In May 2009, three senior financial leaders in higher education—Laurie G. Antolovic, Albert G. Horvath, and Margaret F. Plympton—participated in a panel session, moderated by Philip J. Goldstein, at the EDUCAUSE Enterprise Information and Technology Conference. The three also shared their thoughts in an audio interview conducted by Gerry Bayne, EDUCAUSE multimedia producer. Drawn from both the conference session and the audio interview, the following discussion provides a financial perspective on the topics of technology adoption, investments in technology, and management of the IT budget in the current fiscal climate.
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Q. Can you each give some background on your institution and what you plan to talk about today?

Antolovic
I will limit my comments specifically to the IT organizations. Al and Peggy, the university CFOs, can speak about the difficult issues surrounding the enterprise-level effect of the economic crisis.

I believe that IT organizations should always operate as if we are in a financial crisis. The reason I say that is because in the overall fabric that is higher education, the newest thread is information technology. Information technology has been creeping in and taking up a larger and larger part of that fabric at a time when there isn’t much new money coming in. At least in my institution, the pie that represents resources does not show room to continually find new money to fund information technology. So if we haven’t started already, I think this is a really good time to structure and lead our IT organizations as if the situation we are facing today is the norm. That means we have to think and act lean but, in the process, still manage to thrive.

Regarding across-the-board budget cuts, the upside is that they can make people feel as though they are in the same boat together. But that can hold for only a limited time, and it can be productive only up to a certain extent. It is the targeted and strategic cuts that will yield the savings needed to fund new services. So, I think for IT organizations, managing the budget means ensuring the endurance to stay in it for the long run.

Let me give a short example. If you are in the midst of, say, an ERP implementation and you need to cut your budget, one proposal may be to freeze positions or eliminate vacancies. But those positions happen to be people who are deep into the implementation of your ERP system. If you do the math, this proposal will probably not result in savings because you are paying annual licensing for the software that you’ve already acquired and yet you are not making progress in implementing and using it. That software is residing on hardware, and you are running down the lifecycle of that hardware. Although we may have no choice but to make tactical decisions, we must not lose sight of the long-term implications of those tactical decisions.

Horvath
I will focus on how the financial environment has affected public institutions. First of all, public institutions are dealing with decreasing state appropriations. Penn State receives a significant state appropriation, about $338 million per year. Yet this figure is essentially the same today as it was in 2001. Just based on inflation during this period, it should have gone up 22 percent. So we’ve long been trying to figure out how to make the budget work. And now that the state’s own budget has been affected by the downturn, we’re additionally concerned over what the state will do with that appropriation.

In the past, in dealing with a flat appropriation, Penn State has been fairly aggressive in increasing tuition. We are tuition-dependent, with 30 percent of our overall revenue coming from tuition. But we are now in an environment where we don’t believe we can raise tuition 10 to 12 percent to offset the impact of flat or decreased appropriations. We are already considered one of the higher-tuition public schools. So we are very concerned about appropriations and tuition.

On the other hand, this is one time that I can say that I’m thankful Penn State does not rely heavily on revenue from its endowment. The payout from the endowment provides less than 2 percent of our revenue. Still, the decrease in the endowment value has an impact on our ability to borrow and an impact on our capital plans. We’ve spent a lot of time thinking about how to moderate our capital program. We haven’t taken anything off the list, but we have definitely slowed down a number of projects. In the future, tough choices will need to be made when deciding which projects go forward and which ones don’t as we try to figure out exactly how the debt markets are going to stabilize, where they’re going to stabilize, how much borrowing we can really do, and how that translates into when capital projects can move forward.

Our lifeblood is enrollment. We’re fairly confident that we can meet our enrollment targets at the University Park campus, which has about 42,000 to 43,000 students. We also have nineteen other campuses across the state, and enrollments at those campuses tend to be much more sensitive to economic conditions. Yet public institutions may be better positioned, relative to higher-cost private institutions, if dollars-and-cents are indeed an issue for students and their families. For us, it is “so far, so good” for next year: both applications and acceptances look good. Parents and students are feeling the same economic pressures individually that we are feeling institutionally.

