Transforming
Student Services

*The U. of Minnesota takes a fresh look
at client/institution interaction*

by **Robert B. Kvavik** and **Michael N. Handberg**

Transformations take many shapes. They can be structural or functional, subtle or dramatic with major or minor impact on institutions. They can be radical and revolutionary occurring rapidly in response to external pressures for change or they can be evolutionary and stable. They can be driven from within the organization with broad participation and expectations for change by the membership or they can be driven by a few individuals, often from the top down, with varying levels of resistance to change. They can be comprehensive or narrow, occur with great fanfare or quietly. With transformations, anything is possible.

The student services transformations at the University of Minnesota are affecting both structures and functions in rapid, dramatic, and comprehensive ways with major impact and consequences for the university. Staff participation is gradual and incremental, but student participation is enormous and growing. The public response to and acceptance of the transformations have been overwhelmingly positive.
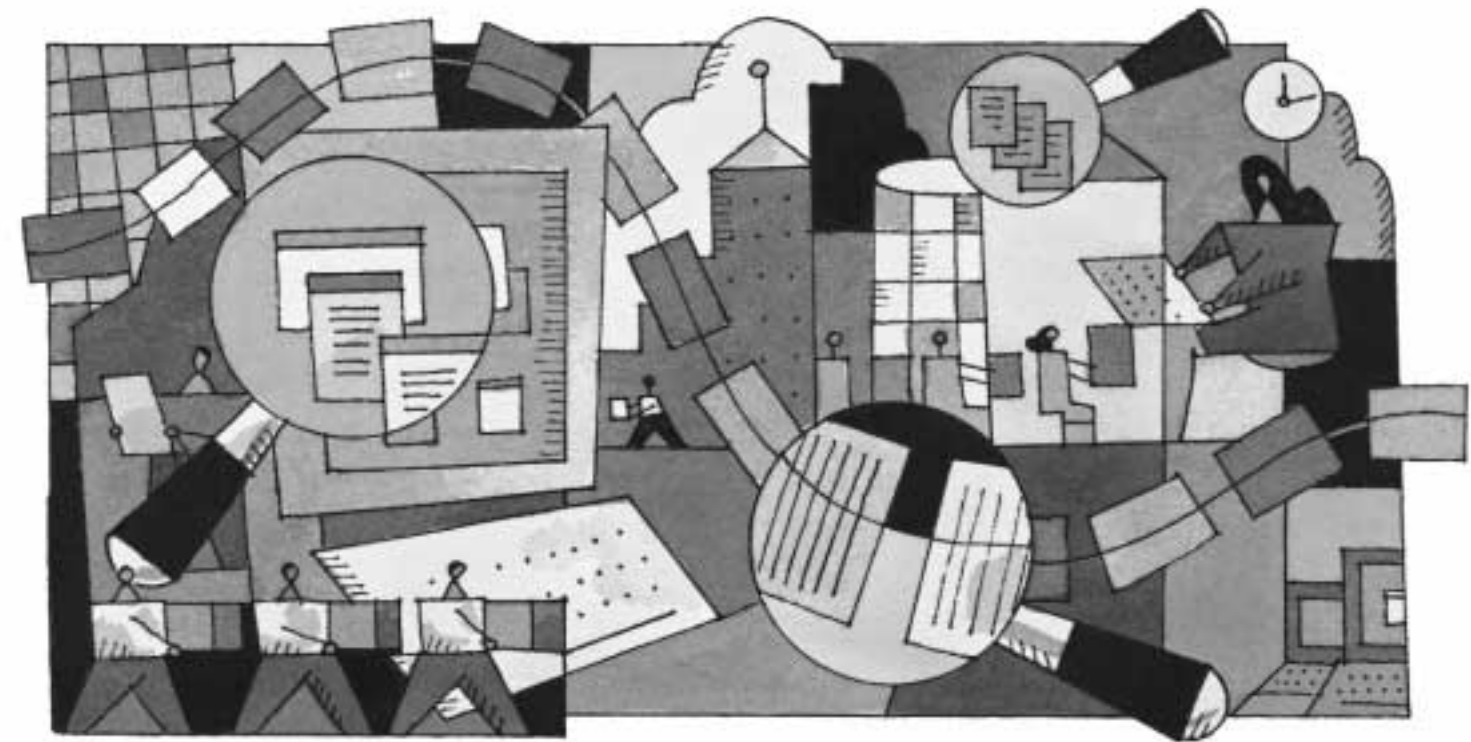
Two transformations in student services are especially noteworthy and represent a sea change in how student service units support the university community. First, student services are undergoing a fundamental change moving beyond the traditional responsibilities of maintaining student records, financial aid administration, and student advocacy. They are becoming more tightly linked with the institution's strategic academic and economic objectives.

