Preparing the Next IT Leaders: Financial Management

The next generation of IT leaders must learn to navigate the complexities of higher education financial planning and negotiation

By Karen L. Goldstein

Today’s leaders in higher education information technology (IT) know that a significant factor in their success is a solid understanding and skillful management of finances related to IT. Technology infrastructure, hardware, software, and services are very expensive to provide and will continue to be so for some time to come. Most CIOs have learned about complex IT finances the hard way—they were handed the budget along with the new job. At most institutions, people aspiring to become the next CIO are not regularly given the opportunity to learn about IT finances or the overall financial structure of their institution. But they should.

As we consider the preparation of future leaders in information technology, we need to consider how to help them navigate the complexities of higher education financial planning and negotiation. In framing the topic of financial management for the participants of the EDUCAUSE Institute Leadership Program, I have asked the following questions:
1. Can you draw an organization chart for your institution?
2. Can you describe the budget process for your IT division, as well as across your institution?
3. Do you know the individuals on campus who control significant funds?
4. Could you partner with one of these individuals in one of your ventures?

These questions provide a basis for a discussion of IT financial management and awareness. While the financial structure of a large research university (public or private) is quite different from that of a small college or a community college system, learning some basic facts will help every CIO become more effective.

Understanding the Processes

The first step to financial success for IT leaders is to understand clearly the organization, financial structure, and processes of the institution. What kinds of IT services are important to support each of these functions? As we consider these different institutional operations, we need to think about the sources of revenue to pay for these services.

What expenses fit into the Education and General Budget of an institution? What expenses are considered part of auxiliary services and thus are budgeted and managed in a different way? How does the institution plan, budget, and manage funding for capital projects? Does your institution use a system of allocated costs or chargebacks for services? The successful CIO will know the answers to those questions, at least for his or her home institution.

Revenues: What Are the Sources of Funding?

In private institutions, one major source of revenue is the students and their parents, who pay for tuition and fees, room and board, and many auxiliary services, like books and supplies from the bookstore and parking fees. Directly related to students as a source of revenue are federal and state grants and loans for student financial aid. Institutions that rely heavily or exclusively on this kind of revenue are often referred to as being “tuition-driven.”

Institutions with a research mission also rely on public and private grants and contracts for research and service. Some research universities with entrepreneurial centers generate revenues from patents and other intellectual property.

Gifts from alumni and friends as well as from foundations are extremely important to any institution.
Distributions from endowment investments can be a very important source of revenue, depending largely on the size of the endowment in relation to the size of the institution. Institutions with medical, dental, or veterinary schools receive revenues from providing those services.

Those who work in public institutions should understand other revenue sources and financial processes as well. Public institutions also receive state program grants and capital funds, usually based on specific formulas approved by a legislative body. Understanding the details of the formulas and the politics in the state will help the CIO discover if there are particular ways to acquire capital for technology projects, for example. Community colleges receive funding from the county or local community. It is important to understand the regulations and policies so as not to pass up any opportunity for funding.

**Expenses: What Does It Cost to Run Our Institutions?**

Providing higher education is a human-resource-intensive endeavor, no matter how much information technology we use. In small, private colleges, often the perceived value to the student is in the small classes taught by senior faculty members. That kind of teaching is expensive, and the cost of providing it will not change appreciably in the future. What has changed in recent years is that the faculty and students all require more technology to support their teaching, learning, and research activities. Therefore, we have added the cost of technology equipment, software, and personnel to the cost of providing low student-faculty ratios. Though we may see larger classes in public and research universities, they incur additional costs—including graduate education and the need for faculty to conduct research and teach both undergraduate and graduate students, as well as manage research assistants and associates. Even with the larger classes in public universities, staff still must provide support to students across campus.

It is important for the IT leader to understand the challenges that come with providing all the ancillary services to education for each institution’s students. The needs of the students change over time, requiring, for example, a greater number of counselors in the counseling center. Competition among institutions leads to increased prices for new science centers, fitness centers, student centers, and athletic fields. These kinds of items all factor into the costs of running the institution.

