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Winter 2008

ACUTA Journal of Telecommunications in Higher Education

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Winter, 2008 Vol.12, No.4



of Information Communications Technology in Higher Education

Published by The Association for Information Communications Technology Professionals in Higher Education



This Issue: Leading Today's Technology Organization

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Event	Date	Location
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Summer Summit	July 12–15, 2009	Marriott City Center Denver, Colorado
Fall Seminar	October 25–28, 2009	Marriott Downtown Waterfront Portland, Oregon
	t higher education information communications o the achievement of the strategic mission of	
 ACUTA's Core Values are: Encouraging and facilitating networking Exhibiting respect for the expression of Fulfilling a commitment to professional Advocating the strategic value of informeducation Encouraging volunteerism and individed 	of individual opinions and solutions al development and growth mation communications technologies in higher	acuta

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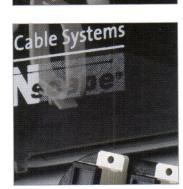
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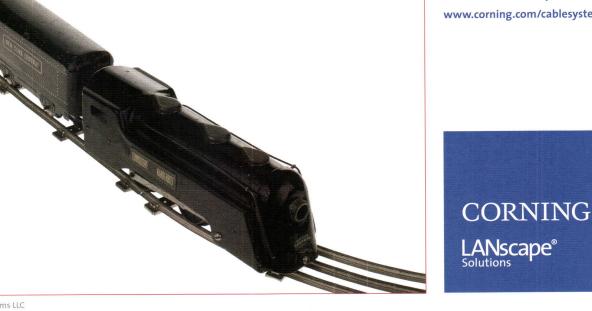








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Leadership, when you boil it down, is a trust issue. In all things related to your leadership of your team(s), the constant attention to the health and welfare of that trust is everything, This is why the following two concepts are paramount in leading your people: consistency and conviction.

• Consistency of action and decisionmaking tells your team that you have a plan in place and that your head is in the game.

• Conviction tells your team that you believe in what you are doing and that your heart is in the game.

—Marty Clarke page 33

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PRESIDENT'S MESSAGE



CORINNE HOCH COLUMBIA UNIVERSITY ACUTA PRESIDENT 2008–2009

The World Is Changing. . . . What Are *You* Changing?

This dramatic statement and challenge from the cover of the 2009 Columbia Business School **Executive Education Program** booklet, heralds Columbia's proven world-class leadership programs. Change is reflected throughout the dynamic program, from the portrayal of the professors engaged with their students and their subject matter to the new naming conventions used for course descriptions. Excitement spills from each page and results in the desire to be a part of such change.

Change is definitely in the air. Even on a national level, the recent presidential candidate platforms all promised change. No matter which party you chose, change was a certainty.

The overall theme in leadership today reflects the need to change in order to keep up. However, change just for the sake of change without direction is not the answer. Only after sufficient analysis of current needs, services, and products offered along with the inherent business processes should final decisions be made. That is good leadership.

Two strategic plans ago, ACUTA recognized that the world of telecommunications was changing and identified strategies and action items to position the organization to embrace the change. Yet the board members at the helm wisely chose not to force change on the organization so rapidly that it would lose its identity in the process.

Strategic planning is the way that organizations, institutions of higher education as well as corporations, confirm what their mission and their core raison d'etre are. It is the process they use to reveal overarching goals and to identify key stakeholders, responsible parties, and actions required within specific time frames.

Strategic planning is the key to the development of the business planning necessary to keep up with the changing world. It provides metrics to gauge where we are. The choice of the rate of the change is also up to the leadership. ACUTA chose to change in an evolutionary manner, an appropriate choice for a volunteer organization.

The leadership of ACUTA resoundingly chose to be the preeminent communications voice for higher education. It chose to retain its acronym, ACUTA, the way the association has been recognized for 37 years. But the tagline has evolved from the Association for College and University Telecommunications Administrators to the Association for Information Communications Technology Professionals, reflecting the changing technology and the roles of campus and corporate leaders.

You may have noticed the increased involvement of ACUTA in legislative and regulatory affairs. Advertising appears in more targeted areas and is more professional. The publications and educational programs continue to be flexibly current and consistently enriching. Webinars and audio conferences complement the seminars and annual conferences. The exhibit hall continues to be sold out to corporations who recognize the value of the ACUTA experience. Membership continues to increase, as does the attendance at seminars and the annual conferences. The Strategic Leadership Forum offers a more concise program for presidents and CIOs who want to be on the leading edge of technology.

ACUTA is not just telecommunications anymore. The organization reflects the fusion of voice and data on one platform. It provides guidance before, during, and after the transition. It assists those who are financially and technically liable for the success of their institutions and their corporations. And yet the organization has preserved its unique ability to allow its members to network professionally and efficiently.

So in closing I offer the gauntlet: ACUTA is changing—explore the website, participate in the blogs and listservs, and come to an ACUTA event to really discover how the organization will live up to your expectations. And I challenge you to live up to the changes with ACUTA. Indeed, the world is changing, and ACUTA is keeping up!

Leaders You Admire

Bill Birkhead, retired vice president of business and finance at Westminster College in Pennsylvania. His decisions were always driven by the best overall business interests of the college, but he never sacrificed his integrity or relationships with those around him. Bill is one of those rare people who could make you feel good about being told "no."

Ron Walczak, Principal Consultant, Walczak Technology Consultants, Inc

Bruce Gilchrist, Columbia University. We both came in early, spent hours talking about the issues and problems of the department of information technology, often coming up with workable solutions, sometimes just shaking our heads. What Bruce knew about numbers, people, and technology (in the 1980s) was just awesome. What I appreciated the most was that he always gave me room to grow in new areas.

Neil S. Sachnoff, Executive Director, Information Technology, Middlesex County College



FROM THE EXECUTIVE DIRECTOR



JERI A. SEMER, CAE ACUTA EXECUTIVE DIRECTOR

In my space for this issue, I would like to share some ideas from President Corinne Hoch and myself about the value of membership and participation in your professional association. As colleges and universities strive to understand and respond to the recent economic turmoil, we wanted to take a moment to let you know why your ACUTA membership is more valuable than ever to you and your institution during this time.

• ACUTA's Legislative and Regulatory Affairs Committee will monitor the situation in Washington for changes that affect colleges and universities. Legal and regulatory requirements will continue to expand, and, of course, compliance is necessary in order to avoid costly fines and legal proceedings. You will be continuously informed of any action you might need to take in response to new or revised rulings.

• In 2009, with travel dollars restricted on many campuses, we plan to increase the number of audio/Web seminars that we offer. This is a low-cost alternative that focuses on topics directly relevant to your operations.

• Dues for many other associations are substantially higher than ACUTA dues, yet you can find everything you need in one place with ACUTA: high-quality educational events; a very active listserv providing expert advice from your peers on any issue you face; valuable publications with useful, targeted information; and the very best professional networking available.

• Career development opportunities abound. We would ask you to seriously consider volunteering for involvement in an ACUTA committee, contributing to one of our publications, or sharing your expertise by providing resources for our website or answering questions on the listserv. None of these opportunities requires travel or monetary investment, but you will reap the rewards of increased knowledge and career satisfaction. These and other volunteer opportunities are online at www. acuta.org/?2153.

The need for education and training on the many technical and management issues that we are required to deal with does not go away in a difficult economy. Technology changes continue to march forward, and campuses need to anticipate and keep up with student and faculty demands for expanded technology services. ACUTA offers educational programs that are precisely targeted to your campus information and communications technology needs, and we are pledged to keeping the cost of these programs as low as possible.

ACUTA events benefit both institutional and corporate members, by providing a cost-effective and time-saving forum for interaction among technology providers and their current and potential customers.

ACUTA is a strong organization—our membership base is stable and our finances are solid. However, our ability to thrive as an organization depends on the continued support of our institutional and corporate affiliate members, both at our events and in other areas of participation. As you prioritize your activities in an era of shrinking budgets, we hope that you will keep participation in your professional association high on your list. We firmly believe that ACUTA delivers an outstanding return on investment, and we are committed to continuing our efforts on your behalf.

True Yesterday, Today, and Tomorrow: *You* Are ACUTA

Leaders You Admire

Sam Memberg, Public Library. Everyone knew Sam. Everyone liked Sam. Sam had been with the library forever when I got there. Besides being patient, knowledgeable, and just likeable, Sam was able to find humor in almost everything. What I appreciated the most was that while he provided room to grow, he also tolerated mistakes, and I made my fair share of them.

Phil Sharkey, Columbia Presbyterian Medical Center. One of the smartest people I ever knew, but you had to know him to know that. What made his leadership so effective was that he taught me how to ask questions—not as simple or easy as it seems.

> Neil S. Sachnoff Executive Director, Information Technology Middlesex County College

Dr. James Dalton, vice president for information technology and public relations at Roanoke College, believes in hiring competent people and then giving them the freedom/authority to make important decisions. He is always there for counsel. His leadership style allows his employees to grow in their job. He is a firm believer in allowing us to expand our knowledge and skills through whatever avenue is available. He has the respect of the entire community at Roanoke College.

Carolyn Trail Telecommunications Manager, Roanoke College

I admire a leader who is willing to allow an employee to succeed (or fail) on his/her own without constantly micromanaging every aspect of the task. If you have no faith in the person to whom you have assigned the task, then it should be given to someone else. Ten years ago, Larry Foster (who is now vice president of PAETEC) was assistant director of IT at SIUE—and my boss. He was this kind of leader.

> *Terry Meredith Communications Services, SIUE*

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Leadership Lessons Learned

Joseph P. Sawasky

Throughout my career, I have learned many lessons from both incredible role models and dynamic professional experiences. Many people have served as key role models and even mentors over the years; my list includes literally hundreds of people at every level of the organization. These professionals have, most times unknowingly, provided me with key techniques for being successful. CFOs have taught me about obtaining funding and managing budgets; provosts and other academic leaders have proved the value of broad input and shared governance; facilities leaders have shown me how transformed places can dramatically change attitudes and instill team pride; and my staff members have continuously shown me the importance of deep expertise, passion, and true organizational commitment.

Mixed among these broad lessons on how to manage a modern technology organization are some much finer points—specific approaches that I have found particularly valuable on an everyday basis in higher education leadership. I keep them in a personal professional "playbook" to guide leadership behaviors; and I really believe these techniques have helped to keep student, faculty, and staff customers relatively happy. The following really small tidbits are presented in hopes that they may be of value to others, not just to me:

- Consider customer satisfaction to be the ultimate key performance metric.
- Be introspective and honest about your own performance and the performance of your organization.

- Remember always to celebrate successes *before* tackling issues.
- Build relationships and partnerships outside the technology organization.
- Keep lists of projects. Carry them around everywhere and make them the single source of the truth.
- Find a way to deliver on your commitments in the face of impediments.

Customer Satisfaction

Technology organizations are notorious for meticulously tracking rather detailed performance metrics: number of system transactions processed per second, percentage of application uptime, and bandwidth utilization, among other things. While these can be valuable for discretely managing system components, they rarely have significant meaning to external customer audiences. Sometimes they can even distract the conversation from things that really matter to people we serve. Customers care only about their experiences-end-to-end system performance and the ease and richness of application interaction.

Customer satisfaction is the ultimate key performance metric. This may sound a bit odd coming from a technology leader, but throughout my career, I have found this "soft," nontechnical data to be the definitive measure of both the individual's and the organization's success.

Accordingly, at first, I recommend spending less time gathering all that

As difficult as it might seem at first, I have always found that customers will much more readily accept honest admissions of poor performance as long as there is a real commitment to work on improving problems.

minutia about systems and seek more qualitative feedback from your customers. Eventually, you may need the detailed system data, but use that data primarily to dig deeper into customer satisfaction problems if/when those customer problems are discovered.

Honest Introspection

Once you have customer satisfaction information, be both introspective and honest with everyone about your organization's performance. It is tempting to attempt to defend, deflect, and provide excuses for areas of poor performance. Instead, be bold, and stand up in front of your team and others across campus and openly discuss issues. As difficult as it might seem at first, I have always found that customers will much more readily accept honest admissions of poor performance as long as there is a real commitment to work on improving problems. Of course, results must eventually follow.

Celebrate Successes

At times in higher education there seems to be a license to complain and focus exclusively on challenges. In virtually every technology organization, there are a myriad of things going "right" every day: new applications being developed; operational heroics being performed to ensure important campus processes run *smoothly*; and complex upgrades occurring off-hours to enhance system capabilities for end users.

You will find it easy and useful to intentionally start all staff meetings and campus presentations with quick celebrations of successes instead of immediately jumping into lively debate about the problem of the day. Complicated problems can easily consume entire meeting times if not managed properly, and who wants to spend whole meetings griping? By placing an initial emphasis on accomplishments, all involved will realize that the organization is indeed moving forward despite occasional tribulations. Starting sessions by quickly listing recent accomplishments also helps set a more positive tone for meetings and presentations.

Build Campus Partnerships

A sociologist faculty member once told me that colleges and universities are the most complex organizations in the world. Among other things, they are composed of many fairly autonomous suborganizations, which have diverse and sometimes even competing goals.

Because of the complexities of both activities and interests, reaching concensus and getting things done at the enterprise level can prove difficult. There can just be too many competing ideas. Because of this, it is at most times necessary to build strong partnerships with other organizations to help build critical mass and momentum.

In my experience, library deans are great technology partners. In a past position, a library dean and I had to work together as strong partners to enable a major library information commons facility project. Neither one of us could have done it alone.

Opportunities for partnerships exist with student organizations, deans, the provost's office, the library, facilities, finance, marketing, and HR, to name a few. Having two or three or more university leaders come together to promote new projects will usually increase the likelihood that decision makers will at least listen to—and perhaps even approve—new ideas. In the end, you will also find that it is even more fulfilling to share successes with others; and as a side benefit, it sets a great example for other units across the campus.