How have we responded to all of this? At Penn State, we’ve implemented a salary freeze for next year in the hope of trying to preserve positions rather than implement layoffs. Even though we haven’t had broadly based, institution-wide layoffs, positions are not being filled and vacant positions are being collapsed. So everybody is in a very, very cautious mode.

Even though this all sounds negative, I’m actually fairly bullish. The stimulus funding coming from the federal government has been very helpful to public institutions. It has ensured that our appropriation will stay at its current level for the next two years; so whereas it won’t grow, it’s not going to fall either. That has been a big win for us. And I’m hoping that the stimulus package will actually stimulate the economy and that by the end of the two-year period, we will see tax collections in all of our states. I do think I’m starting to see some very modest signs, some glimmers, of improvement.
Plympton
In general, I will focus my comments on private institutions. Lehigh is a research university, with about 4,600 undergraduates and 2,000 graduate students. Like other private institutions, we depend on donor support and endowment earnings, in addition to tuition revenues, to support our operations. Looking at downturns in the first two, and uncertainty in the third, we are making budget reductions both in this current year and in the budget for next year. Still, this is the first time in my thirty-five years of working in higher education finance that I have said, “Thank heavens we’re not better endowed.” Endowment is only about 15 percent of our budget. So that 15 percent is down more than 20 percent, and that’s hard, but it’s nothing like having 50 percent of your budget being down 35 percent—which is what some other institutions are facing. So, that impact for us is a little bit less, but for the private institutions that are heavily endowed, you are seeing those results in all the press reports quite regularly.

On the flip side, we are, as a result, very enrollment- and tuition-dependent, with about 50 percent of our income coming from tuition and fees. We have not had any downturn in our enrollment in this current year, and it looks as though we’ll be pretty much on track for next year, but of course you don’t really know until the students show up in the fall. In addition, Lehigh is primarily a traditional-aged student population, and the downturn in the demographic pool of high school graduates is going to affect the university regardless of the economy in the future. And as Al noted, enrollment patterns may indeed shift to the less-expensive, more-familiar flagship public institutions and other “lower-price” options.

Regarding tuition, we have also announced, for next year’s tuition increase, the lowest increase in forty years—a 2.9 percent increase in tuition—specifically because we are anticipating a very heavy hit on our students and their families in terms of the economy. We currently support about 50 percent of our students with financial aid. We are assuming that this percentage will go up and also that the level of need of the students will go up. So we are anticipating growth in both components of the aid budget. We get very little state support, but what we do get is all targeted toward financial aid, and the state support is obviously going to be going down. We thus expect that we will continue to have struggles, both in terms of financial aid and enrollment, in the coming years in a way that will lag, perhaps, the negative economic situation for the larger economy.

Another concern for us involves the uncertainty and the timing of the economic downturn and the effect on institutional choices. Laurie touched on this when she talked about tactical and strategic decisions. Because of the speed with which the economic downturn occurred, our first set of decisions was definitely not strategic. The things we had to do in this current year absolutely had to be across-the-board. Now, with a little more time, we are being much more
strategic and much more thoughtful in looking forward. But we simply couldn't do that at first. We just had to say “This is going to apply to everybody” because we didn't have enough time to do the kind of analysis and work that is needed for more strategic choices.

A final aspect is the morale impact. And certainly for our employees, we have not yet had layoffs, and it is a very high priority for the institution that we preserve as many jobs as we can for as long as we can. It is important to keep faculty and staff positive enough to be able to focus on the future, to see what the opportunities are, to make both the certainty of the negative news on so many fronts and the uncertainty of so many additional factors.

Q. How will the financial crisis change the way institutions think about investments in technology? Will technology investments be funded differently? Should IT leaders be prepared to face questions about the need for and value of IT investments?