**The Larger Economic Environment**

Those of us in higher education finance and administration remember only too well the beginning of the 21st century. With the fall in the stock market, virtually every college and university lost much of the value of their endowment, which reduced revenue from endowment payouts. In an environment where everything is based on growth, sharply reducing the size of a large portion of revenue had a chilling effect. Students and their parents found that the same economic environment reduced their ability to pay for college expenses. Students thus required greater financial aid at the same time that federal and state support was flat and institutional endowments were not producing the same level of scholarship support as they had in the past. As a result, many students built up unacceptable levels of debt.

Colleges and universities, understanding the huge backlog in maintenance of their physical plants, had used the growth in endowment funds to build and renovate many buildings in the 1990s. Much of that work was financed through bonds, and some of the work had to continue. Institutions found themselves with higher debt and lower assets, affecting their “bond rating,” or their ability to borrow money at the most favorable rates.

In public institutions, public funds were cut drastically as states felt the same economic pressures. Many institutions responded by trying to raise tuition to make up for the losses; they were often prevented from doing so by legislative actions. During the first four years of the 21st century, there were layoffs and low or no salary increases at many institutions.

With the strengthening economy, endowments have recovered at most institutions, donors have returned to their previous levels of generosity, and state funds are growing, with some increase in general public support for higher education—but not to the same levels as before and not without some damaging interactions having taken place. The nationwide discussions on regulating higher education are much stronger now, for example, as legislators insist on greater accountability with increased funding. Population data indicate continuing increases in demand for higher education through 2009.

At the same time that we are recovering financially, we still face a number of challenges. Along with the continuing competition for students comes competition for additional financial aid, both need-based and merit-based. For-profit institutions provide more choices for students. Competition also continues among institutions to provide the best facilities, which we know can result in higher debt-service costs. And we now face the additional challenge of much higher energy costs and continued significant increases in health care costs. Considering all of these demands, how do we find the funds to pay for new technology to support our mission?

**The Larger Political Environment**

In addition to economic challenges, we all face significant political issues, both locally and nationally. Govern-
ment regulation such as the Sarbanes-Oxley Act of 2002 has introduced major changes to financial practices and governance, and those changes are not over. At this writing, universities and colleges are trying to determine their obligations under federal legislation known as CALEA, which relates to the government’s ability to “wiretap” electronic communications and has large cost implications for some institutions.

We continue to see investigations into higher education practices, and many state legislatures are threatening greater regulation. Some institutions face serious issues with the valuation of endowment investments. We must all evaluate the levels of asbestos in our older buildings and calculate the cost of removing it. That cost must then be recorded as a liability in our financial statements.

All this regulation and a changing political landscape will continue to affect the cost of doing business at our institutions. It will also sometimes require new technology, again at significant cost.

**Strategies to Learn More**

The bottom line is that successful IT leaders need to understand the financial environment in which the institution operates in order to best plan and implement supporting information technologies. Despite the negative potential of many of the issues described here, it is important to realize that there are indeed ways to succeed—and even ways to find at least a good portion of the funds we need to maintain and enhance our technology infrastructure and services.

The aspiring IT leader needs to begin to develop this understanding by cultivating relationships that will help him or her learn more about the institution’s operations. If you are an aspiring leader, how do you get started? The advice I offer to those who attend the EDUCAUSE Institute Leadership Program is to get busy and get involved.

Ask your supervisor to allow you to participate in the budgeting processes for your department or division. Always make sure you understand the financial implications of the projects you are assigned. Ask about the budget! Get to know the financial people on campus. Invite people from the budget office out to lunch and ask them questions about the processes the institution follows. Offer assistance on budget presentations or summaries. Read the entire *Chronicle of Higher Education*, not just the IT section. Use every opportunity to be an “apprentice” in the financial world. Making these efforts will put you well on your way to being able to answer the four questions that started this article and to developing a solid understanding of your institution’s financial picture.

Karen L. Goldstein (kagoldstein@davidson.edu) is Vice President for Business and Finance at Davidson College in Davidson, North Carolina.