Student services professionals, in partnership with academic officers, are emphasizing higher value activities such as student retention and graduation rates, enrollment management, resource management, revenue generation, academic planning, marketing, and performance assessment, both for students and the institution. Conse-quently their internal value to the institution increases as they shift from a public utility role to strategic contributors to the management and growth of the university's instructional programs.

Second, centralized, producer-oriented services are giving way to decentralized learner-oriented services. This shift includes numerous opportunities for self-help as well as access to information and services on the part of students and faculty, and with that come greater local authority and responsibility. Of the two transformations, this change is the most radical.

Services are being provided electronically—at any time from any place—and without the intermediation of student services staff. And student service professionals are becoming generalists who serve as facil-itators and navigators in an information-rich environment that is shared by provider and client alike. In such an environment, the existing organizational structure and ways of doing business are subject to increasing scrutiny and are under enormous pressure to change.

Context for Change

At many universities, if not most, student service units are classic models of Weberian bureaucracy. They are rule-oriented as is demonstrated by their publications, financial aid handbooks, and college catalogues that elaborate on endless procedures and processes for determining eligibility for access to programs and resources. Decisions are made via a system of formal and impartial application of laws. Within each unit roles are hierarchical and highly specialized. Official business is conducted on the basis of written documents that are founded on laws and policies of state and federal governments or boards of trustees. Staff and students interact in the context of approved forms, rule books, and written transaction records.

In fairness to these student service units, all have had a major impact on equitably distributing resources and access to opportunities in higher education. Today, however, they are often perceived as slow and unwieldy, inflexible and poorly coordinated,

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inefficient and costly. In worst-case scenarios, these units act with different values, perspectives, and information—sometimes with negative consequences for students. They are viewed by some as territorial, enlisting allies as needed. Rivalries and person-alities are obstacles t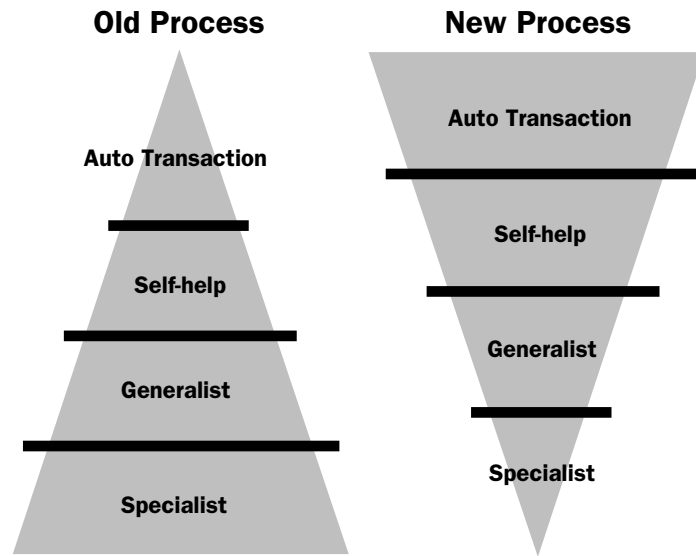o coordination and joint policy making even with such minor matters as setting event deadlines. For example, financial aid deadlines sometimes contradict admissions and registration deadlines and vice versa.

Michael Dolence and Donald Norris argue persuasively in their book, *Transforming Higher Education* (Society for College and University Planning, 1995), for the need to transform the sector's institutions to learner-oriented service providers. For them, the rule-oriented, bureaucratic decision-making process must give way to informed judgment with ability to self-inform and self-correct. Instead of provider-driven services being offered at a set time and place, they must offer student- and faculty-driven services. Self-help and decentralization of information, services, authority, and responsibility are key.