Project Lists

Keeping lists is a very simple way to stay organized. If you don't maintain a project portfolio list for your department now, it will require just a bit of effort to get one started. Once you've started, however, you will find it fairly easy to continuously update it with key information for individual projects: simple narratives of current project status; red/green/yellow project conditions; estimated date of completion; and project expenses, among other things. Once you get in the habit of keeping this list up-to-date, you will use it for a variety of purposes, such as executive department/division updates; one-onone meetings with direct reports; and technology committee updates.

Though there are entire project portfolio management applications, at a base level it doesn't have to be that complicated. A straightforward list will suffice for most purposes. Such a list will likely become a valuable source of information for both your technology organization and other campus constituencies. I use a small MS Access database that contains my division's major projects. It generates two reports for me every week: a status report narrative for each project and a high-level Gantt chart for all major projects. By using a standardized reporting mechanism, you and your team will find that fewer things fall through the cracks, information on your projects will become more consistent across campus, and your teams will become slightly more goal-oriented.

Just Deliver

Information technology-related projects in any organization usually involve multiple departments-both IT and academic or business units. Many dependencies and complex factors can contribute to either success or failure. When there is shared responsibility, sometimes accountability is hard to pin down anywhere. This fact makes it easier to request extensions on delivery dates, attribute failures to lack of resources, or place blame for delays ambiguously on others. Technology projects are infamous for having a relatively high rate of being delayed and/or over budget. Ultimately, there has to be a driving force within an organization to get things done on time and under budget in spite of everything.

It is an important leadership challenge to find a way, sometimes creatively, to finish a project and meet its goals. Whether it is inspirational leadership, a roll-up-yoursleeves effort, lively backroom negotiations with peers, or difficult reallocation of scarce resources from less important activities, technology leaders must find ways to continue to deliver for their institutions. For example, there have been many times that I have reached into my division's limited discretionary fund to provide resources for other departments so their project work could continue. Let's face it, our collective work is too important to be less creative and less determined. When nobody else will step up, we technology leaders should. Let's raise the technology project success bar.

Hopefully, you will find, as I have, that these various approaches to technology leadership simultaneously increase customer satisfaction and your organization's success. I have certainly omitted many other important techniques that many of us use every day. Undoubtedly, it is much easier to write about these things than to actually perform them, and it is virtually impossible to always get everything just right even if you do them all. However, if you incrementally begin to employ these as best modern technology leadership practices, I'm almost certain you will be pleased with the results.

Joe Sawasky is associate vice president and CIO at Wayne State University. Reach him at dx0297@wayne. edu.



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A Primer for New Managers from Four Who Have Been Around

Curt Harler Contributing Editor Someone once said the first step toward knowledge is to know that we are ignorant. For those entering the business and just stepping into leadership roles, it can be tough to know exactly what it is we do not know. Gaining certifications or earning degrees is simple compared to the cost of gaining experience and earning stature in the field.

Although everyone needs help getting started, there are many other stages in one's career at which advice is prized. For one, there is that period about five years into the job when advancement is key. Then, there is the uncertainty of that first day behind the desk that says "boss" and wondering what to do first.

Knowing the technology is important. But senior administrators universally emphasize people skills much more than technology—and with good reason. When they were young pups, terms like 4G, Wi-Fi, and OC-192 were simply typos on technical documents. Technology changes. Dealing with 802.11g or cellular backhaul is just the table stakes to a career in telecom. But the need to motivate coworkers, develop mentors, and deal with superiors remains constant.

Getting Started

For the "right-out-of-school" communications professional, it is important to develop a deep understanding of the new work environment. "They should get a clear grasp of the organizational vision and how their job fits into the bigger picture," advises John Kingland, associate chief information officer in the Information Technology Services department at Iowa State University.

Kingland says it is important for a newcomer to value any opportunities to hear about customer needs or wants. "Think about how those needs can be met," he says. "Customer satisfaction is always a key to success in communications technology environments."

Mentors will help give direction. Here it is necessary to draw a line between the technical self and the leadership self. "You have to find a technical mentor and a leadership mentor," says Scott Kincaid, CIO at Butler University in Indianapolis. "They are not necessarily the same person," he emphasizes.

The point was driven home in Butler's recent VoIP project. Someone with technical skills is not necessarily the one with interpersonal skills. In fact, internally they code-named the IP project "Infinitely Personal" to keep the personal touch in mind. Ideas like that are free for the taking—if you know the right people.

"Visit other campus settings and take your counterpart out to lunch," says Craig Kontny, telecom manager at the Auraria Higher Education Center (AHEC) in Denver. They are home to the University of Colorado–Denver, Metropolitan State College of Denver, and the Community College of Denver. AHEC supports and facilitates all of the schools and the Health Sciences Center's downtown Denver campus in their teaching missions. An "other campus" does not necessarily have to be an academic campus, he notes. But setting up a relationship with someone running similar equipment or with a similar environment can pay off.

"Use them as a resource but don't call them for every little problem," Kontny says. He also feels it would be a good idea to ask for a tour of their communications facilities. And there is no question that technical competence is required.

"Early on, it's all about technology," Kincaid says. "Continue to be robust in technology. But keep in mind that leadership is more in knowing what the organization is trying to accomplish. That is why you need a leadership mentor," he adds.

A budding leader will keep people skills in mind. The leadership mentor should be someone to go to lunch with, run ideas by, and milk for the perspective of their experience.

"Lead by example," advises Melissa Long, manager of voice telecommunications in the Office of Information Technology at Auburn University. "Take on additional tasks and responsibilities from upper management so that you gain working knowledge of the environment you work in. This allows you to exhibit the attributes of a team player and gain the support of upper management."

Long points out that it is difficult to take a leadership role if you haven't exhibited traits of being capable and willing to learn.

Above all, be ready to roll with the punches. "Always and at all stages of your career exhibit a positive attitude," Kingland says.

Part of this is having a clear personal professional vision for yourself that is in concert with your organization. "Start every day knowing what you expect to accomplish and what you will do first," Kingland says.

Get Organized

Remember the old saying, "If the only tool you have is a hammer, you'll view every problem as a nail"? Kincaid says that is a trap journeyman workers often stumble into. "Your user's needs are not necessarily what you know," he points out. "You need to understand what the user is trying to accomplish. A leader understands the needs of the customer and sees options that will meet them. As an oversimplified example, maybe they don't need another phone line across the office; maybe what they really need is a 20-foot phone cord instead of a seven-footer.

"Leadership is not constrained by what you know. You have to take a macro look at every problem," Kincaid adds. In addition, Kingland would advise the newcomer to learn about relevant statewide, regional, and national professional organizations. "When opportunities are available, get involved," he encourages.

Professional organizations, including ACUTA, EDUCAUSE, and vendor-specific or software-specific user groups, provide many opportunities for leadership training and even leadership roles. While there are some good national groups, finding someone locally can be difficult. Kincaid says vendors can be helpful pairing you with other shops of about the same size and budget.

"See if there is an existing user group for the equipment you have," Kontny agrees. He gives a personal example: Avaya. "Avaya has



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a great users group that has national meetings every year. See if there is a local group. If there isn't, start one," he says, hinting at another great way to establish yourself as an up-and-coming leader.

Anyone in the business should attend ACUTA and similar events, Long says. "They are great at exposing you to how other institutions handle the growing changes in information communications technology as well as the wonderful

networking resources." This is another good place to pick up mentors—both leadership and technical.

"Read and broaden your horizons," Long continues. She notes there are so many trustworthy publications and organizations that supply a wide variety of information that help you "think outside the box" that it doesn't make sense not to take advantage of them. "You never know when you may be in a meeting or conversation where a new technology is being

discussed and you will know what they are talking about and can contribute," she adds.

Kontny advises going to every meeting possible. "Volunteer for the local group (or national group for that matter)," he says. This will help you meet your peers from other campuses.

More Mature Workers

After a half-dozen years on the job, the information communications professional should be well on the way to working independently and solving complex problems with minimal or no supervisory guidance.

"The objective at this career stage is to demonstrate a clearly diminished need for supervision," Kingland says. This is the time on the career track to seize any opportunities to lead project teams. "Take advantage of supervisory training that may be offered or available," he adds.

"To move into a leadership role you have to look at the big picture," Kincaid emphasizes. On a small campus, the telecom function is often a one- or two-person shop. Every day, one is peppered with problems. A good leadership mentor is even more vital at this point.

Take It Up a Level

While building personal leadership skills is key at each level of one's career, it pays to look at the bigger picture, too. Take time to see how your job and your goals fit in. Here are some tips:

- · Look at the IT organization's place in and impact on the university.
- Discover the strategic goals of each department.
- See how department goals fit institutional goals.
- Become part of the team that formulates tactical plans to meet those strategic goals.
- Understand institutional challenges and how the school fits the broader community.

"Separate in your mind the technology from the leadership role," Kincaid says. Leadership is knowing your target audience. It is much more compelling, when you are asking for \$50,000, to point to three other schools that solved a similar problem than it is to bury administration with technical jargon, Kincaid says.

With luck and proper contacts, the communications manager will soon be flying solo. "When you are flying solo for the first time it is important to earn respect both up and down the organization," Kingland says. His key point: Develop clear communication skills.

Remember that communication requires listening as well as talking. "Lead

projects and initiatives considering input from colleagues, employees, and being mindful of organizational strategic directions," Kingland says. He emphasizes the listening part of the job.

"Give appropriate consideration to guidance or advice from those higher in the organization," he says.

"Sit down with all parties involved," Long agrees. "Lead the meeting...don't let the conversation shift from what its

intended topic.

"Describe in clear terms the goal that is to be accomplished. Open the meeting and interact with others to brainstorm ideas on how best to accomplish this," Long continues. She echoes the need to be a listener and facilitator. "Don't shoot any idea down without doing a value check-it may not apply to this goal but could work for a future one. By including the employees who will be working toward this goal, you are getting their buy-in

or shared ownership of the success of the goal," Long points out.

As the project moves forward, make sure to keep channels of communication open, including providing timely—but not too many—updates to upper management.

This is the point in one's career that the contacts developed in professional organizations can be extremely valuable in providing tips or pointers on how to "sell" an idea to the administration.

If I Had Known Then...

How many times have we muttered, "If only I had known then what I know now...?" Share your advice with new people on staff. Share what you have learned from other people whose opinions you respect. The whole department—the whole industry—will benefit from wisdom imparted to the next generation of technology leaders.

At some point, you will become the mentor to others, offering advice and guidance. That can be for someone far away or for people in your department.

Kingland says it is important to communicate beyond simply giving work orders. "Document progress, acknowledge and reward milestones that are achieved on time, and develop relationships that are mutually beneficial," he says.

"Respect is earned with results delivered on time, honesty, clear communication, and ethical behaviors," Kingland concludes. Looking back, everyone wishes for a redo on certain aspects of their performance.

"I wish I'd been more patient then—willing to accept teammates, leaders, and users for who they are...and continue to move the organization forward without unnecessarily stressing myself," Kincaid says.

"Have the wisdom to know when to push. Don't be frustrated if you get only 70 percent of what you want. Remember, we are all cogs in the wheel," Kincaid adds. He notes that the business is becoming so complex that one person is unlikely to be the VoIP, data security, financial, and business plan guru all at once.

"This is not to say the position's days are numbered—but as telecom becomes more technical, people will have to be comfortable with the idea that they can't do it all. We'll see people who are geeky and people who are user-oriented. There is a place for both to keep the user happy."

"I have learned that upper management's goals or philosophy can change as does the technology," Long says. "I have to be flexible and adapt to the continuous change."

In addition, she says she has gained the satisfaction of knowing that she can contribute to the university's goals. "I do have good ideas that are important to my organization as long as I remain flexible and keep on learning," Long concludes.

Curt Harler is a freelance writer and a contributing editor to the ACUTA Journal. Reach him at curt@curtharler.com.

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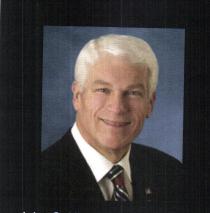
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John C. Hitt, Ph.D., President University of Central Florida

Communications Technologies: What Do Presidents Need to Know?

A man is flying in a hot-air balloon and realizes he is lost. He reduces his altitude and spots a man down below. He further lowers the balloon and shouts, "Excuse me, can you tell me where I am?"

The man below says, "Yes, you're in a hot-air balloon, hovering 30 feet above ME."

"You must work in information technology," says the balloonist.

"I do," replies the man. "How did you know?"

"Well," says the balloonist, "everything you have told me is technically correct, but it's no use to anyone."

The man below says, "You must be an executive in higher education."

"I am," replies the balloonist, "but how did you know?"

"Well," says the man, "you don't know where you are or where you're going, but you expect me to be able to help. You're in the same position you were before we met, but now it's my fault."

So, what do presidents need to know? One way of answering that question is to examine what they do. I'd say that most of our time and attention is occupied by a set of issues and a group of constituencies over which we try to have some influence or to which we are accountable, including funding, legislative bodies, governing boards, donors, community organizations and leaders, students and their parents, and athletics.

Most of these are external to the institution. Internally, presidents must be concerned with developing, articulating, and implementing a vision for our respective institutions and for ourselves as institutional leaders by asking these questions:

- What is the future vision for the institution?
- In terms of this vision, where is the institution now, and where is it going?
- For what does the institution want to be known, both on and off campus?

• What must be accomplished—or avoided—to achieve success?

• What are the institution's strengths and weaknesses?

• How can the vision be articulated and how can understanding and buy-in from key constituencies be assured?

• How can these elements be used creatively as engines for positive change—even transformation—in fulfillment of the institution's vision?

Of all the important issues presidents need to deal with, why should information technology be among them? And if we as CEOs do attempt to get involved with IT, what do we need to know to successfully participate in IT-related planning, priority setting, and decision making?

There are very few facets of the academy that have not been touched by technology. Think for a moment about your own institutions, and how, in just a few short years, technology has changed both the content and the delivery of the curriculum—how classroom technology, distributed learning, networking, online services, and our new ERP systems have begun to reshape the ways in which our institutions do business.

• In research, technology has both redefined and extended many traditional disciplines into computational sciences. No research institution can compete for major grants without having high-performance computing and network resources available.