Plympton
I think timing will be different. Some of the ways that choices get made might be different. Priorities are going to have to be addressed differently. There are going to have to be funded in a variety of ways. There are going to be the few key funding sources that were available in the past.

I think we'll be having more conversations about how things that are outsourced, or differently sourced, affect different parts of the budget. Lehigh has outsourced many aspects of our services, for a long time. Our board would think it naive if we weren't seriously looking at whether there are other, additional outsourcing solutions that we haven't yet taken advantage of.

Our technology organization is a joint library-technology organization, which has both its pros and its cons in these times. It means that the organization is fairly large and that it has a very eclectic set of requirements because it's doing administrative computing and providing the networking and buying journals and supporting the instructional design folks and the distance education offerings, etc. It really is an organization with a wide variety of priorities and responsibilities.

So we are looking to the IT organization for cost-cutting strategies, but we're also talking with IT leaders about revenue. Are there additional components, programs, or areas of focus that we can introduce? Can we offer more distance education classes or provide more support to research grant programs or offer more for-fee services to students? All of these could potentially generate incremental revenues. We certainly look to the IT organization not only as a key expense reducer but also as a revenue enhancer.

Horvath
I think the important questions are whether we are delivering services in the way that we ought to be and whether we are taking advantage of talent throughout the institution as effectively as we can.

One of the issues at Penn State is how the central IT organization interacts with the IT functions in the units across the institution. We are trying to find pockets of operation where we have a lot of people doing the same thing, perhaps not as effectively as across the board. How do we figure out who's doing what? How do we eliminate redundancies, become more efficient, take advantage of strengths—and as a result make our IT dollars go further? This is a good time to think about these questions, because I'm relatively new in my role at Penn State, as is our CIO. So we're both open to this discussion.

From an administrative computing point of view, we're at the tail end of the move to ERP. Penn State has traditionally built rather than bought. We have some rather big, hard-core administrative systems that are forty years old. In addition, we need to think about how we can keep our networks robust enough so that students are satisfied and so that faculty can do their research and so that administrators can provide necessary services. At the same time, we need to put money into systems that are not as “attractive”— systems such as payroll and financial aid.

In today's environment, these choices are going to be much harder to make than in the past. The challenge of maintaining momentum while dealing with the financial situation is going to make or break us. As Peggy said, we're just going to have to make tougher decisions and stay focused on the bigger picture of what it is that we ultimately want to achieve.

Antolovic
Although information technology at Indiana is probably a bit more centralized than at Penn State, we all have many pockets of IT operation, as Al noted, around our universities. There is still much work to be done in furthering automation and gaining operational efficiencies and in leveraging, even at the campus and institutional levels. But I think the next productive challenge is in trying to figure out how to harness the transformational power of information technology to help institutions better structure themselves to do their basic business.

Somebody needs to be the evangelist for trying to figure out how information technology should be used so that the institution can do a better job of providing its services—a better job of educating students, supporting researchers, and helping the community with economic development. It would be a waste if we do not take advantage of the situation we are in right now to define this need.

I would argue that this is a role for somebody who does not have operational responsibility for either finance or information technology. Those in information technology have preconceptions about CFOs: the CFO is always looking for savings; the CFO doesn't want to spend any new money. Those in finance have pre-
conceptions about CIOs: the CIO is always looking for money; if you’re next to a CIO, watch your pockets and your wallet.

I think a more neutral party could lead the institution along a path toward making more efficient use of information technology, so that colleges and universities can find the money to support the basic academic mission as opposed to paying $50 million for new ERPs.

Q. In the meantime, without this neutral third party, how can IT leaders and CFOs work collaboratively to help institutions more optimally manage the total cost of technology, as opposed to the centralized IT budget, which in some institutions may be only 30 percent of what the institution spends in total for technology? Al, what is the CFO’s perspective on that?

