

FY 2007 Annual Report Information Services

FROM THE CHIEF TECHNOLOGY OFFICER Shirin M. Goodarzi

Welcome to the Information Services (IS) Annual Report. I am honored to have been named the college's Chief Technology Officer in December 2006, having served in an interim basis since the former CTO's retirement in July 2006. I am excited to have the opportunity to lead information technologies and information services initiatives and to create and implement a technical vision for the college. During this year of transition, the Information Services area has continued to provide a full range of technologies and services and has an impressive list of accomplishments to showcase.

In *2015@aacc.qual.edu*, the college's latest strategic plan, technology is again completely embedded in the plan. The full integration of technology into

the planning process is indicative of our mature planning model where technology is no longer regarded as a separate goal but as an environmental driver for the entire process.

Looking ahead, we reaffirm our commitment to providing the highest level of service in support of rapidity of change, technical literacy, network security, learning via technology, internet access and anytime, anywhere, anyplace services.

I wish to thank my Information Services colleagues for their invaluable work and support.

Vision & Mission

Vision. Information Services will provide a full range of technologies and services in support of using appropriate technology to improve all aspects of college life. We will be recognized as a leader in the application of technology as a tool for broadening learning opportunities and enhancing business processes. Our goal in delivering these services is the creation of a positive, lasting experience for our customer.

Mission. Our mission is to empower students, faculty and staff to be proficient in using appropriate technology for learning, communicating, obtaining information, and solving problems as members of the global community of the twenty-first century. Multiple service delivery systems will enable us to provide high quality support and efficient service to the college community. IS will provide leadership in its collaboration with the college community in the continuous evaluation, development and implementation of innovative information systems, technologies and services. The effectiveness of the services and support provided by Information Services will be gauged by the success of the college community in its use of technology in the achievement of its primary mission of learning.

IS Organization

Media and Web Services
aacc.edu support and content management, intranet, MyAACC, media

Customer Support Services
Technical call center, desktop support, network administration, asset management, AV equipment distribution

Instructional Support
Desktop support, network administration, AV equipment delivery for remote sites

Institutional Technologies
Database/system administration, computer application analysis, programming, training

Network Services
Network infrastructure, cabling plant, data/video equipment, voice services



AACC was ranked as one of the top 10 tech savvy large community colleges for 2007 by the Center for Digital Education and the American Association of Community Colleges. The ranking was established based on a national Digital Community Colleges survey which examined how colleges are deploying technology to streamline operations and better serve students, faculty and staff.

FY 2007 IS Fast Facts**Technology for Learning**

191 smart/modified smart classrooms

68% of informal learning spaces with open wireless access

22 megabits per second (MBS) of bandwidth capacity

78 computer labs

1,797 instructional desktop computers

Technology Support

29,895 calls/year to Technical Call Center

64 servers supported 24/7

99.8% server availability

3,084 total college computers

111 technology move requests completed

91% work orders successfully completed and on time

Web Statistics

263,215 avg visits/month to aacc.edu

150,925 avg visits/month to MyAACC

Administrative Technologies

91% of 224 service requests completed on time

94% satisfaction with 120 Colleague training sessions

Email Statistics

36.5 million emails received

30.7 million emails blocked

5.8 million emails allowed

Philosophy

Information Services holds the following tenets as the beliefs that form the framework for our professional actions. These principles shall be kept in mind when performing our daily tasks.

- Service is our #1 priority.
- Support of instruction is our primary mission.

IS will:

- Support and facilitate the “one stop shopping” concept for students and other customers.
- Actively form partnerships with the customer community to collaborate on projects.
- Recognize the natural tensions that exist between the “one college” and “growing college” concepts and take a leadership role in reconciling the two.
- Strive to provide regular, on-going training and professional development opportunities to all IS staff.
- Make available technology that will afford students broader opportunities to investigate topics, apply learned skills in simulated real-life situations and complete class assignments.
- Make available technology that will enable faculty to engage students in new ways of learning, effectively illustrate concepts beyond traditional teaching methods and provide alternative vehicles to respond to different learning styles in the classroom.
- Provide technology to expand the current physical parameters of teaching and learning by creating an environment that fosters innovation, communication and the success of the entire college community.
- Provide and maintain current technologies in order to achieve the college’s goals and objectives.
- Add value to every interaction by demonstrating leadership and critical thinking skills.
- Keep “rules” to a minimum; rather, we shall develop more general “guiding principles” to frame our professional behavior.
- Empower staff members to make decisions based on data.
- Provide a friendly, courteous, respectful and professional environment for both our customers and internal staff.
- Strive to know the customer’s business processes, especially with regards to those that interface with automated systems.
- Strive to remain aware of all aspects of any given project instead of concentrating on solely the technical dimensions.
- Be willing to take ownership of problems.
- Serve for simplicity and cost effectiveness through standardization.
- Strive to centralize services and provide cost effective, fault tolerant, redundant hardware and software services.
- Continually assess our performance and make improvements if necessary.

IS Budget

Technological budget initiatives are handled through two mechanisms at AACC, the IS and Tech Council budgets. The IS budget is a "maintenance budget." As such, all items needed to support the current environment, assuming a small amount of growth are considered in the IS budget. The annual IS budget is created by starting from a base of zero. That is, every year each expenditure from the current fiscal year is scrutinized for inclusion in the next budget cycle. It is important to note that replacement of PCs, laptops, printers, servers and AV equipment is included as part of the IS operating budget.

