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Information Technology Strategies for Financial Aid Automation

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Financial aid may be the least understood student service activity in our nation's colleges and universities. While most institutions have considerable say in what their own admissions, registrar, and bursar policies and procedures should be, financial aid is uniquely governed by rules and regulations that are largely set not by educational institutions themselves but by the federal government. Financial aid's particular status is further defined by its necessary interactions with external entities: federal and state departments of education, commercial lenders, private foundations, and other education finance sponsors.

Financial aid is taking a more centralized role in the enrollment management of higher education institutions today. Increasingly, financial aid affects students' decisions about which institutions they can attend. According to a recent study by Pryor, Hurtado, Saenz, Korn, Santos, and Korn (2006), as many as two of every three students indicated that they have "some" or "major" concerns regarding their ability to finance the costs of a college education. The study also found that 34 percent of students who were admitted to their first-choice school were unable to enroll because they could not afford to attend. Almost 21 percent of students in the study did not receive aid from their first-choice institution.

Presidents, deans, provosts, faculty members, registrars, and bursars are keenly interested in and often involved with the admissions and enrollment management processes. At the same time, financial aid, perhaps because of its complexity and the many external entities involved, has often been further down the management chain. In many institutions, faculty and senior leadership have paid little or no attention to the intricacies of financial aid policies and procedures and their role in supporting the institution's goals. Using the financial aid technology pyramid (Figure 1) as a framework, this research bulletin is designed to help senior college and university administrators begin to more fully engage and better understand the complexities of both financial aid and information technology (IT) support for efficient and effective management of the financial aid resource in enrollment management. This bulletin illustrates how to use the technology pyramid in enrollment management, financial aid, and IT planning and implementation.

The financial aid technology pyramid shows the range of possible applications of technology to financial aid so that readers can determine where their institutions fit on the pyramid and develop a dialogue among provosts, CIOs, and enrollment management and financial aid administrators about what goals their institution would like to set for IT investment in financial aid. It is an attempt to create an organizational schema of available technology tools that could support financial aid policies and processes at any given institution. Created by three current or former financial aid directors—Craig Cornell, Mark Evans, and Ted Hallenbeck—this pyramid presents a multidimensional view of how to think about financial aid and its technology support at your school.

Figure 1. The Technology Pyramid



Highlights of the Financial Aid Technology Pyramid

At first glance, the pyramid may appear complex for financial aid newcomers as well as experienced professionals. The following pages explain how university administrators can read and use the pyramid to understand scholarship processes and how these processes change as they become more technology-enabled.

Pyramid Structure

The bottom row, Level 0, represents functions of a financial aid office that relies solely on paper-based processing. The apex of the pyramid represents a state-of-the art, completely paperless, Web-actualized office. Most college and university financial aid offices fall somewhere in between. Rows labeled 0 to 7 to the left of the diagram illustrate the sequential steps from paper-filled to paperless processes.

Both the right and left inclines of the pyramid show the various influences that are the drivers of financial aid technology changes. The left side identifies forces external to the institution, such as federal regulations, that impact the institution's financial aid operations. The right side identifies forces internal to the institution that impact financial aid operations, such as customer service, budget constraints, and student expectations.

For management purposes—and of great interest to presidents, provosts, and CIOs—the planning, human, and technology resource issues are identified on the right side of the pyramid.

Color Coding

The colored blocks of the pyramid refer to the different processes a financial aid office performs.

- Light-yellow boxes show the various ways staff members communicate with students, such as faxes, e-mail, text messages, and student portals.
- Medium-yellow boxes describe various capabilities for large amounts of information necessary for all students, such as paper application forms, publications, electronic forms, interactive Web sites, and multimedia presentations.
- Dark-yellow boxes illustrate scholarship-related information, applications, and interactive transactions, such as scholarship Web sites, online scholarship applications, and searchable scholarship databases.
- Cream-colored boxes represent outreach activities, such as print materials, PowerPoint presentations, and Web-based presentations.
- Blue boxes represent loan-processing and loan-communications functions, such as paper promissory notes, DVD-based counseling, electronic entrance/exit loan counseling, vendor-integrated loan systems, electronic signatures, and electronic reconciliation.
- Lavender boxes name the key Internet-based external communication functions, such as Web sites, listservs, and portals.
- Green boxes represent aid packaging and awarding processes, such as award letters, document imaging, interactive applications, online real-time awards, electronic work flow, and 24 x 7 online delivery systems.
- Pink boxes illustrate federal and state application processes and resulting communications, such as veterans educational benefits certification, action letters, and federal reporting.
- Red boxes represent the back-and-forth flow of information necessary for the completion of the Free Application for Federal Student Aid (FAFSA) process, such as application, Web-based renewal, and Web-based corrections.