Horvath
My role is to be an individual who helps push the institution forward in every way possible and who provides the financial and administrative wherewithal to make that happen. So information technology is as much of an issue for me as it is for the CIO, or the provost, or the president, or deans, or anybody else. My role is to help uncover all of the money that is spent regularly on information technology and then help to identify strategies and approaches to make those investments more effective.

In higher education, we tend to revel in the fact that we allow people a lot of freedom to do the things that they want to do. But the reality is that we have some fundamental differences within information technology. We have administrative computing, which looks a lot like corporate shops with their 24x7 issues. We have academic computing, where everybody does their own thing and wants openness and flexibility. Then we have the whole issue of infrastructure and networking and what we are providing for students.

Thinking about all those things, I understand why CIOs come to the table and ask for money, because those things are expensive. Nevertheless, we need to be more institutional in our thinking. We are losing opportunities by being too fragmented. The CFO can’t simply say to the CIO, “Go away, I don’t have any money to give you.” We have to discuss what it is that we want to do as an institution.

Q. Is Al’s level of enlightenment enough, or are there other institutional budget practices or policies that get in the way of reducing IT costs?

Antolovic
Typically, questions about how much an institution spends on information technology are sent to the central IT organization. It would be nice if, inherent in the budget or financial structure, there were a way to determine the outside and the central organization’s investments. For example, is it possible to tell from an HR or payroll system who all the IT workers are in an institution? And can the equivalent dollar amount then be extracted in order to know how much is being spent on IT compensation? In addition to compensation, many other expenses fall under the IT umbrella. We need the CFO’s office to help us see this information. It is difficult to discover redundancies and
inefficiencies or to identify potential efficiencies unless university business systems are structured to provide that level of transparency. I think we need to foster transparency not just by policy but by actual structure.

Q. Many academic institutions are adopting a more corporate approach to some of their project management and budgeting. Are you adopting corporate practices at your institutions?

Horvath

Colleges and universities have always been fighting the argument that we’re not efficient and that we ought to act more like businesses, especially since many trustees are corporate executives. But I think we do understand much of what businesses are doing. We have adopted many of the re-engineering and business-process approaches that have come from the corporate world, and we have used these for a couple of decades.

I think the big issue is that, fundamentally, academic institutions are different kinds of enterprises. We can’t just cut faculty positions. There’s this concept of tenure. We have to continue to meet certain demands regardless of whether or not they are efficient and cost-effective. On the other hand, I do think we’ve used that argument perhaps too often and too broadly. Maybe at this point, we should be taking a more corporate view on things that aren’t truly core to the mission of the institution.

I think there is a lot that we can do as a community without touching on the competitive edge.”

“best colleges” rankings and the research rankings, and many of those measures are driving us in the exact opposite direction from the kinds of things we have been talking about. For example, a smaller student-to-faculty ratio means higher teaching quality and a better school, according to these rankings. But lowering that ratio certainly does not drive toward higher faculty productivity; these kinds of measures work against being more cost-effective and reducing expenditures.

Horvath

Competition is something we are going to have to live with. The recognition of competition has come slowly to our institutions, becoming more noticeable probably over the last ten years around faculty. The marketplace for faculty has gone through the roof in terms of the kinds of investments that are needed to attract the top faculty.

I think competition is going to be a key factor in prioritizing what we invest in. Systems that allow students to apply to the institution and systems that support faculty research are investments that protect revenues. If we are trying to attract students who expect a certain amount of bandwidth, a certain amount of functionality, then that has to figure into how we move forward and what we focus on.

Antolovic

I’d like to address the topic of competition simply in the context of information technology. I think that over the past decade or maybe longer, we’ve been keeping up with the Joneses. Our students will say: “Students at Penn State can do this. Why can’t we do that here?” Or some faculty member will hear about how faculty are supported at Lehigh and will want the same at Indiana. And most of the time we’ve simply responded accordingly. We say, “This is what students and faculty expect, so let’s go ahead and provide it, because if we don’t, we are going to look really behind the times.”