One of Dolence and Norris' most powerful insights is their recasting of productivity. They argue that cost savings, downsizing/rightsizing, and restructuring all miss the point. Enhancing productivity is the end

Figure 1

Turning Our Thinking Upside Down

These are the ways student transactions are completed: automatically, self-initiated, by means of a generalist, or with the assistance of a highly trained specialist. The left triangle, representing our old system, suggests that the vast majority of the transactions require help from student service specialists. The challenge was turning that triangle on its head.

Old Process

Auto Transaction

Self-help

Generalist

Specialist

New Process

Auto Transaction

Self-help

Generalist

Specialist

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game and learner needs must drive productivity. Variety, quality, timeliness, and responsiveness are central aspects of information age productivity. This contrasts with the bureaucratic model of productivity, which is heavily oriented toward processes, procedural accuracy, and outputs rather than outcomes. The unit's immediate goal—for example, the number of students given the right award—blurs a concern for the institution's larger goal of timely completion and graduation rates. Financial aid as entitlement conflicts with financial aid as a tool to leverage resources for maximizing income, to manage the composition of an incoming class, and to reward performance.

Embedded in the discussion of productivity, according to Dolence and Norris, is the expectation that student service units add value to the institution beyond improving the quality and

timeliness of traditional activities such as record keeping. At most institutions there is little expectation that the registrar and financial aid offices do more than register students for classes, report grades, schedule classrooms, print transcripts, and award aid in the form of scholarships, need-based grants, work study, and loans. Part of the problem is organizational. Part is the "student affairs legacy." There is nothing inherently wrong with locating these units within student affairs, and it is a common arrangement. What is wrong is the broader institutional perception that, because these units are in student affairs, they serve only students and are marginally related to academic affairs (that is, they admit students, sell diplomas, give students money, or fine them for late payments or registration). They do things *to* and *for* students.

Minnesota's Makeover

As we thought about reengineering student services and building new administrative systems at Minnesota, we realized that these units and their computer systems are fundamental to managing our instructional programs—a $700 million annual enterprise. Beyond providing services to students, these units are tied to managing the curriculum and instruction, generating and maximizing revenues for the institution (especially tuition), and retaining and graduating students. The challenge is to build awareness of this reality.

We also realize we should be more aggressive about using the transactional data and the processes that generate these data (for example, grade reports and faculty course assignments) in ways that add value. Can the process of registering for courses also be a process for assessing performance (such as time to completion) and for planning one's academic program? Can the process of reporting grades and assigning faculty to courses simultaneously generate information on instructional productivity and demand? Can we acknowledge the role of the admissions director, registrar, financial aid director, bursar, and their staff as key players in facilitating strategic academic decisions?

The University of Minnesota's student services units have been under enormous pressure for the last three years. As with most American universities operating mainframe legacy systems to support student administration, our programs were not year 2000 compliant and had to be fixed or replaced. Also, several years ago the legislature mandated a change from the quarter calendar to the semester calendar. Those changes would be hard to accomplish with existing built-in-house programs because they would have to be rewritten with arcane codes and poor documentation. And, to make matters worse, their clients—students, staff,

and faculty—did not respect these student support units. One survey, to our surprise, indicated that as students progressed from freshman to senior year, their dissatisfaction increased. It seems that adjusting to the bureaucracy got even more frustrating and complicated as students neared graduation.

University of Minnesota colleges have employed nine different grading systems (we're down to just three today), one of which awarded an F+ to students. (We can only surmise that the F+ recognized "failure with distinction.") Some of our college bulletins dedicate the first one-third of their pages to rules rather than to course and program descriptions. As lengthy as they are, these bulletins represent a condensed version of the full set of rules found in the financial aid handbook and the registration bulletin. The publishing costs are enormous. Students, from the time of registration to the time of enrollment, need several pounds of bulletins and guides as reference materials. Because there are no one-stop registration centers and because both academic units and cen-

tral support service units want to regulate the registration process, an unfortunate student can walk several miles and cross the Mississippi River numerous times to complete registration—assuming everything goes right.