• The ways we deliver administrative services and provide access to institutional data are changing dramatically through the use of self-service Web portals, electronic commerce, ERP systems, and data warehouses.

• And technology has reshaped the way individual information workers, students, and faculty and staff members perform tasks: electronic mail, instant messaging, electronic spreadsheets, Web browsers, online research, and professional listservs—you can add to the list.

What are the primary areas of interest for higher ed communications technology executives? IP-based voice and video, wireless voice and data, and new technologies and products, to name a few. To be sure, these are important issues, but they appear to be mainly tactical matters that do not often command the president's attention. So how do we connect the dots between your agenda and the president's?

Strategic Alignment

Strategic alignment is the alignment of IT strategies, priorities, investments, and outcomes with those of the institution and its leadership. It is the correct fit between the capabilities and opportunities that information technology affords and the priorities and needs of the institution, its operating units, and its students and employees.

When alignment is achieved, information technology has the power to be a catalyst for change and to amplify the capabilities of the institution and its people. Without alignment, institutional leaders cannot be confident that the institution's IT investments are well made or that they are contributing to institutional success. The goal is to align IT investments with institutional strategic goals, in order to enable fundamental improvements in teaching, learning, research, and administrative processes—and improvements in their costs—through technology-enabled transformation. The challenge of achieving alignment is magnified by the rapid change of technology and by the decentralized nature of the academy. As Clark Kerr aptly comments, "Colleges and universities are networks of cottage industries, united only by our common need for parking."

For strategic alignment to exist, there must first be strategy, and strategy must be widely understood throughout the institution. When I came to UCF as president in 1992, I articulated five goals for the institution that persist today:

• Offer the best undergraduate education available in Florida.

• Achieve international prominence in key programs of graduate study and research.

• Provide international focus to our curricula and research.

- Become more inclusive and diverse.
- Be America's leading partnership university.

At UCF, we have an excellent strategic planning process that has broad participation and visibility throughout the institution, and we have integrated the five goals into our strategic planning.

Moreover, the strategic plan gains its focus, content, and power from the participation not only of the president, but also other executives, vice presidents, deans, department chairs, and, of course, faculty and staff members-and the IT division. Our goal is for the university's strategic plan to be "technologically aware;" that is, for those who develop the plan to have a good understanding of how technology can contribute to the realization of the plan, along with the associated opportunities and risks. Development of a strategic plan must be followed with appropriate tactical planning that is linked in an obvious way to the required fiscal resources.

Furthermore, our strategic plan and the five goals shape the university's budgeting process. Divisional budgets are driven by the institution's priorities. And the annual reports prepared by all campus units require an accounting of progress toward the five goals and other institutional strategic objectives. Having understandable goals and a strategic plan with institution-wide involvement not only charts a course for the university, but also provides the operating units and departments with the information they need to focus and align their activities and their resources.



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This kind of strategic alignment assures that, whether or not the president and communications technology professionals communicate directly, the institution's communications professionals know that their actions and resources are positioned to move the institution forward and contribute to its success.

At UCF, we are attempting to balance forward-thinking planning with an adaptive organization approach—one that is both purposeful and opportunistic—with the instincts and resources needed to respond to change. Obviously, doing so requires a solid foundation of technology, ready access to information, and capable employees, all of which we continue to develop.

The ability to be an agile organization—while at the same time being the sixth largest and one of the fastest-growing universities in the nation—requires a special campus culture. It also requires a solid information technology base that is capable of rapidly changing direction to support new initiatives, while maintaining superior service to current initiatives.

A second alignment challenge is aligning institutional services and resources to the needs and expectations of today's Netgeneration students. Most of us are members of the Boomer or Gen-X generation; that is, most of us were born long before the existence of the Internet, PC, Web, or digital media.

Today's Net-gen students have never known life without the PC, Internet, e-mail, and the Web. They are digitally literate, always connected, social, and adept at using new technologies. Author Marc Prensky refers to them as "digital natives" and to us as "digital immigrants."

Net-gen students are totally proficient in technologies, and technology-related behaviors that may be unfamiliar to many of us in senior administration: blogs, wikis, IM and text messaging, swarming, and so on. From conversations with our own students, I have learned that they have access to a wide range of personal technologies, and they are comfortable using them for both academic and social purposes. What they lack—and we need to provide—is appropriate academic contexts for their use. And, of course, educating students should be our main concern and must be foremost in any strategic plan.

A third area of alignment has to be among people. Thus, the agendas of presidents and information technology professionals must be aligned as well. An article written by Jeanne Ross and Peter Weill of MIT's Center for Information Systems Research entitled Six IT Decisions Your IT People Shouldn't Make published a few years ago in the Harvard Business Review elicited quite a bit of conversation. Ross and Weill studied IT management practices at hundreds of companies throughout the world, examining differences between those companies that had gained substantial value from their IT investments and those that had not.

They concluded that the direct involvement of senior managers is the key factor-at least in the business sector-in determining whether or not an organization's IT initiatives will be successful. Businesses whose managers don't understand technology or its linkage with the organization's goals well enough to make IT-related decisions delegate IT decision-making almost entirely to the IT professionals, with the common result of excessively optimistic expectations and often disappointing results. On the other hand, those organizations whose senior leaders become involved in answering the following six questions tend to generate greater value from their IT investments:

• How much should we spend on IT?

• Which business processes should receive our IT dollars?

• Which IT capabilities need to be company-wide?

• How good do our IT services really need to be?

• Which security and policy risks will we accept?

• Whom do we blame if an IT initiative fails?

Institutional leaders need not have a deep knowledge of technology, and, in

fact, the focus should not be on technology itself, but rather on the goals and objectives of the institution and how IT initiatives and resources can align with them in order to move the institution forward.

The questions posed by Ross and Weill are merely another way of approaching business-IT alignment. It is no longer possible for a college or university president to safely delegate all technology -related decisions to the CIO. The costs are too high, the risks are too great, and the opportunities are too significant for the president not to be personally aware or involved.

A report on IT alignment in higher education published by the EDUCAUSE Center for Applied Research found a set of characteristics common to institutions that report close alignment of IT with institutional priorities:

• Planning is considered important and closely linked with the institutional budget-ing process.

• The campus has an IT plan or engages in continuous IT planning.

• The campus environment is dynamic or stable, not turbulent.

• IT governance processes—that is, the combination of organizational structure, advisory committees, and executive in-volvement arrangements—are considered to be effective.

• IT has greater communication with and involvement of key constituents, particularly faculty and deans.

• Major IT initiatives include clearly documented objectives and outcome expectations.

• Institutional vision and priorities are clearly articulated.

How can your president or chancellor become sufficiently informed about information technology so that she or he can successfully engage in IT planning, decision-making, and priority-setting?

One way is by reading and participating in technology-related sessions at the conferences held by higher education leadership organizations. ACE, AASCU, NASULGC, and related organizations are addressing IT leadership issues in their publications and programs.

Another is to ensure that you, the IT professional, have an appropriate level of communication with your institution's senior management. I hold regular meetings with our provost, vice president for administration and finance, and our CIO to discuss campus IT priorities, investment strategies, and policy issues. The CIO also meets regularly with all other vice presidents, directors, deans, and other campus leaders to ensure their participation in IT decision-making and priority-setting.

A third is to ensure that technology directions are visibly linked with the institution's strategic goals and initiatives, and that there are clear expectations regarding outcomes, as well as ongoing assessment.

A fourth is to take action to structure your projects and initiatives to ensure that the institution is getting maximum value and impact from its technology resources. What services are best offered centrally versus departmentally? What IT services or resources function sub-optimally and need to be improved, eliminated, or outsourced? Are other institutional leaders uninformed or technology-averse, thus missing opportunities to gain improvements or strategic advantage from the institution's technology resources or to contribute to the dialogue?

But what about the level of investment? Much has been written about the appropriate level of campus IT expenditures, and the return we get from these investments. There are risks in spending too much as well as too little. The tough financial times many of our institutions are now experiencing make it all the more imperative that we structure our IT investments to gain maximum impact and advantage.

Getting this right requires decisionmaking and resource allocation processes that are informed by vision and institutional priorities and backed up by quantitative and qualitative results. This process should involve not only the CIO, but also the president and other senior leaders. Improvements that can be obtained through the strategic integration of technology are transformative and can result in enhanced results such as improved student learning outcomes, reduced instructional and service delivery costs, increased access, an increased capacity to manage growth, and operational excellence. Continuous improvement requires change, and technology can be one of the most powerful enablers of change.

For the future, think and act strategically. Of course, no business could continue to operate without an effective voice or data communication system, and communications infrastructure and services are mission-critical resources. But that is expected at a minimum. To think and act strategically is to understand the opportunities and challenges that lie ahead, and to shape your department's thinking and actions in such a way that you can contribute in new ways to the institution's future success. It also means taking a proactive role in informing senior management about the possibilities and risks.

Strategic initiatives are measurable and accountable, and need to be represented in the institution's highest level of planning. Do communications services appear in your institution's strategic plan? Are there any direct relationships between institutional goals as represented by the plan and the services and resources you provide today or could provide tomorrow? Does the institution's plan, or do its leaders, recognize future risks to the institution or its goals? Is there anything you can do about those risks?

In other words, if communications services and IT in general are going to shift from a tactical focus to a strategic focus, communications services and IT leaders are going to have to think, act like, and communicate meaningfully with the institution's leaders and planners.

Conclusion

In summary, leadership must decide whether investments in technology are to

be strategic or tactical, and I would argue that the degree of cost and risk demands that our IT investments be truly strategic.

Our challenge as institutional leaders is to:

• Establish and promote a clear vision and direction for our institution.

• Foster effective planning and collaboration.

• Hire good people.

• Make appropriate investments and harvest the results.

• Use technology to stimulate continuous improvement.

• Stay personally involved.

Your challenge as communications professionals is to become aware of the goals and priorities of your institution as well as its major components; and, in consort with senior management, position your initiatives and services toward fulfillment of institutional goals. Ensure that senior management is aware of what is needed to succeed. Technology can become invisible—except when it stops working—and you need to help senior management know when achievement of or progress towards an institutional goal can be attributed in whole or in part to IT.

What we don't want is to find ourselves in the hot-air balloon scenario: institutional leaders who don't know where they are going, IT leaders who can't help them, and a lack of effective communication between the two. We can and must do better than that, and if we succeed, our institutions and the students we serve will be the better for it.

Dr. John C. Hitt has been president of the University of Central Florida since 1992. Visit UCF's website at www.ucf.edu.

This article is condensed from Dr. Hitt's presentation at ACUTA's 36th Annual Conference. We appreciate Dr. Hitt taking time to review it and allowing us to include it in this issue on leadership.

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The Leadership Challenge

Ron Walczak

"Leadership is one of the most observed and least understood phenomena on earth." J.M. Burns

Leadership. Go to any bookstore and you will find shelf after shelf full of books on the subject. Many are pop culture "how-to" books: not too many pages, lots of white space and bullet points, and plenty of stories about leadership successes and failures. The intent is that you read the book on an airplane and disembark with a checklist of new ideas and tactics to transform yourself and those who work with you.

Historically, one of the most reliable outcomes of such leadership literature is in the area of the publishers' marketing leadership they know that new converts will go buy copies for employees and expect them to read and buy into the new program. Let's look rather at some key words that offer a few ideas to consider and act upon—but only after some internalization and customization to your specific environment.

The best place to start a discussion of any topic is with accepted definitions for terms. Unfortunately, a clear, concise, accepted definition of leadership is hard to come by. Most authors tell us what it looks like and provide tactics and point to outcomes, usually through analogies and case studies. But in the end, they almost always default to the definition of "management," not leadership. A good leader recognizes that people are not inanimate objects to be managed—they are dynamic and complicated beings that must be led.

In his book *Leadership for the 21st Century*, Joseph Rost writes, "Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes." Examining that definition presents a good outline for understanding leadership.

The first component of Rost's definition is "influence." It's important to note that the influence goes both ways. Leadership is not dictatorship. If your goal of climbing to the top of the ladder is to be able to tell other people what to do, you will be a very ineffective leader and your time at the top will be short lived. While a leader must have a vision, he or she must be willing to accept advice and counsel from others, especially those who are experts in their own area of responsibility.

Note also the word "relationship" in the definition. If you stop to think about it, relationships are almost always the foundation for success, whether in our careers or our personal lives. The care and feeding of relationships is a critical skill for those who want to lead. An effective leader establishes and continuously strengthens relationships in his or her department.

As the definition implies, not everyone can be the leader. Some must be followers. Most people are very willing to follow if they have faith in their leader. Research conducted by Professor R. E. Kelley at Carnegie Mellon University in Pittsburgh seems to confirm that when motivated by a mutual purpose, leaders and followers who focus on their respective areas of responsibility more often than not produce results that exceed expectations. Kelley insists that a good leader must engage followers and keep them active.

Consider the Culture

One of the most important things a leader can do is to establish a culture that strengthens the influence relationship between leader and followers. Different organizations have different cultures. My work as a consultant puts me in a wide variety of cultures (higher education, healthcare, government, Fortune 500), and each culture has both advantages and disadvantages. While the organization will dictate the overall culture, it is possible for a leader to develop a subculture within the organization that promotes group unity and effectiveness.

What do we mean by culture? E.H. Schein, in his book *Organizational Culture and Leadership*, provides a long, boring (but accurate) definition of culture as "a pattern of shared basic assumptions that was learned by a group as it solves problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems."

Schein points out that there are three levels of culture that deserve attention. The first level, called "artifacts," deals with the visible organizational structures and processes. The second level, called "espoused beliefs and values," consists of the strategies, goals, and philosophies of the organization. Finally, "underlying assumptions" are the unconscious, taken-for-granted beliefs, perceptions, thoughts, and feelings—really the ultimate source of values and action.

All three categories are present in your institution, but you may find there is often conflict between them. For example, if your institution decides to implement "casual Fridays" as an employee morale booster (an espoused belief), but your behavior toward those who actually wear jeans to work is dismissive, you have created an "underlying assumption" that contradicts the espoused beliefs of the institution. If people working for you figure out that wearing jeans is a no-no, there goes casual Friday. You have submarined policy.