As mentioned, at Level 0, all functions are manual and paper-driven. This is the way all financial aid offices operated historically, from those in tiny schools with fewer than a hundred students to the populous multicampus systems with tens of thousands of students. Most offices still use some paper, if only for students and families who are uncomfortable with or distrustful of electronic communications, but in general, processes at this level are labor-intensive and inefficient. At this level, both information about and applications for scholarships are only available on paper.

Between Levels 0 and 1 is the “technology divide.” In order to climb the pyramid, an institution must have certain technologies in place. At a minimum, these technologies include computers with access to the World Wide Web, a student information system for financial aid (either stand-alone or an enterprise-wide system), and a connection to state and federal electronic services.

Level 1: Rudimentary external passive electronic processes and services. This level includes the most basic and sometimes passive electronic hardware and processes, including fax machines, downloading FAFSAs from the U.S. Department of Education Web site, videotaping counseling sessions, and using trade association electronic discussion groups. For scholarships, search engines are available at various Web sites for students and staff to find information about third-party funds. Institutions with financial aid processes concentrated at Level 1 are likely to be involved in short- and long-term planning for technology process improvements.

Level 2: Elementary external interactive electronic processes and services. Level 2 adds basic interactive capabilities, such as e-mail accounts, basic imaging, and FAFSA on the Web. For scholarships, this would include the school’s formatting its own scholarship information for electronic availability. Institutions with financial aid processes concentrated at Level 2 are likely to be involved in business process review, staff training, and staff retraining.

Level 3: Fundamental internal electronic processes and services. As one climbs the pyramid, the technology tools become more sophisticated and expensive and require more planning and development. At Level 3, the scholarship information may be available as PDFs and includes links to relevant scholarship Web sites. Institutions with financial aid processes concentrated at Level 3 are likely to be involved in addressing staffing considerations, including reassigning and restructuring financial aid staffing.

At this point, it is important to note that a school may be at different levels for separate processes. For example, a school could be using e-mail accounts (Level 2) and have its scholarship information available as PDFs (Level 3).

Level 4: Intermediate internal electronic processes and services. Level 4 is another step toward greater service—and complexity—including the ability to download forms, documents, and publications as PDFs and to submit FAFSA corrections over the Web. At this level, the scholarship process would offer the option to apply for scholarships either online or on paper. These improvements have staffing and budgetary implications,

such as the need for a Web server and dedicated server space to collect and hold information. Most likely, by this stage, the financial aid office would have a dedicated IT staff person to support the office's IT needs. Institutions with financial aid processes concentrated at Level 4 are likely to be involved in considering hardware and software upgrades and providing technical training to staff.

Level 5: Advanced internal electronic processes and services. At Level 5, the paper scholarship application is eliminated, requiring that students apply online. Likewise, the loan master promissory note can be signed electronically, and financial aid awards can be viewed online. Institutions with financial aid processes concentrated at Level 5 are likely to be involved in considerations of technical security, back-up, and educating the university community about new financial processes and practices.

At Levels 6 and 7, the financial aid office processes are largely paperless. Collected data moves electronically to the student information or financial aid systems. These levels require greater cooperation between financial aid and IT staff members, with negotiations about which office owns, is responsible for, and has access to what technologies.

Level 6: Cutting-edge internal electronic processes and services. Level 6 moves into state-of-the-art technology capabilities, including a student portal with customized Web pages and an interactive, institution-specific financial aid Web site that provides interactive forms with direct feeds to other information systems. For scholarships at this level, the institution would provide a searchable database that includes the institution's scholarships and may include third-party scholarships as well. Institutions with financial aid processes concentrated at Level 6 are likely to be involved in continuous upgrading, reinvesting, training, and educating the community.

Level 7: Electronic attainment. The penultimate level includes only paperless procedures, virtual delivery systems, 24 x 7 availability, and multimedia applications such as communications to cell phones, live commercials, and instructional videos on Web sites about applying for summer aid. Institutions at this level are able to quickly adapt technology innovation to their specific needs. Obviously, schools that function at this level have both IT and financial aid staff that jointly develop creative solutions to improve financial aid service and delivery. Institutions with financial aid processes concentrated at Level 7 are likely to be involved in maximizing efficiency and improving customer service.

Level 8: Web actualization for continuous improvement. A fully actualized Web-based financial aid office can enjoy continuous improvement to stay ahead of the technology innovation curve.