Developing a New Vision

It doesn't take a rocket scientist to realize the old system no longer served the needs and expectations of our students and staff and that dramatic changes were needed. We began by shifting admissions, financial aid, and registration to the office of the senior vice president for academic affairs, assigning new personnel to manage these units, and radically simplifying policies. The bursar's office was merged with the financial aid office to create a new center for student financial services. PricewaterhouseCoopers helped us formulate a new vision, which is being constantly refined, to simplify and optimize our systems. The five-point plan is summarized here.

1) STUDENT TRANSACTIONS

Student service units manage an enormous number of transactions. Hundreds

of thousands of grades are reported and recorded, thousands of students are registered, several hundred million dollars of tuition and fees are collected, and an even larger amount of financial aid is awarded annually. Many of these transactions are done manually, on paper, at fixed times, and at fixed locations.

Fully 75 to 90 percent of all transactions currently done manually and on paper should be done electronically and without the intervention of an administrator. Moreover, these transactions should be linked strategically to minimize runaround. For example, dropping a course should automatically and simultaneously adjust financial aid and credit a student account as well as notify a student of the academic and financial consequences of his or her decision.

Similarly, there are too few transactions that can be initiated directly by the student. The student must go to the appropriate office and complete a transaction assisted by a staff member. More egregious is not being able to complete these services at a single location and at a single time but rather having to go to several locations, often with return visits, in order to complete a transaction or certification process. We know our processes can be redesigned so students can self-initiate most transactions and complete them with greater accuracy, in a timely fashion, and when and where it is convenient. These transactions must be either highly automated or self-initiated by the client via the Web (Figure 1).

2) SELF-CERTIFICATION

A large percentage of student services transactions involve certification. Students are certified as admissible to colleges and majors and eligible for courses, financial aid, and graduation. Can we create an environment that permits greater opportunities for self-certification? The University of California, Berkeley, for example, permits students to enter their

Figure 2

Entangled in Student Services

University service units must become client-focused and seamless rather than be organized in silos as our old model was.
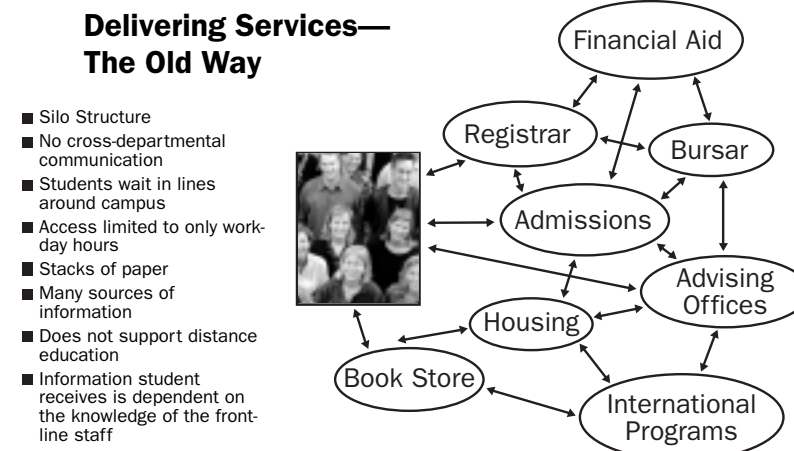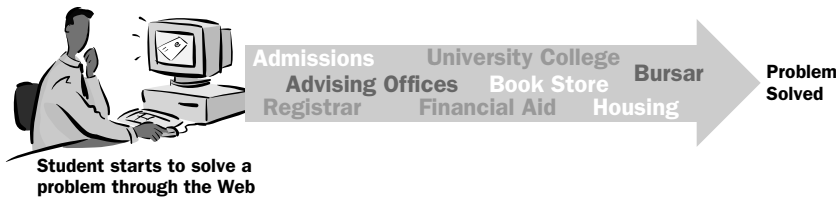
Delivering Services—The Old Way

- Silo Structure
- No cross-departmental communication
- Students wait in lines around campus
- Access limited to only workday hours
- Stacks of paper
- Many sources of information
- Does not support distance education
- Information student receives is dependent on the knowledge of the front-line staff

Financial Aid

Registrar

Bursar

Admissions

Advising Offices

Housing

Book Store

International Programs

Figure 3

Simplified Student Services

A Web-based way of delivering services helps students help themselves.