When I worked for Ernst & Young, it was "understood" that taking vacation time would lead to lower-than-acceptable rates of chargeability (very career limiting). So the artifact (employee manual) was contradicted by the underlying assumptions (take vacation and experience career stagnation or termination). Now, conversely, you may be in a position to implement a casual day even though it is not formally recognized by the institution. While this may be seen as a positive in your group, you must be careful that those who participate are not punished by the rest of the organization (i.e., "They are so unprofessional over there").

How does this apply to leading your group or institution? Every group goes through an evolution from "formation," where it is assumed that the leader knows what to do, to some level of "maturity," where it is assumed that each team member knows what the goals and objectives as well as his or her respective responsibilities are and can rely on a track record of accomplishment to guide decisions and attitudes. Group maturity includes coming to grips with "mutual" intentions (from our leadership definition).

So all you have to do is create and maintain a culture that promotes the evolution of group maturity. That's not, perhaps, a simple task. As you endeavor to lead your organization, there are some strategic and tactical considerations that fall under three general recommendations:

1. Do your institutional homework. It is your responsibility to understand the artifacts and espoused beliefs and values of your institution before you can reasonably expect to lead your group. Your employees expect you to understand and handle corporatelevel issues so that they can do their assigned duties. You are the firewall *and* the person who breaks through roadblocks. Your interpretation and reactions must be consistent if you want to create stability within your group. Frankly, that's the easy part. 2. Do your employee homework. If you want to lead, you have to evaluate how institutional issues affect your department's people, and that requires knowing your people. This demands an investment of time and emotion that many are not willing to make, and as a result, they end up being less effective than those who will.

3. Practice evaluating your decisions and actions against a triple constraint of integrity-justice-compassion. It's not easy to balance the three—but who said leadership was easy? Consider that integrity without justice and compassion can quickly become legalism. Justice without compassion can result in harsher-thannecessary outcomes, and compassion without justice can lead to well-intentioned actions that create unintended hardships on others. This triple constraint is really a definition of ethics, and ethical leaders are more likely to be consistently followed.

Concluding Thoughts

The definition of leadership does not contain any direct reference to the bottom line. Leadership is about a relationship between people, and relationships require investment of time and emotions. Effective leaders recognize that investing in relationships will not only improve the bottom line, it will improve the quality of life for all involved—and isn't that the goal?

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Technology Leadership in Tumultuous Times

James S. Cross, PhD

Successful leaders capable of transformational leadership distinguish themselves by their strong sense of moral purpose, their understanding of the dynamics of change, their emotional intelligence as they build relationships, their commitment to developing and sharing new knowledge, and their capacity for coherence making.¹ They offer their organizations the best chance for success in the tumultuous times and global economic mayhem we face today.

Global Mayhem: What's Going On?

In the wake of a financially harrowing September, smart strategies are paramount for future success. Many believe we will see the tumultuous events and global mayhem characterizing 2008 continue into 2009 and beyond. In an interview in Oslo, Norway, Microsoft CEO Steve Ballmer expressed what many have concluded when he told reporters that with credit scarce and job cutting mounting, no one will escape the unfolding economic slowdown. The unsparing tsunami of bad news created by the collapse of storied Wall Street financial firms continues to reverberate in the marketplace.

Every day, it seems only to get worse: the biggest one-day drop in Dow history; S&P loses \$700 billion; Wall Street plunges to more than a \$1 trillion loss; the unemployment rate climbs higher every day; the Dutch government spends \$23.2 billion to take control of the banking and insurance giant Fortis, changing the landscape of the global financial industry; France indicates it has fallen into a recession; Europe's leading central bank becomes lender to distressed financial organizations as the deep freeze in the credit market continues and credit-card debt is on the brink of imploding and may be the next storm to hit the fragile finance industry.

Chaotic Realities for Campuses

Today's college and university business processes require state-of-the-art technologies to support rich human interaction in addition to structured, predictable work. To balance chaos and control and drive new business and organization value, leaders must be armed with emerging organizational, process, and technology practices.

Enterprise and network computing is often the focus for enforcing control, conformity, and security management, but today's marketplace is not cooperating. In addition to the tumult we've experienced in 2008, an unprecedented onslaught of chaotic realities threatens to unravel the structure that technology leaders have brought to the workplace. Consider the following possibilities:

• Escalating security threats, a rash of data breaches, and the success of hackers in breaching networks and production systems will continue to be disruptive.

• The rise of Web 2.0 and what Forrester Research calls technology populism² will introduce unauthorized and potentially incompatible technologies into the workplace, emboldening users to disrupt IT status quo.

• Business and organization users demand tools to access data for analysis and decision making with no prerequisite knowledge of the underlying infrastructure.

• Rampant market consolidation continues to erode and dismantle well-intentioned vendor ecosystem strategies.

• The virtualization of human, data, and machine resources limits IT's explicit control over access to and use of resources.



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Getting out of the office for a few days to attend an ACUTA conference seems like an opportunity for fun and relaxation, but when you return home you realize that being surrounded by colleagues and vendors who are willing to share their knowledge and experiences and even ask your opinion is an experience beyond value.

-Dave Wirth, Princeton University

Attending ACUTA events gives me the opportunity to exchange ideas and solutions with others who may have already dealt with the very issues that I face. The educational sessions, professional networking, talking with vendors in the exhibit hall–I find it very helpful to get that fresh perspective.

-Ron Kovac, Ball State University

The information gained from the sessions and especially the interaction with others is fabulous. I go away from the conference each year with more confidence in my knowledge and abilities.

> -Gail Stephens Radford University

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Information technology leaders must understand the impact of complexity, chaos, and disequilibrium as factors for growth and change; they must be mentally and emotionally able to work within increasingly complex situations. The environment of information technology leaders is increasingly complex and chaotic, yet they must strive for order and control.

Hard Questions and Key Issues

Colleges and universities rely increasingly on sophisticated technologies to reach new markets, deploy new products, and reengineer solutions to remain competitive. As a result, the challenges on the technology front are daunting. Many leaders continue to ask themselves:

• How can we implement an information technology strategy that enables quick and reliable responses to support our dynamic needs without creating an increasingly complex and expensive collection of disconnected systems?

• How can we create a comprehensive approach to information technology deployment and management that leverages existing investments, exploits new technology, and maintains control of our assets and processes?

• What policies are needed for security, service levels, interconnectivity, and integration of emerging technologies?

• How can we create an information technology strategy that works for the whole

organization while absorbing unstoppable chaotic realities and growth demands?

What's a Leader to Do?

Here are some of the key issues that technology leaders must address:

• Security breaches. The number and magnitude of security breaches continue to escalate.

• Software convergence. Service-oriented architechure (SOA), business process management (BPM), collaboration, content, and process orientation are hot trends that must be woven together.

• Business agility. A top issue raised by executives attending the Technology Leadership Forum 2008³ was the need to work more flexibly within legacy IT iceberg constraints.

• Business and technology. How do we promote new relationships between IT and the rest of the organization, to make software creation more accessible and relevant outside of IT? This is part of a permanent shift in the enterprise where those outside of IT are increasingly IT savvy.

• The power of context. Information management tools used to be high cost and limited to a narrow range of workers. Now they're shifting to more ubiquitous information works with uses and context in mind, accounting for workers' roles, activities, location, and access authority.

• Aggressive use of technology. Recent research shows that CIOs and information technology leaders believe that to achieve their business strategies, information technology should be used more aggressively than today.

Because technology creates sustainable competitive advantage, today's successful administrators and leaders must demonstrate technology leadership to drive continuous improvement and develop game-changing capabilities. College and university leaders must continue to focus on understanding business processes and constituents' needs better—and address any opportunities or gaps encountered. They must develop insight into how people interact with technology through observation, analytics, and innovative experimentation. They must understand that technology development is a complex, high-risk process and embrace championing technology execution, new technologies, and the "what-if" possibilities they create.

Information technology leaders must be committed to creating enterprise systems and networks that are smarter, with intelligent network services built in; faster, in terms of their performance; longer lasting, with a generational approach to an evolutionary infrastructure; and capable of driving innovation to deliver the best solutions.

In a Critical Issue paper from Learning Point Associates, Dr. Gilbert Valdez presented the following themes from the literature on leadership:

• Vision and moral purpose: ethical leadership; the alignment of vision and purpose to strategic initiatives.

• Relationships: reciprocal relationship between leaders and members; participative; and relational leadership.

• Complexity: the cognitive and creative capacity of leaders to operate within highly complex situations; importance of perspective and multiple frames; strategic decision making; situational leadership.

• Change: transforming leaders and cultures; leaders as change agents and social activists; organizational learning as a response to change.⁴

These views of leadership embrace the idea that the future is unknown and no single, right model or prediction is likely to be right every time about every thing. The only way to prepare for the future is to create a permanent capacity for change through organizational learning and collective leadership.

Central to the leader is an equally strong emphasis on the importance of relationships and building productive work teams as core leadership activities.

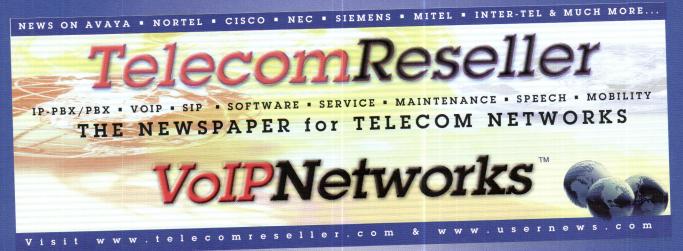
Information technology leaders must understand the impact of complexity, chaos, and disequilibrium as factors for growth and change; they must be mentally and emotionally able to work within increasingly complex situations. The environment of information technology leaders is increasingly complex and chaotic, yet they must strive for order and control.

Technology leaders of the future need a sophisticated array of knowledge and skills to be versatile leaders in the college and university marketplace. Cribbin (as cited in Hanson, 2002) argues that leaders need "three guides to action: clue sense, cue sense, and negotiating sense." Clue sense is the ability to understand signals, recognize behavioral patterns, and determine what behavior is appropriate in any setting. Cue sense is being able to detect signals from individuals or organizations in the external environment to build a base of support. Negotiating sense is the ability to achieve a viable solution by understanding diverse positions and goals and gaining support for a position.⁵

Successful Leaders Drive Game-Changing Technology

Leading an information technology program that creates sustainable competitive advantage starts with fostering innovative thinking. The process begins with redefining the opportunity or problem and creating visions that stretch beyond conventional wisdom. In many instances, leaders must challenge traditional paradigms. Effective and innovative use of information technology is one way an organization can simplify a complex industry or process to achieve the benefits of centralized scale while being distributed geographically.





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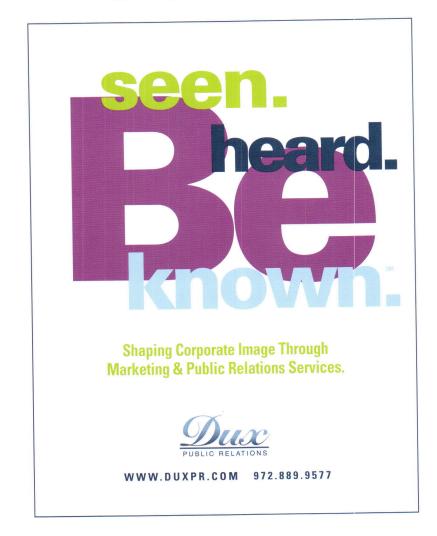
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Today's successful leaders must spend time observing customers and always asking, "Why not?" During every interaction, leaders must demonstrate respect and empathy for the realities their customers face each day. This starts with setting process-performance goals and objectives that create meaningful differentiation in the marketplace. This means changing process performance and customer feel and affecting characteristics such as cycle time, price, and ease of doing business. This requires leaders who are comfortable with challenging the status quo, who will push innovation and consider early how to achieve implementation, and who will convey passion and confidence.

New information technology initiatives developed in partnership with constituents, distributors, or suppliers are generally more successful because the approach focuses technology on real problems, collaboration, buy-in, and common opportunities. The collaborative approach generates continuous improvements that deliver solid financial returns and improved business process performance. Beyond incremental improvement, leading game-changing innovation requires additional leadership attributes and may require pushing a new concept toward users and constituents that they have not requested.

It all comes down to people and relationships. Successful leaders must develop diverse technology teams—with differing backgrounds, skills, and experiences to let the use of technology achieve its full potential. Having a blended team take on new technology strategies can be instrumental



in defining the breadth of the opportunity and ensure efforts are designed for effectiveness and acceptance by users and constituents. This is critical because information technology affects business processes across the organization and can determine the feel of an organization—what many people label the customer experience.

Conclusions for the Future

College and university technology leaders have a unique opportunity to redefine their landscape with technology. Tomorrow's leading colleges and universities are being built today by leaders who embrace technology, understand how it creates innovative capabilities, and have the skills and discipline to execute the change. Maybe your college or university doesn't need to be on the bleeding edge, and maybe you don't have a lot of resources, but you need to ask: What do we need to be focusing on to make our information technology organization ready for the future and ensure that we are enabling the business processes we support to be ready to go forward?

James S. Cross, PhD, is a former president of ACUTA. He is now retired from Longwood University and enjoys his farm in Alabama. He can occasionally be reached at jscross@jetbroadband.com.

Footnotes

M. Fullan, "Leadership and Sustainability," Principal Leadership 3, no. 4 (2002): 14–17.
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4. Gilbert Valdez, senior adviser for technology and codirector of the North Central Eisenhower Mathematics and Science Consortium at Learning Point Associates, "Critical Issue: Technology Leadership: Enhancing Positive Educational Change," available at www.ncrel.org/sdrs/areas/issues/educatrs/leadrshp/le700.htm#dif.

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 \mathbf{v}

^{3.} Ibid.