I think we need to pause for a moment and, as a community—not just at Indiana but as a community of colleges and universities—look at what is truly essential. What is it that we need to provide?
We should start talking about acceptable standards of quality and levels of risk. Maybe we’ll realize that instead of keeping up with the Joneses, we should be keeping down with the Joneses. Some services give us a competitive edge, and we do need to pay attention to those, but there are other services that, if provided collaboratively at leverage, would be more efficient, save us all money, and probably even guarantee more robust service and greater availability of talent to support the services than if we provided them individually. I think there is a lot that we can do as a community without touching on the competitive edge.

Plympton
It will be interesting to see if one of the results of all of the upheaval and the competition is that institutions will become more niche-focused. This may not be possible for some of the big state institutions and systems, but perhaps some private/smaller institutions will decide to compete based on, for example, being the very best romance languages experience that students can have while agreeing that the school won’t be tops in the organic chemistry field. This flies in the face of the liberal arts tradition and runs counter to the goal of being one of the “top-fifteen schools.” It may not be realistic for higher education as an industry, but it would be a way of not having everybody trying to do everything for everyone at the highest-possible level. Some institutions have defined themselves this way for years, and many others have started to do so. Competition may increase the trend.

Q. What about outsourcing?

Plympton
We have been outsourcing for years, though we haven’t always called it that. We have outsourced expected areas (e.g., food services and dining services) and also less-obvious areas (e.g., using common applications and having the remote servers processing our parking). Outsourcing is a very interesting question, particularly for information technology. What should be outsourced, and does doing so result in cost savings? The general answer is yes, because the contractor performs the service full-time and is thus more efficient than we can be internally.

On the other hand, this may not always be the case. Outsourcing can be situation-specific: specific to the geographic location; specific to the project; specific to the institutional situation; specific to the expertise needed and on hand. At the institution where I worked previously, for example, we couldn’t outsource much of anything, whether we wanted to or not, because we were in a rural location and there was no service provider accessible to us.

Q. Will the budget crisis change the way institutions create funding models for technology in the future?

Antolovic
IT funding models can drive certain ways of thinking and working, certain ways of managing. And I think that it is precisely in this kind of work—making a decision about which IT services should be shared services—that the CFO and campus leaders can help the IT organization. For example, are there colleges or service units within our institutions that generate their own electricity or purify their own drinking water? These commodities are generated, contracted for, and provided at the institutional level. Some IT services are basically the equivalent of these commodities. We need to decide, in the aggregate, what should be shared services.

Horvath
What I would ask you, Laurie, is what are those IT operations that are analogous to electricity? I think we’re struggling a little bit with the definition of a commodity in this world. Once we make that decision, I can help develop one thousand different ways to motivate or finance. But IT services are not as clear-cut as electricity and water. Is e-mail now a common good? Is everybody willing to live with a single e-mail system? Perhaps they should, but do they?

Antolovic
Again, these decisions should not be left to the IT organization alone. The answers will differ from institution to institution. There has to be a community conversation about what is on that commodity list. The crucial aspect, Al, is the support provided by leaders like you and other CFOs.

Plympton
This is another example of the role of leadership. Part of what has to be going on in these conversations is our saying to deans or other unit leaders: “What are the drivers behind your need to have your own unique application system?” It then becomes an institutional responsibility to help reframe those pressures. No one dean and no one IT director should have to make these decisions. This moment—this financial downturn—gives us the opportunity to have these high-level discussions.

Horvath
I agree that now is the time to push forward, setting aside the issue of financial challenges. I am sensitive to how faculty work and how universities are run. But at some point, we have to look for ways to be more creative and more integrative, because ultimately that is how we are going to get more done. We don’t have bags of money being left on our doorsteps. We are going to have to manufacture the resources from somewhere. If we consolidate e-mail systems, for example, we can take that responsibility off the IT leaders’ desk so that they can focus on those other important activities that they haven’t been able to get to.

The idea is simple. It is the implementing and the pushing forward that will be the challenge.