- No silos: integrated, seamless cross-departmental delivery of services
- Accessible from any computer on the Internet
- Eliminates student runaround
- Increased accessibility: open 24 hours a day, 7 days a week
- Electronic: no paper, easily updated
- One source of information easily found and understood
- Controls the institution's message to students
- Facilitates change

Student starts to solve a problem through the Web

Admissions · University College · Bursar · Advising Offices · Book Store · Registrar · Financial Aid · Housing → Problem Solved

own grades in the admissions process. It then reviews only the applications of students that are admitted. A study conducted at the University of Minnesota found that students taking courses without satisfying a prerequisite actually did better than students who had. It seems students will not risk doing poorly in courses for which they are underprepared and that they do better because they want to take the course. Despite such findings, universities place numerous prerequisites on courses because the culture remains highly regulatory and is based on the belief that students will not make good decisions if left to their own devices. This approach to student management is antithetical to the vision we have articulated. Given the right tools, students can manage their own academic progress much more independently of the current advising system.

3) ONE-STOP SHOPPING

Not all activities can be automated and many do require some assistance by trained advisors. Here the challenge is to cross-train staff so they can answer a broader array of questions. This is the genesis of the one-stop shopping concept. The generalist role challenges the current "silo" structure of student service, which fosters decisions by specialists

who control functional domains. But delivering student services has become overspecialized. Given the right kind of training and incentives for employees, our staff can answer a broader range of questions. This will result in a more user-friendly environment. Even so, there will always be roles for specialists.

We need to design systems and organizations to provide students, faculty, and staff with greater quantity, quality, and timely access to data. That data should be integrated and support institutional personnel as well as strategic planning and decision making. Service units must help build and support an environment where clients are provided with knowledge and know-how to solve problems. Central administration must promote greater authority to make decisions at the local level.

The silo approach, as illustrated in Figure 2, must give way to a problem-solving approach, as seen in Figure 3. In the latter model, the student extracts information from a variety of university units as needed. The problem being solved often transcends in several ways the tasks assigned to the individual units that provide data. First, registration is a seamless process that involves not only registering for classes but also paying tuition and fees and withdrawing finan-

cial aid. Second, and perhaps more significant, the registration process is not only signing up for courses, but planning a program and assessing performance to date. It is an opportunity to articulate expected outcomes such as academic goals. Increasingly it is the students who control the time, pace, and place of registration. The process is electronic, instantaneous, and more accurate.

4) PLANNING AND MANAGEMENT

Until now we have discussed ways to improve how transactions are handled. While these changes and their concomitant cost savings are significant, by themselves they do not fundamentally change the way service is provided nor will they generate the necessary productivity and customer satisfaction. They will not permit deans and department chairs to manage instructional and human resources fully. Nor do they permit students to take increased control of their academic progress and performance. At a minimum, the systems must have three additional capacities: planning, performance assessment, and marketing.

To illustrate the importance of these added capacities, consider an example outside the realm of student services. Several years ago the University of Minnesota purchased software to schedule classrooms that replaced a manual, labor-intensive system, which had index cards as its core technology. What surprised us was that savings made possible by the planning capacity of the software initially and substantially overshadowed the cost savings from automated scheduling. We found that increasing classroom utilization and occupancy rates and scheduling accordingly could remove from service 25 percent of the classroom inventory. Fundamental to the new student systems must be an enhanced capacity for planning.

5) BUILDING A PORTAL

Concomitant with building an automatic and electronic registration system was building software tools to facilitate program planning and assessment by the student. The potential is enormous, limited only by our imagination. That was the good news. The problem was the immense increase in the scope of the work we had undertaken and a lack of sufficient resources. As a consequence the university looked for assistance from the private sector.

In December 1997 the university and IBM announced an agreement to develop a software product to support innovative advising and business processes that promised to change further how student services are provided at universities. Now completed and in use, the product of the partnership makes it possible for students, parents, faculty, and staff to plan, assess performance, and make smart, productive decisions that will further both personal and institutional goals and objectives. Web site users are able to make decisions and take action in ways previously unimagined with significant savings in time and increased productivity (Figure 4).