Looking @ Leadership: Perspectives from Outside and Inside IT

Mick McKellar

Imagine a large oak table, three comfortable chairs, and three experts discussing leadership issues facing IT organizations. Imagine that two past presidents of ACUTA are on one side of the table, and a renowned leadership expert from outside IT is on the other side. Imagine you are a fly on the wall.

The "inside" experts are the two past presidents of ACUTA: David O'Neill, executive director IT/CIO at Boise State University; and Anthony J. Mordosky, associate provost for information resources/CIO at Rowan University. Daniel Granholm Mulhern, first gentleman of the state of Michigan (he's married to Governor Jennifer Granholm) and the author of *Everyday Leadership: Getting Results in Business, Politics, and Life*, is the "outside" expert. They respond to questions from the virtual moderator.

Please give your thoughts on the relationship between management and leadership.

• Outside

Managing and leading are similar in two respects: They are both about working with people and about getting results. The most important difference between management and leadership is that management is associated with position in an organization, and leadership is an activity. Leadership can occur from anywhere. One can lead with authority or without; one can lead down, across, or up.

What holds management and leadership together is the desire for positive outcomes. What can separate them is that management tends to have a focus on sustaining the organization, while leadership may stress or even break an organization to get work done.

Although some believe leadership is more important, focusing on ultimate aims and not being dictated by the particular needs of a management structure, both are challenging activities. It takes great skill and practice to manage well. Yet leadership is probably more difficult because it demands more of the individual.

• Inside

Leadership and management are two distinct but complementary systems of actions, required in our complex and rapidly changing work environments.

Leading doesn't necessarily require an understanding of the present and has little or no compassion for it. Leadership is the ability to see beyond where we are or what we are doing. It envisions the future, communicates it, and incents transition. Management requires an understanding of the present and a compassion for it. Management is responsible for the procedural and often mundane tasks of doing today's business or implementing change.

Leadership and management become superimposed at the boundary of change and are bound by the common thread of change. In turbulent environments, successful leadership can be more difficult. The common boundary is understanding, communication, and trust. It's rare that a single individual has the skills, and, more importantly, time to do both well. A vision must catch the imagination of others, create expectations beyond the ordinary, and speak to a desired end. It must resonate with the audience not just as a good idea but as the most outstanding idea.

Does an IT leader have to be a technical specialist?

• Outside

One can be knowledgeable about all aspects of technology, but only at 20,000 feet.

Probably more important than technological expertise is technological experience. It's invaluable to have worked on the line—to understand where the customer's needs meet a particular process—whether that's technology, serving doughnuts, or delivering shipments. But keeping up with all the specific technologies is nearly impossible, especially in a fast-changing industry like IT. The need for actual technical expertise is probably inverse to the size of the organization.

Coming up through the ranks is a good thing, because the high-level manager will have experienced changes at many levels and will understand what kind of stresses and opportunities they create.

Whether leadership ability or technical expertise is more important depends entirely on the context. If your name is Steven Jobs, it's all about leadership. If, however, you're working at a help desk for Microsoft, it's probably far more important that you know how to help someone through a technical problem.

• Inside

Although it has become increasingly difficult to be knowledgeable about all aspects of IT, one must stay sufficiently informed to ensure delivery of the most appropriate current technologies and current best practices.

IT staff expect a leader to have sufficient technical expertise to be able to have an informed discussion of technology initiatives. This is a challenge for IT leaders at small to midsize campuses, because they seldom have the luxury of having both a CIO and a CTO to share this responsibility. While a level of technical expertise is essential to establishing your credibility with the IT staff, leadership ability is more important. The issue is not about the technology, but about what that technology enables the campus and or its constituents to accomplish.

Because coming up through the ranks is a good thing, identifying, developing, and encouraging staff that have leadership abilities is essential for IT. Many institutions choose IT leaders from outside the IT field—an approach that may work for specific institutions. However, in small to midsize institutions with limited staff, the IT leader is not as involved with the strategic aspects of the IT environment, but most often directly involved in the day-today operations. Having a solid technical background allows these individuals to work effectively with their staffs on both the strategic and tactical aspects of IT functions.

How do you define and articulate a vision, and then lead with that vision?

• Outside

Vision is a picture of future success held tenaciously in the present. A vision by definition is not real, but about clinging to something that exists in the future as a possibility. One always walks a tightrope between having the vision be too far out and having it too close. If it's too far, people get discouraged. If it's too close, it doesn't really generate great motivation.

A couple of leadership skills stand out as particularly important in the IT field. First is listening. IT leaders, especially in complex organizations, have to continually listen to their people to understand how realistic their goals and strategies may be. Similarly, listening to the customer is absolutely essential. Millions of us are familiar with the situation where someone has designed a system or software that works in theory but badly misses the needs of real people working in the business. The practice of listening points to a broader strength—the ability to balance between people and strategic needs. Leaders accomplish their work through other people. Technology only works if it works for people.

IT leaders must understand the whole business of the enterprise, not just that of technology. In large organizations, the structure and uniformity so important for efficiency also ensure that change is slow to come. IT leaders need to fight the rigidity at the same time that they're creating the uniformity. That's another tightrope for a leader to walk.

• Inside

Vision is that magic ability to foresee destination prior to the necessity for change. Vision certainly can be a concrete idea or concept, and the end game is enterprise positioning and success. A vision must catch the imagination of others, create expectations beyond the ordinary, and speak to a desired end. It must resonate with the audience not just as a good idea but as the most outstanding idea. To articulate and make that vision real it must be framed in real terms and must be understandable in the language and environment of the audience. Strategic visioning and the resulting strategic goals must transcend specific technologies, vendors, and products. Vision should be conceptual in nature and not prescriptive. Goals and initiatives should be identified as desired conditions and environments, functionalities and capabilities, or the avoidance of such. Rapid change in the IT world is inevitable, so change tools when it makes sense to and when doing so contributes positively to attaining strategic goals.

IT leaders must understand enterprise vision, mission, and goals, and then apply appropriate IT resources to increase the value of the enterprise, i.e., real ROI.

Is the IT world too complex, and changing too fast, to keep up?

• Outside

Asking whether IT is changing too fast is a bit like asking whether the sun is rising too

early. It is what it is, and you must adapt. One key skill is a persistent drive to look at the map. Whether through annual plans, quarterly meetings, or more frequent meetings with the team, it's essential to keep checking the map to see if you're on course.

Because there is no course on complexity, it is important to cultivate a thirst for learning, and then to welcome change. Two fundamental challenges flow from complexity. The first is getting completely lost in the trees—to get so deep into an issue you lose sight of the overall game plan. The second is running from complexity. Those facing shifts in their world due to technology simply cannot afford to ignore changes. They have to wade in. In the new world, old expertise may be as much a threat as it is an asset.

The nature of complexity creates opportunity, because complexity scares so many people away. It's like playing chess for a living. Those who can think many moves ahead have a great opportunity to win.

Inside

Leadership in the IT world is not all about adopting technology. Although the assessment, selection, and implementation of the right technology is important, these tasks become the role of management once leadership translates enterprise vision and goals into IT goals and objectives. It takes more than a single person to support technology, but one can provide leadership.

It is about and always has been about change, and though the pace of change may be challenging, it is not too fast for one person to lead. First and foremost, IT leaders must have and demonstrate an understanding of the enterprise, the environment in which it operates and its strategic goals, objectives, and priorities. It's not the technology, but the change that the new technology enables, that we as IT leaders must be prepared to address.

We can learn about the new technologies through our professional organizations, consultants, and at times the vendor

An Outside Perspective on Change

Cultural change definitely takes time, patience, and persistence. People crave organization, and efficiency demands it. So today's organization is always built to answer yesterday's problems. You can't change it overnight. How fast you can change it depends largely on the size and history of the organization. The larger the size, the greater the challenge. In a shop of five to 10 people, one can dramatically change the culture in less than a year. When you talk about scaling up to a hundred or a thousand people, you have to measure serious cultural change in years.

IT leaders have a tremendous opportunity to be leaders in times of change. Because the field itself is rapidly changing, and it is bringing productivity enhancements to market all the time, IT leaders can bring products but also bring a mind-set of change. They can do much to ease people's fears, simplify things so people can understand, and help separate the wheat from the chaff when it comes to innovation.

There are three critical aspects to leading change. The first is a clearer vision. Great leaders demonstrate a compelling reason why people should change by articulating a vision of how much better things will be. Second, leaders model the way. You can't sing the praises of technology while having your assistant print your e-mail. Finally, it's important to put markers in place. People need to see what the measurable units of change are, and they need to celebrate as those milestones are reached.

Organizational learning is a tremendous asset to change. In a change process communication is essential, and it has to be two-way. Leaders need to continually push for change, yet listen to, understand, and adapt to the obstacles that arise. Through that learning process, everyone grows and change moves at a pace that is sustainable. community. Most campus constituents do not care what needs to be done in the networking closet or the data center; what they want to know is "How am I going to benefit from the technology?" Our business plans must address the benefits to the campus, not the underlying technology.

Is relational leadership replacing command-and control management practices?

• Outside

In the best organizations IT leaders have become much more important. In the old days they supplied tools, like a die maker would to an auto producer. But now they're actually creating business opportunities. IT becomes not just an efficient way to do what we've always done, but a leading force in finding new ways to be more effective and competitive. With the advent of Web 2.0, social marketing, and other forms of decentralizing power and innovation, IT will only become more important.

In chaotic times relational leadership becomes more important than ever. When chaos abounds, the human tendencies to flee or fight will only rise. And the only way to modulate those two tendencies to escape healthy tension and stress is to communicate. It becomes increasingly important that leaders engage people in understanding and adapting to challenge.

Command and control as a central organizing principle in IT and in modern leadership in general is dead. Some of the central functions of authority will remain true—to organize space and time, to align rewards to effectiveness—but with so much knowledge and innovation taking place at other levels in the organization, it is impossible to command and control an effective organization. Instead we need new models and new language; for example, to orchestrate as opposed to control, to stimulate as opposed to direct. It's time for a whole new kind of leadership. • Inside

EDUCAUSE data (Core Data Services Fiscal Year 2007 Summary Report, September 2008) continue to suggest that senior IT leaders are growing in visibility, responsibility, and authority. This is evidenced by an increasing number of senior IT positions holding seats at the cabinet level and their increasing responsibility and authority for visioning and positioning IT resources within the enterprise.

This continuing change differs from the distant past's rather singular focus on managing the day-to-day applications of IT resources. The growth of the chief information officer (CIO) title and that of a subordinate chief technology officer (CTO) also seems to suggest the elevated expectations. This enterprise-level evolution is in turn felt within the IT organization itself. Senior IT leaders must continue to extend their reach and connections to deans and other department heads to assure a sound understanding of their visions and expectations for IT. In so doing, senior IT positions must be able to transform these into IT visions and then rely upon subordinates within the IT organization to bring such to reality. It places a greater reliance upon IT department heads and managers to demonstrate effective management skills. A greater need for understanding enterprise goals and objectives and how to translate them into operational actions now falls to an increasing number of IT positions.

This trend will continue.

Relational leadership is no less possible in chaotic times than in any other time as long as the group has the necessary level of maturity and understanding. However, this leadership style is best deployed when a situation calls for creative solutions.

Command-and-control-based leadership has and will continue to have a place in IT, particularly in response to mandates or times of chaos demanding rapid actions. It may also be required in the rather mundane tasks which demand little or no creativity. However, as mundane tasks continue to disappear and greater reliance is placed on self-directed teams, relational leadership groups, or similar allaiances, command-and-control leadership will decline. And although mandated change or chaos may continue to require a direct leadership philosophy, particularly within environments resistant to change, the style may not flourish but simply remain necessary.

Conclusion

Experts from inside and outside may disagree on details, but the overall message is clear: IT leaders are agents of change who do not operate in a vacuum. Skilled leadership is more important than ever, and the challenges must be viewed from a variety of perspectives.

Special thanks to our panel: Anthony Mordosky, www. rowan.edu/; David O'Neill, www.boisestate.edu/; and Daniel Mulhern, www.danmulhern.com/.

Elwin "Mick" McKellar is a freelance writer and frequent contributor to the Journal based in northern Michigan. Reach him at mick@mmnetwork.info. Marty Clarke spoke on leadership at ACUTA's Annual Conference in Las Vegas in July 2008. The following material is taken from his book, *Leadership Land Mines*. We appreciate Marty allowing us to excerpt this material and offer it to you as a very condensed overview of his advice on being an effective leader.

Leadership Land Mines 8 Management Catastrophes and How to Avoid Them

Before we get into the leadership land mines themselves, there are two important concepts that we need to cover.

1. Think "Body of Work"

2. Managing the Situation and Leading Your People

Think "Body of Work"

Stop thinking job description or job title and start thinking body of work. Professionally, what body of work are you constructing? If you retire today, what professional body of work will you leave behind? What's the state of your current body of work? These questions are critical because leadership is not a one-and-done kind of thing. It's not a country where you get your passport stamped and you're in. Leadership has more to do with consistency than with victory.

Think of it this way: As of this writing, 39 Super Bowls have been played, which means over 1,750 Super Bowl rings have been awarded. Now compare that with the current number of members in the Pro Football Hall of Fame, which is just over 225. A Super Bowl ring marks you as having won a big game, but a Super Bowl ring is not a free pass to the Hall of Fame. It helps. It helps a lot. But it's not an automatic bid. Not even close.

This is because an induction into the Pro Football Hall of Fame, *any* Hall of Fame, is a reward for consistent excellence *demonstrated over time*. That induction rewards a body of work. A body of work demonstrating excellence gets you into the Hall of Fame, and that's where I want you to focus your thinking, vis-a-vis, your demonstrated excellence in leadership. Stop thinking about your next promotion and start thinking about what body of work you are establishing.

Leadership is (or can be) that thread of consistency that you weave through every professional decision you make and action you take, no matter how big or small. Managers make a million decisions, and each decision demonstrates leadership or it doesn't. These decisions and actions build a body of work. It is your body of work that is going to tell the tale, not your current title or the title for which you're aiming. I don't care what your business card says. Your title does not make you a leader. Your title may put you in a position to lead, but that's about it. Your decisions, your actions, your body of work are what make you a leader. That's why, typically, leaders are said to have emerged over time rather than just appeared all of a sudden.

