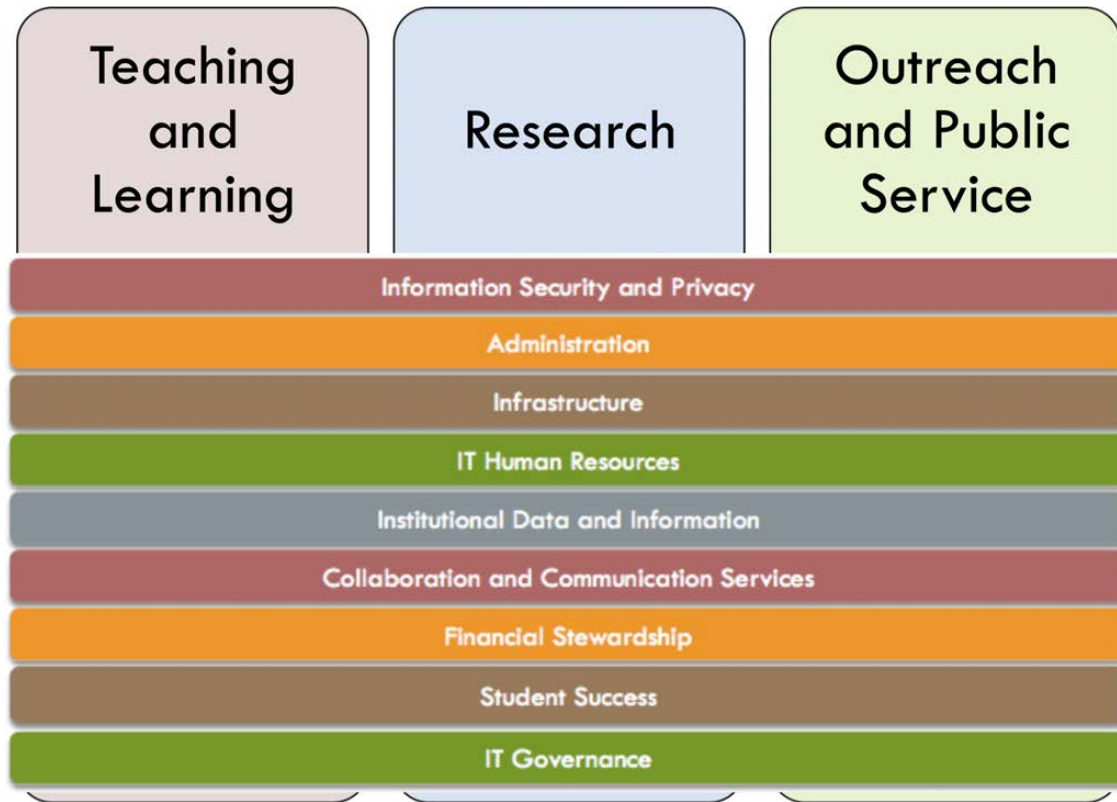
The IT planning process is similar to any large-scale planning process. Typically, IT leaders initiate the process. There are environmental scans and SWOT analyses. Brainstorming sessions lead to more focused goals, and first drafts can be developed to share with constituents and other IT professionals. If an institution is large, then planning workshops and town-hall meetings allow for open and transparent discussion of goals and initiatives.

In a typical IT strategic planning process, some common elements usually emerge. There are discussions about whether and how IT departments should be innovative, transformative, or just operational, and these decisions are greatly influenced by the mission of the institution, which usually relates somehow to enabling teaching, learning, research, and outreach. Since IT supports the institutional mission both directly through teaching and research services and indirectly through business process improvement, there is a lot of ground to cover in these discussions.

There are also well-known categories of IT that support the services of mission-centric areas of the institution. Items like infrastructure, information security, decision support, and financial stewardship are common areas of focus where specific goals and initiatives can be created. Figure 3 presents a graphical representation of the relationship between institutional mission and IT goals. This representation comes from the IT planning framework at the University of Illinois, and it can be used as a baseline for guiding the planning process.



Figure 3 **Relationship Between Mission and IT Goals at the University of Illinois**