What It Means to Higher Education

It is clear that student financial aid is a big and growing business. According to the College Board,

Students received over \$122 billion in financial aid for undergraduate and graduate study in 2003–04, an increase of 11 percent over the preceding year after adjusting for inflation. Total aid excluding non-federal loans, which do not provide subsidies to students, totaled \$111 billion, an increase of 9 percent after adjusting for inflation. Grant aid, both overall and for undergraduate students, grew by 6 percent in inflation-adjusted dollars, while education loan volume rose by 16 percent. Grant aid per full-time equivalent student (FTE) grew 5 percent. The growth rate in loans per student was about 3 times the growth rate of grants per student, both overall and for undergraduate students. (2004, p. 4)

Not only is financial aid big business in terms of dollars, it also impacts a majority of higher education students. The College Board reports that “62 percent of undergraduates enrolled full-time receive grant aid from federal or state government, from the institutions in which they are enrolled, and/or from employers or other private sources. Millions of students and families also take advantage of federal tax credits and deductions for higher education” (College Board, 2006a, p. 2).

The question for our institutions is to what degree their investments in financial aid technologies are mapped to the impact that financial aid has on the sustainability of the institution. Arthur Sandeen, a longtime university administrator with responsibility for financial aid, advocates that financial aid officers “become full partners in the decision-making councils” of colleges and universities (2003). Frequently, the registrar sits on academic policy committees with professors as they determine course and graduation requirements. The bursar often reports to the chief financial officer, and together they enforce strict financial controls under the watchful eye of internal and external auditors. Unlike the registrar or bursar, financial aid officers rarely enjoy such interaction with faculty and senior administrators. Certainly, the head of admissions needs a financial aid partner during recruitment efforts, but often that interaction ends once the financial aid award is offered and accepted. How many professors or senior administrators understand the ins and outs of financial aid issues once students have matriculated?

External and Internal Impacts

Because more than \$94 billion in federal financial aid—and over \$6.8 billion in state and \$24 billion in institutional grant dollars—is distributed annually and managed by financial aid offices, financial aid is a high-profile service (College Board, 2006b, p. 8).

The political issues, especially at the federal level, are continually at the forefront. Every six years, by law, the Higher Education Act of 1965 (the act that authorizes the federal financial aid rules and regulations) is reauthorized. This process, often politically charged, causes the landscape of financial aid and higher education to be in a state of perpetual motion. As a result of philosophical differences among members of Congress, the past two reauthorization cycles have been especially turbulent and subject to much public debate.

As a result of some state investigations, institutions that choose and partner with certain student loan providers and utilize their proprietary loan software may be required to

implement systems that will support more players than the traditional short list of “preferred lenders.” Since federal regulatory changes are scheduled for the next several years, institutions must have adaptable computer systems. Vendors will need to be responsive to integrated systems modifications as well as to each institution’s IT support needs for installing, testing, and applying upgrades outside of the historical schedule.

Universities that are “cutting edge” and have partnered with the U.S. Department of Education for enhancing the student aid delivery system must support the efforts of the student financial aid office. Programs such as the federal Experimental Sites Initiative, the federal financial aid Quality Assurance Program, and the Late Stage Delinquency Assistance project may require IT to assist with system workarounds and modifications. Contending with these and other external forces will necessitate further IT adaptations to the ever more complex realities of financial aid.

Automation and Financial Aid

The role of automation in the financial aid office is paramount to the enrollment management strategies of the institution. The reliance on financial aid for a student to consider, matriculate, enroll, persist, and ultimately graduate is evident and continues to be a growing issue. This, combined with the fact that college applications are at an all-time high and that the average student over the past 10 years has been submitting an increasing number of admissions applications (more than 25 percent of the college-going population sent out at least five applications) means that effective and efficient financial aid processes need to be in place to assure that as these students shop around, they are presented with a clear picture of their ability to afford a given institution. Once they decide to apply for financial aid, they must not be discouraged by arduous processes (Hawkins & Clinedinst, 2006).

Tightening budgets on college campuses have forced many offices to find ways to streamline and automate processes. Web-based self-services and federal legislative efforts through means of acceptance of electronic signatures and processes have all contributed to a more automated financial aid process. The combination of forces led to the development of the financial aid technology pyramid. At its core, the pyramid is a roadmap for a financial aid office to move toward paperless operations.

Key Questions to Ask

- How does financial aid figure into our institutional goals and mission? Do we explicitly include financial aid in public statements of our institutional goals and mission?
- How can we leverage our use of technology in financial aid in order to:
 - Support our enrollment goals?
 - Provide better service to students and families?
 - Assure compliance with federal and state financial aid regulations?
 - Improve employee morale?

- Where does our institution fall on the technology pyramid? Do we have aspirations to be elsewhere?
- What resources are required to move up on the pyramid?
- If resources were not an issue, which technologies would the financial aid office adopt? Why?
- What are the primary drivers for improving our use of technology for financial aid?

Where to Learn More

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