The good news is that avoiding the most common leadership land mines will have an almost immediate impact on your leadership ability no matter how far along you are on your career path.

Managing the Situation and Leading Your People

Anyone with management responsibility has a tough job for many reasons, not the least of which is that managers live in two worlds. In any given scenario, there are exactly two challenges to which every manager, every leader, must rise.

Every leader must manage the business situation at hand while at the same time leading and developing his or her people. That's it. The managerial universe gets no

more complicated than that. Trust me, that is complicated enough. Both challenges are extremely important, and there are numerous land mines within each of those two parallel universes. Just the ability to *separate* those two challenges can give you an enormous leg up.

· Managing the Situation

Business situations come in all shapes and sizes. Projects need to be completed. Revenue targets need to be hit. Press releases need to be written. Bridges need to be built. Name anything you like. When the dust settles, managers are expected to have produced results. Managers exist because for many projects and goals, teams of people can often produce better and faster results than individuals, and someone must be in place to lead and direct the team. However, many managers get sucked into the soap opera of their team dynamics and lose sight of the bigger business situation. This is very common and very damaging.

[It is necessary to keep] the desired business results in clear vision.... However, the cardinal rule is this: business before people.

The business-before-people rule brings clarity to most critical decision points. Even when you are staring right at your people, the business results need to be in the front of your mind. When the desired goals are clear and ever present in your mind, the soap opera tends to fade away.

Ask any auto racing enthusiast and he or she will tell you that the pit crews of those race cars go over every inch of their automobile looking for the slightest imperfection or inefficiency. Using everything from very high-tech tools to their own hands, they constantly examine the car from stem to stern. They are always looking to remove anything that will slow the car down in the slightest. The sponsors are paying for results. They are paying for wins. In managing a situation, with a clear vision of the business results needed, a manager must act in the same way a racing crew acts. A manager must constantly review the systems, people, policies, practices, and tools being used in any business situation. Anything that is not helping is probably hindering and must be modified or even eliminated.

That is managing the situation.

When I finally latched onto the phrase business before people, my managerial life became quite a bit easier. There was no more good cop/bad cop. All critical decision points eventually became intellectual exercises rather than emotional ones. In fact, because I acknowledge that I am myself rather an emotional person, I was often my own worst enemy in making wise decisions as a manager. When business before people became my mantra, I was able to separate my emotions from the task at hand easily.

In practical application, when puzzled by a decision, a manger needs to ask the following questions in the following order:

1. What is best for the business?

2. What is best for this person/these people?

Asking those questions out of order is usually where most poorly thought out decisions get their start. Asked in the correct order, business before people, a manager has a fighting chance to make a wise decision. Sometimes the answers to those questions can be rather hard to swallow. But managers get paid to make tough decisions and swallow a bitter pill every now and then.

Leading Your People

I can think of very few professional experiences I have found more rewarding and enjoyable than those times when I had gathered the right people around me, creating a team who understood the mission and were motivated to generate results. However, just like well-weeded, blooming gardens do not happen by themselves, neither do high-performing teams. Both happen because of consistent attention and tending. That goes for teams of staff as well as for teams of salespeople. Great teams do not happen organically. They happen because the leader has the presence of mind to *lead* the team, and not just float along with it.

Business comes before people. That much we've established, and that's not going to change anytime soon. However, even though business comes before people, nothing is going to happen without a group of people working together to accomplish common business goals. And, as someone in a leadership position, you send a message to your team every time you make a decision.

The question of "What messages am I sending to my team as a result of this action/decision?" is *critical* to leadership because your people are paying attention to you.

Oh, they might not be doing what you tell them to do. They might not be producing the results you tell them to produce. They might even be acting like people who are patently ignoring you. But they are paying attention to you.

Everything you do.

Everything you say.

Your employees are paying attention to your every move. Each of your moves sends a message that shapes their faith in you:

- Are you worth following?
- Are you worth listening to?
- Are you smart?
- Are you fair?
- · Forget your credentials. Are you credible?
- Do I have confidence in you?
- Are you making a contribution?
- Do you have any backbone?

- Do you care?
- Do you have a hidden agenda?

The list is endless, but what it all adds up to is the most important question in each employee's mind:

• Do I trust you?

That's what you sign up for every day that you show up to work as a manager. The cold fact is you cannot make anyone follow your lead. Your employees might give it a go for a while, but without a pattern of behavior that inspires their confidence, the situation will disintegrate. This is why I emphasize the concept of your professional body of work. You have the power in your hands to shape your employees' faith in you simply based on the quality of your decisions and actions over time. Leadership, when you boil it down, is a trust issue. In all things related to your leadership of your team(s), the constant attention to the health and welfare of that trust is everything, This is why the following two concepts are paramount in leading your people: consistency and conviction.

• Consistency of action and decision-making tells your team that you have a plan in place and that your head is in the game.

• Conviction tells your team that you believe in what you are doing and that your heart is in the game.

Consistency and conviction cannot be taught. They cannot be faked. Either you bring those to the table every day or you don't. There is very little middle ground here. When you act inconsistently, or you really don't believe in what you're doing or saying, you can bet your team can tell. Sometimes they know even before you admit it to yourself. So, when I tell you your employees are paying attention to you, I mean they are paying attention to your consistency and conviction.

Having said all that, let's look at some of the specific "land mines" guaranteed to stop leadership in its tracks.

Managing Your People: Land Mines

1. It's All About Me

Early in your career, when you are still trying to move up the ladder and make it into a manager's position, it's okay to spend time doing the best possible work and trying to get yourself noticed.



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When you keep the focus on yourself, and the It's All About Me land mine detonates, the reason it goes off is because all decisions and actions are being made NOT with the business results in mind, but rather in an effort either to bolster your image or, worse, make sure your image does not get damaged in any way.

This behavior, no matter how cleverly you think you have it disguised, is usually pretty obvious. The people who spot it first are the people who report to you. The team can see it and your credibility begins to erode quickly.

If this land mine has derailed you as a leader, here is some advice: Beware of being obsessed with personal recognition or the need to have your personal agenda served. Shift your focus off yourself and onto the needs of the business. Personal maturity is the antidote for recognition addiction. If you are ever unclear about how to respond to a situation, ask yourself, "Is this a you thing, or is it a company thing?"

2. Managing to the Exception

The Managing to the Exception land mine gets triggered in two ways: (1) Any time a person or a group of people allows an idea to be shot down because it's not perfect, this is "overt managing to the exception." (2) Any time a manager lets a matter of small consequence dictate decisions on matters of large consequence, this is "unconscious managing to the exception."

Overt managing to the exception kills speed, squashes creativity, and reflects poorly on the managers who embrace it. Habitual exception managers act as they do, shooting down ideas and finding every reason, no matter how small, why something *can't* happen for any one or combination of three reasons: (1) They are desperate to show how smart they are; (2) they have a hidden agenda; or (3) they genuinely do not see the big picture. To defuse this land mine before it explodes, remember to pay attention to your radar and see it coming. Ask yourself, "Is this a deal breaker?" If not, call it what it is: Managing to the Exception.

3. The Super Doer

The Super Doer land mine goes off any time you spot a situation or issue that should be handled by a staff member but instead you jump in and resolve the issue yourself. When managers make a habit of jumping in and resolving issues themselves instead of having their staff do it, they unwittingly give up on the very concept central to proper and effective leadership—that is the concept that you are there to lead, to show the way to others, not to do everything yourself. Remember to get out of the way and let your people do their jobs.

4. Blame Addiction

This land mine goes off any time managers spot a problem and then, instead of getting the problem fixed, they spend valuable time and energy trying to find out who is to blame for the issue and how we'll avoid the situation in the future. Two of the rules for avoiding the Blame Addiction are (1) identify the company pain and (2) force yourself into present-tense thinking.

Leading Your People: Land Mines

1. Popularity Priority

Whenever you make a decision based on what will make you more popular rather than what is best for the business, the Popularity Priority land mine goes off. What makes this one so very damaging is that when it gets triggered, you usually feel great without realizing that your professional credibility has taken a hit. Remember that making decisions based on your own popularity is like eating a slice of cake. It tastes good, but if you make a habit of it, you're not going to like the results.

2. Cloudy Expectations

The Cloudy Expectations land mine goes off when assumptions get made about how things are supposed to turn out. Keep two questions in mind: What results are we after? What are the consequences that arise when these results do not occur? Lack of clear expectations often causes massive damage and delays. One of the most annoying features of this land mine is that when it's discovered, it's maddening to see how easily it could have been avoided.

3. Confrontation Phobia

The Confrontation Phobia land mine goes off whenever a manager chooses not to confront an issue because it's just plain easier to take the path of least resistance and let it go. This is an ugly land mine. You have to take this one to heart because this ability to confront issues properly is at the very core of leadership. In the professional world very little works smoothly, gets implemented perfectly, or arises without opposition. Confrontation is the business of meeting challenges big and small and managing through them.

4. Managing by Committee

This land mine is a leadership deficiency so common it defies measurement by conventional mathematics. It detonates any time progress on a project slows down, or a critical decision get delayed or never gets made at all because someone, somewhere down the line decides that he or she does not want to shoulder the responsibility of being entirely accountable. Remember: Lonely is part of the job. Do not fear it and do not manage around it.

Keep these leadership land mines in front of you. Burn them onto your mental C drive and never lose sight of them. These are specific behaviors that cripple your ability to lead effectively. Just being mindful of them will make it easier for you to avoid them.

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High Tech and Highly Effective

Paul Korzeniowski

If you are responsible for the technology on your campus, you're positioned like never before for leadership. More than just a convenience, technology has become an essential part of the delivery of educational resources. On many campuses, this has led to a new, more visible, more influential role for those who provide technology services. Look around your campus for new opportunities—they may be yours for the taking!

The Campus—Both Real and Virtual

Running an academic institution has become more complicated as technology has obliterated physical boundaries. Competition has intensified as many institutions are trying to branch out beyond their initial comfort points and into new disciplines. The traditional geographic reach of the college campus has far less impact on today's planning with the advent of new online courses that allow students down the street or across the globe to attend class. Current and prospective students have access to more information about their academic institutions, and the technology landscape is very significant.

Consequently, academic institutions find themselves maintaining a precarious balancing act. They need to find ways to respond to changing market dynamics, such as online learning, that are prompting them to reevaluate their typical student profile. They have to service students who are familiar with technology and demand it academically as well as recreationally. They need to make strategic decisions about a myriad of technical options that will influence how they operate as well as how they deliver educational services to students. In short, they need to find ways to use technology to their advantage.

Academic leaders agree that technology is having a profound impact on the learning process. The biggest change has been the advent of online learning. Since many homes now have broadband access, students are able to access course information at any time and on any day. This change has enabled colleges to break down traditional barriers and reshape campuses. "As globalization increases and boundaries are removed, we have a greater opportunity to tap into a wide range of resources while reaching an ever more diverse audience," stated Jim Hunt, provost at Southwestern University in Georgetown, Texas.

Schools are no longer limited to serving students in their immediate area; they can offer services to individuals who are located halfway across the world in some cases. This is changing the way that schools recruit prospective students. Many have a significant Internet presence and have immersed themselves in Web marketing.

Others are even using technology to increase their student population base. Founded in 1875, Park University in Parkville, Missouri, was an independent, liberal arts, four-year, coeducational, residential Christian institution. The university then began to serve one underserved demographic: military personnel. Park now operates 43 campus centers in 21 states and relies extensively on online technology to deliver content to students who might not be able to attend traditional classes. "Technology has helped to fuel our growth," noted President Beverley Byers-Pevitts. Since 2001, the number of students has increased from 17,000 to 42,000.

Opening the Door to the Working Student

The growing use of online technology has also changed student demographics. Nontraditional older students are now able to take courses online and access information during the day or at home or on the road at night. Working a full-time job and raising children has historically meant that such individuals had to put their educational plans on hold. Now, they have the ability to take classes when it is convenient for them. They have the flexibility to develop their own academic schedules.

Pushed largely by new online models, the way that education has been delivered has been changing. The "smart classroom" has evolved from a novelty to a core component on many campuses. Few professors pass out thick, multipage paper syllabi that students have to thumb through. Electronic documents and items, such as e-books, have become common tools in the classroom.

Technology has provided faculty with new ways to engage students in the classroom. PowerPoint has replaced the traditional chalk talks, and students rely on laptops rather than paper binders to take notes in their classes. "Video content is being used more often on our campus, and it helps faculty reinforce key messages to students," said Su-Pyng Ku, vice provost at the University of Southern California. Recording technologies are becoming simpler and making it possible for instructors to prepare podcasts or videocasts that their students can review to enhance comprehension. Videoconferencing can enable students to interact with professionals whose busy schedules don't permit them to travel to campus.

No Need for Office Hours

The nature of teacher and student interactions is also changing. Office hours are becoming a relic as new tools enable students and faculty to interact anytime during the day or night. "I can communicate with students in my elections class between class meetings to update them on news items, clarify class assignments, and answer questions about expectations," explained Lyon College president Walter B. Roettger. The instant access meshes with the students' fast-paced life and their desire to collect information as soon as possible.

As a result, in today's age of instant gratification, colleges have become much better at meeting students' expectations. The days of waiting weeks for schools to post and mail grades have disappeared. "Course management systems did not exist 10 years ago, but now are de rigueur on campuses," said Maurice Matiz, vice executive director, Columbia Center for New Media Teaching and Learning, Columbia University. These systems provide online management tools for the instructor, such as class rosters and grade books, that students can use to track their progress during the semester. Many of these products feature online tools for collaboration, annotation, and communication. Northern Iowa University specializes in education and now mandates that all of its students become familiar with at least one learning management system before graduation.

Some would say that academia has only scratched the surface and even more dramatic changes loom on the horizon. "The increasing use of Web 2.0 and social networking has the power to dramatically realign our instructional techniques," stated Jim Sage, vice president for information technologies and CIO at the University of Akron. In some cases, faculty members are already using new social networking sites, such as Facebook, to interact with students.