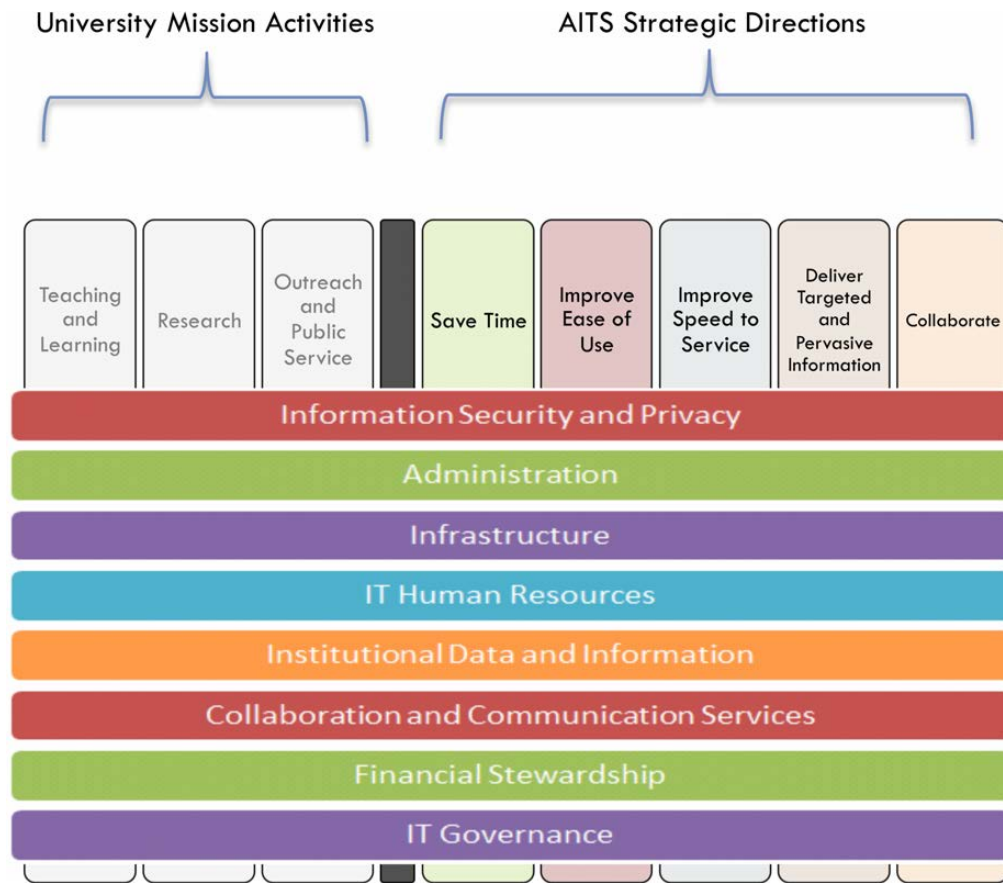


As a specific example, the Department of Administrative Information Technology Services (AITS) at the University of Illinois used this framework to guide its planning process. Using a typical planning approach, the department first looked at the purpose of a strategic plan and its own departmental mission and vision. Since AITS is an administrative unit, its focus was on service, and the department decided that its plan should be based on others' goals. The fundamental mission was to make reliable services that worked, and the vision was to be a better partner within the university. With this in mind, a framework planning document was adapted to focus on the department's goals with the understanding that many other IT groups would focus on direct support of the teaching, research, and outreach mission.

Figure 4 shows the relationship between the strategic directions of the department and the overall goals of the university. Specifically, AITS will focus its resources on projects and services that save time for students and faculty and on improving those services' ease of use. Collaboration is important to the department, and it wants to make sure that data captured in the administrative systems can be used in a targeted manner by anyone who would like to use them. With these directions in mind, the AITS group developed goals using "SMART" criteria to ensure they were specific, measurable, attainable, realistic, and time-bound.



Figure 4 **Relationship Between Unit Strategic Directions and Institutional Goals at the University of Illinois**



The AITS strategic plan has two purposes. First, it helps to guide the work of the department. When projects are appropriately prioritized internally, they should meet the goals of the plan and also relate to the strategic directions. Second, the plan can now help inform other planning processes throughout the university. Ultimately, the AITS plan will continue to be modified as campuses and colleges develop new goals and initiatives. Figure 5 is a simple representation of the relationship between all facets of integrated planning.

Figure 5 **The Components of Integrated Planning**



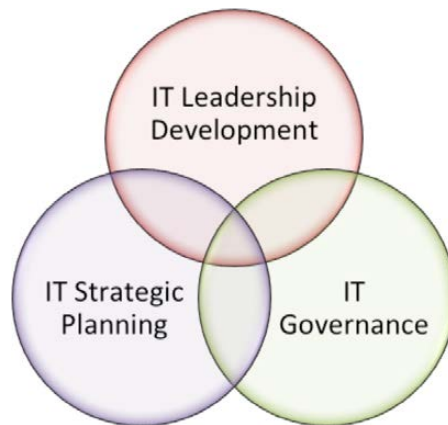
## TYING TOGETHER IT LEADERSHIP, GOVERNANCE, AND PLANNING

The question might be raised about whether all this is really necessary. Because IT is integral to every aspect of the institution, it makes sense that almost everyone will be involved somehow with the implementation, maintenance, or use of IT. Without leadership, governance, and planning, solutions can and will be implemented multiple times throughout the organization. While there is a good amount of necessary redundancy in IT services, it is the unnecessary, and often expensive, duplication that improved collaboration can help eliminate. So the answer to the question is “yes,” some amount of governance and planning is necessary.