Most remarkable is the current use of the system. The initial Web site built solely by the university had 13,000 hits per month when it was first activated. Today there are more than 13 million
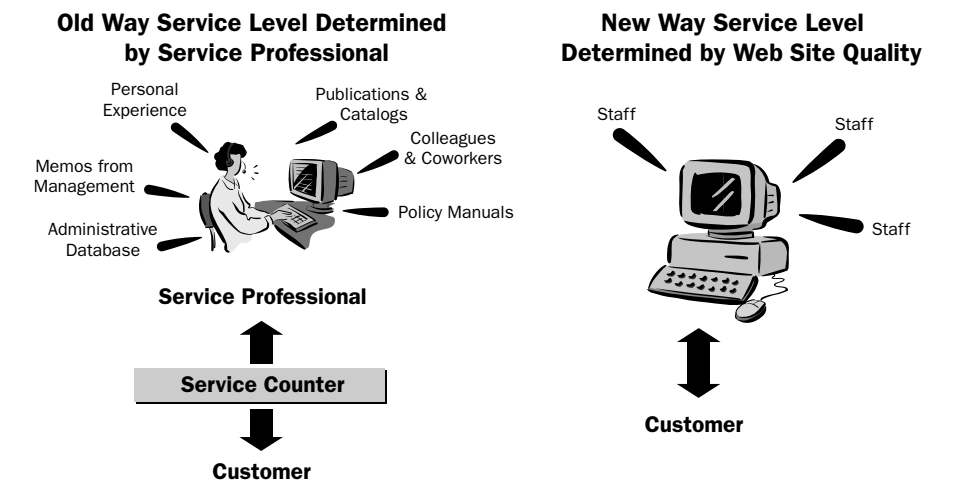
Figure 5

Student Services: Before and After

Our vision for student services involves a major change in the way the university interacts with clients.

Old Way Service Level Determined by Service Professional

Personal Experience · Publications & Catalogs · Memos from Management · Colleagues & Coworkers · Administrative Database · Policy Manuals

Service Professional

Service Counter

Customer

New Way Service Level Determined by Web Site Quality

Staff · Staff · Staff

Customer

hits per month and more than three million pages of information downloaded by students and staff. Clearly the old model of service could not satisfy what proved to be enormous latent demand for information. Especially noteworthy is that the user can customize the look, feel, and function of the Web site. This portal, called "My One Stop," gives each user a unique, personal, and preferred perspective of the university.

The new student portal provides powerful planning as well as time and resource management tools for students, faculty, and staff. Course, program, final

exam, and career planning can improve timely degree completion. In addition, creating customized programs serves the academic and career goals of the student, financial aid planning (with the parents as the clients while the student is in high school), faculty, and course resource planning.

Tools to assess performance are part of the portal strategy as well. Students can determine academic progress toward their degree or a desired grade point average by asking a host of "what if," or auditing, questions—not unlike the performance tools in products such as Quicken. Administration can match faculty and course resources to student demand. Faculty can assess, in advance, the academic capability and interests of their students. Finally the portal provides a capacity to market programs and outsource book sales and loans.
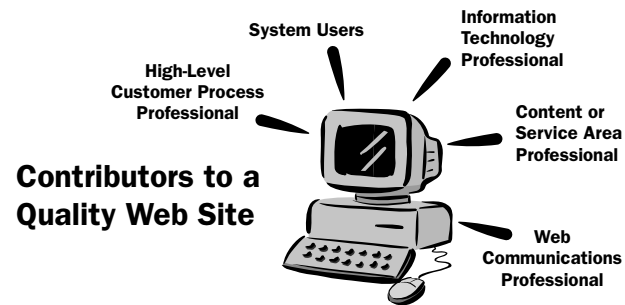
Implementing the Vision

There will be many impacts from this transformation. For example, with the course planner and guide students can access information on the background, interests, and achievements of their

Figure 4

Out with the Old

By transforming student services, we can become much more client focused.