Ready to Go to Work

Technology could alter the educational process even more dramatically in the coming years. "In the future, I would hope that new methods of delivering content to students will enable them to arrive at class with a thorough understanding of the materials," said Marilyn Drury, director, ITS Educational Technology, University of Northern Iowa. Rather than spend time sitting in a lecture and trying to absorb the material, the classroom will be used for collaboration, so students will be able to work with the material in a more substantive manner.

The influx of new technology-based tools is having a vocational as well as an educational impact. "We recognize that in today's knowledge economy, students must be technologically competent," stated the University of Akron's Sage. One would be hard pressed to identify a job that does not require at least minimal computer skills, and the nation's top firms mandate computer fluency among applicants for the most desired management positions.

In addition to a basic understanding of technology, students are also gaining a valuable resource that can help them in their careers. A growing number of colleges have been putting electronic portfolio programs in place, so students leave with samples of job-relevant schoolwork. "Increasingly, students are starting to see the value of their electronic portfolios," said Drury.

Students Demand Technically Advanced Campuses

Most students seem quite comfortable using technology. They have grown up in a world where PCs were available when they were in their cribs, and Internet use was becoming common as they entered kindergarten. Many adolescents have spent countless hours texting friends in middle school and expect to be connected 24 hours a day, seven days a week. They are uncomfortable when connections are down.

"I think the key right now for addressing the needs of our students is to ensure that we have adequate access to the Internet via ubiquitous wireless networks," said the University of Akron's Ken Torisky. "It is my impression that students expect this kind of service."

That impression has become quite common on campus. Across the nation, many schools have instituted laptop and wireless networking programs. During the past two years, Lyon College has extended wireless connectivity across its 136-acre campus, so in the fall of 2008, freshmen arrived on campus with a laptop and able to connect to the Internet from any place on campus.

Technology's reach is extending beyond the classroom. It has become a tool to help academic institutions improve their business processes. As academic institutions push for accreditation to offer fully online degrees, they have to examine their own student services. Such a process can produce streamlined operations and processes that benefit all students. Administrators no longer wade through large paper files as registration has moved online. Complex financial aid filings are done electronically now rather than manually. Technology has enabled colleges to reach students in a moment and establish systems, such as campuswide notification systems.

Expanding the Faculty Pool

In addition, new academic collaborations, large and small, are being formed. Via videoconferencing, the University of Northern Iowa offers a robotics course that is team taught by its faculty member and a cohort in Texas. Its U.S. history class relies on faculty and students from its campus as well as students in Moscow.

Columbia has embarked on a Global Learning Initiative, which centers on distributed-learning initiatives with a variety of other universities. The academic institute has created courses and even programs of study based on the desire to stretch out its campus. Satellite campuses and research institutes are spread out in the United States and around the globe. One example is the university's Leadership Initiative, which is being run in cooperation with UCLA. It is a one-year training program designed to help cultivate emerging women leaders in South Africa who will make a major contribution to HIV/AIDS prevention advocacy at the local, regional, or national levels.

Technology is also enabling academic institutions to stay in contact with their alumni more easily. The idea is to maintain a relationship after graduation. Academic institutions have used technology, such as e-mail and newsletters, to make graduates aware of new initiatives and have now begun setting up alumni social networks, where they can exchange information about their academic, personal, and professional experiences.

Where Is the ROI?

While there has been a great deal of progress in the use of technology, there are costs associated with technology. Many of these projects have multimillion-dollar price tags: Southwestern invested approximately \$3 million to equip its faculty and students with updated computers and wireless networking features. So, how do academic institutions justify such expenditures?

For some, they have simply become the cost of doing business. "We believe that staying current with technology is mandatory if we are going to continue to recruit outstanding students and faculty," stated Southwestern's Hunt.

Success in any business means making wise decisions regarding large expenditures. To help make the best decisions, universities are looking more frequently to experts. For example, USC has instituted a new position, director of learning systems, who will be responsible for marrying technology and the classroom. Because so many of the initiatives are so new, finding individuals qualified to fill such positions is a challenge. Indirectly, this has an impact on the rising profile of the IT director. On a growing number of campuses, as the technology landscape expands, the IT/ICT manager/director position has risen from a middle-tier to a top-tier position on the organizational chart.

Conclusion

Moving forward, academic institutions face plenty of daunting challenges. "I think the biggest challenge we face is finding the resources to maintain a competitive edge in the area of technology," concluded Hunt. If you can do that successfully, you have indeed earned your place at the leadership table.

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Accepting the Award for Lee College was Jim Evans, network support specialist, second from left. Also shown, Walt Magnussen, ACUTA president 2007-08; Carmine Piscopo, immediate past president and chair of the Awards Committee; and Chris Muller from PAETEC, sponsor of the award.

Institutional Excellence Award Lee College Award sponsored by PAETEC

> Chambers County is a rural county less than 20 miles east of Houston in the coastal prairie region of southeast Texas. Its 616 square miles of level terrain slope toward Galveston Bay and the Gulf of Mexico. The county is separated into two distinct areas by the Trinity River. The area west of the Trinity is close to suburban Houston and has several large petrochemical

plants that provide a strong tax base for the communities in which they are located. The area east of the Trinity is much more rural with a population earning low wages from commercial fishing, farming, and various other low-paying jobs. The difference is illustrated by school district data: 19.2 percent of the school age children in western Chambers County are economically disadvantaged compared to 48 percent in the eastern portion.

Lifelong learning has been a problem for citizens in this county. Until CCCnet, there were no GED, ESL, or citizenship classes available for adults, yet only 48 percent of the adult population over 25 have a high school diploma. Providing these opportunities is a challenge. According to a survey done by the partners for the CCCnet grant project, only 25 percent of the population has a computer and even fewer have access to the Internet. High-speed Internet was available to the public only in three county library branches in towns that contain 18 percent of the economically disadvantaged population.

The CCCnet project included the installation of ten mini-computer labs, located in some of the most inaccessible and underserved parts of the county connected by broadband wireless technology offering high-speed Internet service. Lee College provided training to ensure that the technology is actually used by those for whom the project is intended. The Chambers County Community Network is governed by a consortium consisting of Lee College, Chambers County, Chambers Liberty Counties Navigation District, East Chambers Independent School District, and the Trinity Bay Conservation District.

The most demanding challenges were building four 150-foot towers, wiring ten buildings, coordinating with governmental agencies, training users, and finding a company to maintain the system. Once the wireless network was installed, we had to indicate how we would maintain the network and pay for that maintenance. The consortium did not want to maintain the growing number of wireless customers in the area. In 2005, the consortium partnered with TeleShare Communications (now Internet America) to maintain and sustain the wireless network. TeleShare Communications Services was very successful in offering wireless Internet service in the Crosby area and were looking to expand coverage to Baytown and Chambers County.

Planning, Leadership, and Management Support

During the initial phases of the project, Lee College was the fiscal agent responsible for project management. Established in 1934, the college is a comprehensive, public two-year community college. Lee College serves more than 160,000 residents and enrolls more than 12,000 students each year. The main campus is located in Baytown, Texas, 25 miles east of Houston.

In the initial planning stages, we were looking for several things. These concerns had to be addressed and resolved before the actual network design work began. 1. Practicality of locating computers in unattended locations (i.e., Hankamer, Oak Island). Inexpensive motion detectors and computer mini-cams connected to the network would provide security.

2. Practicality of locating computers in "community buildings" in general. These are large open rooms, not well suited to storing and securing computer workstations. More consideration of mobile/laptop labs was needed, along with hardened enclosures.

3. Tower requirements, including evaluation of line of sight.

4. Facility preparation required. Several locations had power issues.

Of course, we encountered several surprises, including the following:

1. There were too many tall trees at Wallisville, Hankamer, Pine Island, and Smith Point. We're looking at 150 foot towers at those locations. Beach City had a tower, but we needed to add about 40 feet.

2. We needed to approach several entities about use of their facilities. We needed to locate antennas on water towers in Baytown, Anahuac, Stowell, and Oak Island as well as the tower at Barbers Hill School.

3. In many of the locations, the volunteer fire department (VFD) is in the same building or very near. Distance learning is a critical requirement for the VFDs, so we considered providing something in those buildings as an enhancement. It would also get them involved and provide them with some real time information and distance education for ongoing training.

At the first meeting, copies of the grant proposal were distributed, reviewed, and discussed. Major points were highlighted, duties of committees were outlined, and members were selected for four committees. One of the key strengths of the project is the strong partnership that was formed from governmental entities in Chambers County. Because the partnership believes that the success of CCCnet is based on the continued involvement of the county, the ISDs, the college, and city governments, it proposed cooperative agreements rather than a legal entity for CCCnet.

Purchases of equipment and other property of CCCnet were arranged through a series of inter-local agreements between the college and the appropriate city, county, or school district officials. Partners committed to in-kind donations including personnel, facilities, utilities, security, existing hardware and software, office space for the project coordinator, use of office equipment such as telephones, computers, copy machines, training materials, and so on.

The overall effort of the project integrates very well with Lee College's mission, which states: The primary purpose of Lee College is to provide quality instruction for its students. Through a variety of programs and services, Lee College prepares students for success in higher education or employment. Lee College also provides a broad-based program of extension courses, distance education, adult education, continuing education, and community service.

Promotion of Technology and Maturity of Effort

Lee College network comprises a gigabit backbone network with campus buildings connected via single mode and multimode fiber to the network operations center (NOC). The NOC provides Ethernet connectivity between buildings and its associated switching site. The campus LAN connects routers and PIX fire walls to the Internet supporting both Ethernet and MAC O/S.

Using a wireless bridge, networks located in buildings miles from each other were integrated into a single wide-area network. The solution used 802.11a 54 Mbps standard. From the point-of-presence, the wireless network will use parabolic antennas to extend the wireless network to a central location inside the county. From there, additional parabolic antennas will extend the reach to rural areas at the furthest ends of the county. For buildings located within a couple of city blocks from each other, omni-directional antennas will be used for wireless connectivity. We found that the 802.11a standard was far more stable and reliable than previous wireless networking attempts, and not subject to interferences such as rain, fog, and large bodies of water.

The network solution is a combination of Axxcelera Broadband 5 GHz along with Western Mux gear deployed to obtain a high quality, commercial grade network. Axxcelera Broadband Wireless is the preferred solution for high-speed Internet services based on Axxcelera's point-to-multipoint AB-access fixed broadband wireless platform.

The AB-access solution consists of both wireless access points (WAPs) and subscriber units, purpose-built for WAN deployment. Towers were constructed at some locations to ensure line of sight (LOS). CCCnet has 10 public access points, most of which will be located in community buildings in Chambers County. The locations provide computers, printers, and required software. Most of the locations are community centers used by neighborhoods for a variety of purposes, from neighborhood meetings to family reunions. The sites were chosen based on community surveys and a study of county building availability. The planning committee identified locations in neighborhoods with underserved and/or isolated populations.

Quality, Performance, and Productivity Measurements

We employed various tools to monitor traffic flow during the initial development of the wireless network. Using Solar Winds Network Management software, we were able to get visibility into the performance of applications and the underlying operating systems and servers they run on. We were quickly able to determine the root cause of application performance issues with a unified view into the network. With the results, we were able to measure bandwidth speed and determine if a problem was hardware, software, or both.

We continued to experience problems with the initial installation of the main link from Baytown to Mont Belvieu. The interface into which the Axxcelera backhaul was plugged showed an extremely high collision and error rate. When running ping tests to this interface, we experienced a high incidence of packet loss.

After reviewing the data from the network management software, CCCnet's governing board agreed that the solution would be to replace the Mont Belvieu Axxcelera link with a Motorola Canopy backhaul and add in high-end Cisco routers in Mont Belvieu and Baytown to handle the routing required. Since that time, we replaced the wireless network configuration with Motorola Canopy 5.7 GHz at several key locations. We were finally able to achieve a 95 percent uptime with the system.

The system is self-sustaining, which meets one of our key goals. We were paying half of the funds for maintenance and improvements, but in October 2007 we had accumulated enough credit to pay off the expenses that had been used to improve the network initially. Now all funds allocated for CCCnet go directly to the consortium for continued maintenance, sustainability, and scalability. We currently have more than 850 residents using CCCnet.

The following measurable, specific outputs and outcomes were accomplished and continue to be evaluated each year. The objectives directly relate to the goals of the project.

- 1. Establish wireless network.
- 2. Provide high speed network.

3. Set up 10 mini computer labs with a total of 50 computers.

4. Conduct training sessions on equipment maintenance.

5. Using networked computers, conduct workshops in Internet and email usage for county residents and/or volunteers.

6. Recruit 10 volunteers to serve the mini labs.

7. Demonstrate that Chambers County residents are more comfortable with the Internet.

8. Increase end-user attention to education, research, and medical information through countywide mini labs.

9. Increase residents' knowledge of county services through website.

10. Create self-sustaining Chambers County Connection network.

Cost, Benefit, and Risk Analysis

All CCCnet partners committed resources to the completion of the project, including such things as building space for labs, hardware, training, technical assistance, management expertise, security, and more.

CCCnet contracted a project coordinator, a network engineer to complete a site study in order to ascertain exact locations of the wireless towers. This person also provided training to project partners and Lee College Cisco Academy interns in basic troubleshooting and maintenance as well as ongoing troubleshooting.

The governing board worked with the community and Lee College to develop risk management procedures that describe how risk management fits into the system development life cycle and defines roles of various personnel who support and use this process. It also includes a risk assessment methodology, the steps in conducting an IT risk assessment, and a risk mitigation process.

Customer Satisfaction and Results to Date

CCCnet was originally conceived as a means to serve the needs of the underserved citizens of Chambers County. The end users of this project have low incomes, lack high school education, and have limited technology skills. Our purpose was to stem the cycle of poverty and the high dropout rates.

One of the major objectives of the grant included promoting participation in civic life and enhancing the community socially, culturally, and economically. The leadership realized that to ensure success and a positive return on the investment requires an overall plan for using technology to successfully achieve long-term as well as short-term business goals and objectives.