*Without leadership, governance, and planning, solutions can and will be implemented multiple times throughout the organization.*

In figure 6, the relationship between IT leadership, governance, and planning is represented. IT leaders execute IT strategies and advise IT governance. IT strategic planning aligns IT resources with constituent and institutional needs and provides guidance to IT leaders. IT governance provides priorities for planning and is a collaborative venue for IT leaders and constituents (Spicer and Pirani 2008). Again, these relationships can be as simple or as complex as necessary. The key is that they result in positive outcomes.

Figure 6 **The Relationship Between IT Leadership, Governance, and Planning**



One example of a positive outcome is the annual IT Governance Summit at the University of Illinois. Each year about 170 academic, technical, and business leaders and staff members from all three campuses participate in a daylong workshop to improve IT governance and planning. Participants take part in panel sessions and discussion groups throughout the day that identify strategic IT areas of focus and offer an opportunity to provide feedback to create more effective IT governance processes. The results of the summit are summarized, and the IT groups work on the action items developed. This event typically finds that communication is always in need of improvement and that there must be a balance between IT keeping up with current technologies but not implementing them fully until there is a meaningful academic or business need to do so.

Within their first year of existence, the IT governance committees at the University of Illinois at Chicago were creating recommendations for central IT to implement. The governance committees recommended consolidation of several

software packages that resulted in cost savings and more widespread deployment. They created white papers on their view of the business processes in need of the most improvement. In looking at the use of IT by students, the governance committees decided not to replicate work done by others, such as EDUCAUSE student surveys or the National Survey of Student Engagement. Instead, they commissioned a research study that followed around a select group of students. They concluded that not only did mobile access to services need to be improved, but also that the improvement needed to allow students to use short intervals to interact with course contents, such as the time spent waiting at a bus or train station. In addition, the committees recommended the development of a mid-size computing cluster for faculty research that would be large enough to reduce the overall cost per faculty member but small enough to not replicate the services of large national supercomputing centers.

In the business improvement realm, the administrative information technology priorities committee (ITPC) was created to direct the enterprise system's structure, projects, and central resources. The committee governs the choice of whether to build, buy, or integrate administrative IT systems and is made up of individuals from the university departments that use the business systems. The committee also selects and prioritizes the work of the central administrative IT unit. To date, the committee has completed 320 projects, spending about \$1 million less than originally budgeted for those projects.

The cross-campus primary IT governance committee consists of campus CIOs, faculty members, and the chairs of the campus governance committees. This group developed a proposal for a new identity management service across the university. The goal is one person, one electronic ID, regardless of campus or affiliation with the institution. This very large and ambitious project was funded through the ITPC process and is being implemented through technical committees that encompass all aspects of the university. Ultimately, it will simplify our electronic systems and services and make it easier for services to be configured for our students and faculty.

## CONCLUSION

By improving IT governance, leadership, and planning, an institution can better incorporate IT into its integrated planning process. For example, as a component of integrated planning, the academic planning process drives IT planning, and IT helps enable the academic plan through the implementation of specific initiatives. Further, IT is expensive, and the IT strategic planning and IT governance processes assist with the financial planning process by prioritizing work. The financial plan also helps IT providers live within their budgets and still meet the needs of university constituents. In addition, involvement in the facilities planning process allows for effective utilization of innovative technologies both in and out of the classroom.

When an institution must respond to disruptive change, good IT planning is a necessity. By improving the IT planning process and incorporating it into the integrated planning process, IT can be an efficient enabler of an institution's mission and goals.

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Many of the documents and much of the information analyzed and described in this article can be found at the following sites:

### University-Level IT Governance

- Information Technology Priorities Committee (ITPC): [www.itpc.uillinois.edu](http://www.itpc.uillinois.edu)
- University Technology Management Team (UTMT): [www.utmt.uillinois.edu](http://www.utmt.uillinois.edu)

### Campus IT Governance

- University of Illinois at Urbana-Champaign (UIUC): <http://itgov.illinois.edu>
- University of Illinois at Chicago (UIC): [www.uic.edu/orgs/itgovernance/](http://www.uic.edu/orgs/itgovernance/)
- University of Illinois at Springfield (UIS): [www.uis.edu/informationtechnologyservices/about/ITGovernance.html#ATC](http://www.uis.edu/informationtechnologyservices/about/ITGovernance.html#ATC)

## Leadership Programs

- Committee on Institutional Cooperation IT Leaders Program: [www.cic.net/home/projects/technology/ProfDevelopment/ITLeaders.aspx](http://www.cic.net/home/projects/technology/ProfDevelopment/ITLeaders.aspx)
- IT Leadership Workshops: [http://cio-dev.cites.illinois.edu/IT\\_leadership\\_workshops](http://cio-dev.cites.illinois.edu/IT_leadership_workshops)

## IT Professionals Forum

- University of Illinois at Urbana-Champaign: <http://itproforum.illinois.edu/2012Fall/>
- University of Illinois at Chicago: <http://itproforum.uic.edu>

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