Old Way	New Way
Students wait in lines	Access from any computer on the Internet
Students walk all around campus	All from one computer
Open 8 hours a day, 5 days a week	Open 24 hours a day, 7 days a week
Stacks of printed material	Electronic, no paper
Multiple sources of information	One source easily found and understood
Office determines timing of information flow	Student determines timing of information flow

Building Efficiency

The staffing requirements shift in the new system.

Contributors to a Quality Web Site

instructors. Information ranges from the reputation of academic programs to the cost and availability of books.

What emerges is an integrated student system with powerful analytic and resource management tools. These tools have major consequences on the way the university conducts several core businesses. First, with a greatly enhanced instructional management system we make it possible for deans and department chairs to take responsibility and be accountable for enrollments, manage instructional resources to better meet student demand, market courses and programs, and monitor and assess performance including tuition revenues. Second, we radically change the advising relationships and responsibilities among students, faculty, and staff.

We quickly realized that implementing the new vision required massive changes not only in business processes and technology, but also in the organization of student services and the skill sets of our employees (Figure 5).

Today generalists or specialists serve behind counters and help students solve problems. The administrator is valued because he or she knows what students need to pursue an academic career. Our vision permits the student to bypass the desk by going directly to the electronic source of information and, with software that serves as a guide, to extract and

apply the appropriate information. The student manages the data and uses it to solve problems without the active mediation of the administrator.

New Professional Roles

A practical consequence is the need to train advisors for roles in this new environment. Rather than serve behind a counter, they must redirect their efforts to the design and maintenance of the Web site (Figure 6). Among the new

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Our vision permits the student to bypass the desk by going directly to the electronic source of information.

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roles we have envisioned under this model are information technology professional, content/service area professional, Web communications professional, and high-level customer process professional.

• *Information technology professionals* navigate the plethora of emerging Internet technologies and decide which are of valuable in our environment. Their decisions inform the university's Internet-based technology strategy. In addition,

the information technology (IT) professionals write code, manage data, and guide the entire team. IT professionals also help the team understand what the new technology will allow them to do and what constraints it may impose on the system.

• *Content service professionals* know the details of the various functional areas served by the system, including admissions, financial aid, bursar, and registration. Content service professionals ensure that the team's applications meet the core business needs of the offices and institution. We have not eliminated the specialists in this system. Rather, their energy is directed toward system design and performance instead of one-on-one counseling.

• *Web communications professionals* set and maintain user interface standards for the entire site. Institutions do a disservice by displaying information differently from page to page within the same Web site. The Web communication professional makes sure the site is consistent and user friendly.

• *High-level customer process professionals* integrate the services of the different back-end offices so the site and the processes it serves effectively transcend its various parts. Rather than a sequential set of actions that moves the client through registering, securing financial aid, and paying tuition and fees, the client is able—through the vision and effort of the high-level customer process professional—to engage the various discrete tasks simultaneously. Transactions, planning, and performance assessment are now all part of the registration process. Customer process professionals work with all involved units to bring ideas and creativity together into a coherent design.

• *End users* must test the site and validate the system. We must include end users in the design process as well as usability testing for a successful implementation. Our experience suggests that it is never too early to bring this most important client group into the process.

Technology Requirements

The technology requirements of the new system can be daunting. They include both the central infrastructure to run the system and the equipment needed locally by users who access the new on-line services. To date, the university has wired the majority of its dorm rooms, developed a robust modem pool, and built a network of computer labs throughout campus. In addition, the university will require all students to own or have ready access to a computer. The mainframe systems have been replaced by a distributed-computing system to support the PeopleSoft systems that serve as the Web back end.

Transforming student services must be driven by a vision and it must have the active support of the institution's senior leadership. The institution must substantially reengineer processes and

simplify policies. It must be prepared to invest substantial financial resources in new technologies and its staff. An enormous training effort is required because the transformation is, for all practical purposes, a change in institutional culture. There must be a communications plan that ties the many components together, clarifies the goals and implementation requirements, and supports the changes through the institution.

Implementing this transformation is daunting but doable. If colleges and universities are to remain viable and competitive in the next decade, such transformation will be necessary. ℮

Source

Dolence, M. G., and Norris, D.M. *Transforming Higher Education*, Ann Arbor, Mich.: Society for College and University Planning, 1995.

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