At the opening of one of the minilabs, we saw firsthand the reaction of the various users to the wireless network and free Internet access. As we walked into the library, children of all ages were surfing the Net on networked computers provided by the grant. A librarian was helping a single mother set up an e-mail account for the first time. She needed an e-mail address so potential employers could respond to her request for job leads. Near the back of the library was a young man who had dropped out of school, taking a refresher course in preparation for his GED test. A librarian was showing a grandmother how to download pictures of her grandchildren who lived in New York.

The social benefits of a community network are a powerful reminder of just how important it is to provide education and resources for young people who want to continue living in their communities. It is a chance for everyone in the community to share the opportunities and benefits of the Information Age.

Dr. Carolyn Lightfoot is Lee College's CIO. Reach her at clightfo@lee.edu.

What Kind of Leader Are You?

Dipak Parmar

As the world freefalls toward global recession, we are facing unprecedented challenges to make our businesses more resilient, efficient, and effective. Colleges and universities are not insulated from the pressures of inflation and recession; we, too, must find creative ways to improve the way we work in order to survive and succeed. Implementing wide-ranging changes, converting challenges into benefits, requires strong leaders who know how to inspire and motivate.

Creative thinking flourishes in an environment of effective leadership that is focused on a vision consistent with the mission of the institution. Every organization has a vision. Long-term plans will contribute to that vision, and leadership opportunities arise at all levels. Our institution may have a vision of being the premier university in the state in providing technology services to students and staff, and that may be an element in a five-year plan to attract the best faculty and increase enrollment. Specifics of our long-term plan may change with new and improved technology, but our vision will remain the same for a long time.

Innovative thinking that leads to success even in turbulent times comes from our chief assets—our own staff. A wise leader knows that investing in our staff will bring lucrative results in terms of productivity and employee satisfaction. We attract them to our organization by creating a brand image; enable them by providing continuous education (leadership by direction); connect them to others within the organization and industry (leadership by association); empower them by delegating more authority (leadership by delegation); and retain them by rewarding and recognizing their contribution (leadership by attraction).

Leadership by Direction

Sometimes new staff are welcomed to our department with very little actual instruction or guidance. Properly training and guiding new staff enables them to understand our organization and its vision, strengths, and limitations as well as the roles and responsibilities of the department and the value additions expected from them as members of the team. Assigning a mentor may shorten the time between uncertainty and confidence for new employees. A certain amount of hand-holding may prevent costly mistakes and enable them to blend their career paths with the vision of the organization. The mentor could also identify education and training needs and encourage them to partake of opportunities for growth.

Leadership by Association

Connecting new staff with internal and external customers and industry experts presents the opportunity to identify changes that may benefit the department or the entire campus. Someone with a fresh perspective can often see something that isn't so obvious to those who have done things one way for a long time. If new staff recommend changes, make them more acceptable to existing staff with a report detailing possible methodologies and a cost-benefit analysis for incorporating changes into the system. Invite feedback from those who have known the business and worked with the customers for a long time. Emphasis

should be placed on meeting existing and future needs of the customers.

All staff should be encouraged to join appropriate technology groups and participate in external training or workshops to upgrade their knowledge on a continuous basis. A corporate culture of lifelong learning for staff at all levels has a positive impact on the work environment as well as professional development benefits.

Leadership by Delegation

Groom staff with potential for leadership by delegating as much authority as appropriate and monitoring their progress. It's best to give them a whole task of their own to complete. If that isn't realistic, make sure they know what the parameters of their task are and how it fits into the project of which it is one component. Connect them with the rest of the team, and provide clear directions. Explain what the expectations are and how results will be measured. (This will make performance more measurable and less subjective, too.) Under certain circumstances, let new staff commit errors and learn from their own mistakes. Until you know someone's capabilities, you must, of course, review their progress regularly. Identify the key points of the project they're assigned to or dates when you want feedback about progress. You need assurance that the delegated task or project is on track. Knowing that others are depending on us and that we will be held accountable helps all of us meet deadlines.

Leadership by Attraction

Retention is a result of reward and recognition. Even with today's budget cuts, we can improve retention by providing a positive work environment and a variety of nonmonetary benefits.

A positive environment is characterized by the free exchange of knowledge and ideas among staff. Ongoing communications, both formal and informal, encourage healthy relationships and teamwork. Everyone is congratulated for a job well done and praised for his or her specific role. Everyone's contribution is recognized, even if it's just congratulations voiced at a staff meeting or a letter of commendation placed in a personnel file. Every employee comes away from a successful project feeling ownership for his or her particular tasks, and is proud to be an accepted part of something bigger than himself.

Other nonfinancial benefits include such things as extra time off, flexible hours, discounts, special parking spaces, occasional social events such as a pizza day, and so on. Making people feel valued will improve your staff retention rates.

Conclusion

What kind of leader are you? If you haven't looked at your department from the ground level lately, maybe these ideas will help you get a perspective on leadership that will improve your own effectiveness. Dipak Parmar is a techno-legal professional and freelance writer. Reach him at dipak@journalist.com.



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support has become timeless. No longer are standard business hours an acceptable parameter for provisioning support services. Similarly, no longer can support services be limited to just the classroom or campus.

Staff resources still represent the greatest cost and limit to providing support services. These tech-savvy millennials express



With more than 19,600 students, Boise State University is the largest institution of higher learning in Idaho. Its main campus is situated on 175 acres located within walking distance of the state capital building and Boise's bustling downtown. Boise State has long been heralded as an institution devoted to classroom teaching, but a new dimension to its mission is emerging—that of a metropolitan research university of distinction. Today, the breadth of programs and services offered and its unique location make it one of the nation's best places to live and learn. The university has eight colleges, a full-time faculty of more than 600, and a full-time staff of more than 1,300. Boise State also operates two facilities in the neighboring county: Boise State West, a 150-acre site, and the County Center, where a variety of academic, noncredit, and applied technology courses are offered.

The university is connected to the Internet via 10 Gigabit Ethernet, is 100 percent VoIP with SIP trunking, and hosts ubiquitous wireless network access campuswide. The recent completion of a four-story 54,000-square-foot Interactive Learning Center with multimedia labs, multipurpose/distancelearning classrooms, a visualization classroom, and an experimental classroom only punctuates the already broad-based set of teaching and learning technologies found campuswide. The university is a charter associate of the newly created Idaho Regional Optical Network (IRON) that provides high-bandwidth network access for research and education throughout the state and region. preference for online self help, demonstrate little patience for explaining problems to help-desk representatives, and regularly seek support both nights and weekends. We've attempted to exploit these characteristics by creating the "Help Desk Self Service" link. This online knowledge base is generated from campus support calls and is updated daily with issues and resolutions.

A quick search of this online knowledge base provides a response to just about any tech problem experienced at the university over the recent past. In addition, if resolution is not readily found, an online service request from this website can be created at the click of a mouse. The request is then automatically routed to a service-call logging system notifying the appropriate staff resource. It also provides request tracking and a personal log of requests and resolutions. Support staff resources are then more able to focus on unique or alternative-priority issues. And yes, we still answer the phones during normal business hours at the help desk when someone calls and wants to speak to a real person.

The need to provide support services for the very broad spectrum of technology held by students is now mitigated in part by relying on the student's technology vendor to support the device. University support staff is then able to focus on university applications and interfaces rather than the device itself.

The integration of technology, applications, and pedagogy has blurred the distinction between specific support services and continues to pressure the consolidation of these support services into a single organization. A single, centralized help desk is also being envisioned and discussed.

The need for onsite, after-hours support continues to be problematic and a looming priority.

Q. Aside from funding, what issue are you, as the CIO, currently spending most of your time addressing?

A. Boise State University continues to aggressively transition from its traditional mission of providing strong supportive teaching to a mission encompassing research in a metropolitan university. As a result, I find myself focusing energies on visioning and preparing the university for the IT organization, staffing, funding, authorities, responsibilities, and governance changes necessary to support this new and expanding mission.

The university has, over the past two years, adopted a new strategic plan outlining its new visions, goals, and strategies. Each of these must also be uniquely translated into college and departmental visions, goals, and strategies. The Office of Information Technology is also so engaged. I believe strategic vision should be conceptual in nature and not prescriptive. The associated strategic goals and strategies must transcend specific technologies, vendors and products and should be identified as desired outcomes, environments, functionalities, and capabilities, each with measurable characteristics. It's also important to envision process (governance) by which the IT alternatives can be vetted, prioritized, funded, and implemented. I've found it valuable to work initially with each dean and department head to clearly understand their expectations and share alternative IT approaches or strategies for achieving their goals. This one-on-one starting step is time consuming and often an iterative process but one rendering a sound understanding of vision and expectations. Resulting IT directions, project proposals, suggested priorities, and resource requirements will then be put before the IT Advisory Committees and then before the Governance Council for final review, endorsement, funding, and prioritization.

Rapid change in the IT world is inevitable. Information technology represents the tool set from which tools are chosen for attaining strategic goals. It should not be a goal in and of itself. (It may, however, act as a performance indicator.) Let the tools change. Better tools are always appreciated and can always be put to good use. Change tools when it makes sense to do so and when doing so contributes positively to attaining strategic goals. What is important is an understanding, acceptance, and attainment of goals.

Q. What is the impact of this issue for your campus? What is your strategy for addressing this issue?

A. The impact is simple—change. The first step as I shared earlier is to understand the university's visions and goals as they were translated by deans, department heads, and other university leaders. This just takes time and a willingness to sit with a broad audience on campus, often one at a time. Once these are understood, IT has two general responsibilities. The first is to envision and communicate an IT organization and environment capable of moving the institution toward the vision and goals. This may mean a significant change in organizational structure, resources, authority, and responsibilities. This is often a tough sell. The second responsibility is to bring forth alternatives, impacts and costs germane to the translated visions and goals so as to generate productive dialogue and collaborative decision making. This is possible only when there is a known, inclusive, and accepted IT governance structure. The process of vetting alternatives, establishing priorities, allocating resources, and monitoring progress must be open and documented. Fortunately, I have had a sound and effective IT governance structure on campus for a number of years. I'm therefore focused on vision and goals, and their impact

on IT organization and environment. I will in short order be fully engaged in articulating and discussing reasonable IT alternatives, impacts, and costs.

Q. Given that a key function of the CIO's responsibility is preparing the campus to support future technologies, what technology changes do you see for your campus as you look forward five to seven years?

A. The first is the commoditization of services. Many functions that have been traditionally the onsite responsibility of a campus IT group are becoming increasingly more standardized, more readily available, technically more demanding, or simply less expensive in the marketplace than can be created and supported in-house. We've already seen a good deal of this commoditization under the titles of outsourcing, facilities management, collaborative ventures, cloud computing, and others.

Many schools have recognized that the functions of e-mail and calendaring can be off-loaded at a significant reduction in costs with a corresponding increase in capabilities. Campus staff support can then be refocused on demands unique to the enterprise. Even ERP systems particularly within the functional areas of accounting and HR are being recognized as more standardized and thus targets for outsourcing or collaborative hosting solutions. I've moved some of these services off campus already and will be looking to transition additional applications and services off campus as business cases will support.

The second is the continued digitization, cataloging, indexing, and ever increasing availability of information. This will place greater demand not only on systems and network bandwidth but on those whose responsibility it is to manage this digital asset. The traditional roles of librarians, institutional researchers, and database administrators will continue to evolve at a significant pace. I project a change in reporting structure and responsibilities over the next few years for institutional research and reporting as a result of the data-warehousing and reporting tools beginning to appear on campus.

The third is a greater standardization and reliance upon interactive video and visualization capabilities for teaching and learning. This technology will become more user driven and user centric with greater capabilities but demanding fewer technical support resources.

Thanks to Dave O'Neill, former ACUTA president, for responding so thoroughly to our questions. Reach Dave at doneill@boisestate.edu.



DAVE O'NEILL, CIO BOISE STATE UNIVERSITY

Q & A from the CIO

Q. Much of the technology we now support in higher education is driven by consumer electronics. What decisions about your technology infrastructure have been affected by this and how?

A. Wireless technologies have most certainly driven a good part of our technology infrastructure over the past few years and along with it the demand for greater security. Network access, whether from a laptop or handheld device in the classroom, foyer of a building, a lunch table in the student union café, or on the lawn between buildings, continues to be a strong factor in prioritizing and committing IT resources. Authentication to network accessible resources now creates challenges not only for network equipment and software but also for application site licensing models. Site licenses that in the past have been bound by place or point of user access need to be reviewed and updated. The concepts of single sign-on, user authentication, web-link access, and site licenses are complex. We are currently reviewing licenses with our vendors to ensure compliance and whether changes in license agreements and/or infrastructure are necessary. Until application licensing agreements accommodate new technologies and their architectures, administrative limitations will continue to challenge technology, access, and compliance.

The growing availability of video capabilities in the consumer market has also placed an increasing demand on campus technologies. Bandwidth is the most obvious segment of the infrastructure affected but too the technologies and applications in the classrooms, labs, and residence halls. The number and varieties of video applications and technologies and demand for their increased use raises questions of standards, support models, and tools as well as policies for the fair and acceptable use of content.

Q. Freshmen at most institutions today are far more extensive users of technology than those of even five years ago. What is the most challenging technical aspect this presents for your campus?

A. The digital generation—or more specifically the millennials as they have become known—bring to campus an expectation for technology unlike any other generation. Technology is a part of their everyday lives.

Text messaging, e-mail, podcasting, and streaming video are commonplace. They use the Internet, play video games, download music to mobile devices, or multitask with a cell phone with little thought to the technology itself. It's part of their play, entertainment, and social interaction. They demand greater access to information at ever increasing rates. They are visual, menu driven, and multitasking. In short, they are exceptionally techno-savvy. They expect this technology and its devices to be fully integrated into the pedagogy and their learning experience.

Q. In what ways has this affected how you deliver support services?

A. As technology becomes the utility for teaching and learning, it brings with it an expectation that "it's always on and support is always available." Demand for

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