New technological initiatives are brought forward through the Tech Council. The Tech Council decides, as a body, which initiatives will be brought forward to the Vice Presidents for their consideration. After institutional and County approval, IS is responsible for the expenditures from the Tech Council budget. Each year the Tech Council budget also starts as a zero base. If any ongoing expenses were included in the Tech Council budget, those expenses are moved to the IS budget in subsequent years.

The IS budget for fiscal year 2007 is shown below. Please note that some costs are duplicated in the budget amount.

Fiscal Year 2007	
Type of Expenditure	Budget Amount
PC replacement cycle	\$817,697
Infrastructure support	\$431,562
Telecommunications	\$459,754
Hardware purchases, leases & rentals	\$1,249,259
Hardware maintenance	\$398,512
Software purchases & upgrades	\$45,000
Software licenses	\$363,825
Software maintenance:	
Colleague	\$195,285
Colleague-related	\$69,920

Key Accomplishments

Colleague Release 18 Conversion

Datatel is requiring its customers to move to the latest version of Colleague, Release 18, by the end of 2007. Led by our IS staff, AACC was one of the first Datatel higher education clients to make the conversion. The successful conversion demonstrated a commitment to teamwork as the project was dependent upon extensive testing and communication with various departments across all three college divisions. According to Datatel, "Release 18 will deliver a newly overhauled strategic architecture framework that offers the first foundation for Datatel to adapt future technologies like web services at a more rapid pace based on the business needs of higher education."

Network Security

Network security continues to be a major concern and requires constant vigilance to maintain the integrity of our network infrastructure. As such, LBL Technology Partners was contracted to perform an IS security audit of all internal and external network devices. The audit was completed in June 2006. IS produced a three year project implementation plan to address the recommendations in the audit report.

Effective computer and network security requires active participation from AACC faculty and staff. IS worked collaboratively with Institutional Professional Development (IPD) to develop an online security awareness training program that all faculty and staff are required to complete. Participants can access the self-paced course 24-hours a day from any computer with an Internet connection. This course, which requires the passing of a test after each section, provides an overview of security risks and strategies to safeguard information. All existing faculty and staff are required to complete the course by August 31, 2007. New hires are required to complete the course within their 3 month review period.

The "Key Accomplishments" included in this report are highlights of the work IS completed in fiscal year 2007. For a comprehensive list of projects, please visit the [Project and Operational List FY07](#)



Regular IS Staffing

Media and Web Services	8.5
Customer Support Services	14
Instructional Support	6
Institutional Technologies	9.75
Network Services	10.5

Key Accomplishments



Sonet Ring Conceptualization

Synchronous Optical Network

IS collaborated with Anne Arundel County for a free connection to the Synchronous Optical Networking (SONET) ring. SONET is a method for communicating digital information using lasers or light-emitting diodes (LEDs) over optical fiber. The method was developed to transport large amounts of telephone and data traffic and to allow for interoperability between equipment from different vendors. The SONET is a self-healing network technology that utilizes a working ring to handle all data traffic and a protection ring to remain on standby. Should the working ring fail, SONET includes the capability to automatically detect the failure and transfer control to the protection ring in a very short period of time.

By connecting the college's network to the county SONET ring, AACC will increase bandwidth from 3 MB to 45 MB at our Arundel Mills and Glen Burnie sites. This connection is anticipated by the end of summer 2007. Performance is expected to further improve when the county implements planned connection upgrades.

PC Deployment

The Customer Support Services team created new software images and deployed 36 instructional PCs, 196 faculty and staff PCs and 18 laptops for a total of 250 systems on the Arnold campus.

The Instructional Support team created new software images and deployed 425 computers in 17 computer labs, two testing labs and two TLC lab computers at the GBTC, AMIL, HCAT and Carrie Weedon remote sites.



Windows Vista/Office 2007 Plan



IS formed a cross-functional team to evaluate operating system options and make a recommendation for selection. The team recommended replacing Windows 2000 with Windows Vista and replacing Office 2000 with Office 2007. IS developed a feasibility study, project plan and projected budget for a fiscal year 2008 rollout. Additionally, IS presented the plan to the Lab Administrators Work Group (LAWG), the Technical Policies and Procedures Work Group (TPPW) and the Learning Response Team (LRT). In preparation for the migration, IS will need to inventory all software, including versions, used at AACC.



Desktop Vendor Analysis



In previous years, AACC purchased all Dell desktops from a third party vendor. In fiscal year 2007, IS conducted a study to determine if it was more profitable to purchase directly from Dell. Based on the services provided and the pricing information, IS recommended that AACC purchase directly from Dell. In doing so the college realized a cost savings of approximately 8 percent and simplified receiving and inventory processes.

Upgraded Distance Learning Network

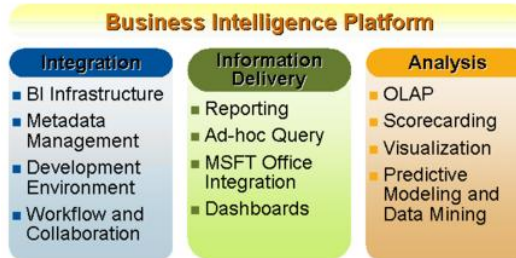


IS worked collaboratively with the Maryland Community College Technology Advisory Board (MCCTAB) to establish standards for the replacement of the obsolete Maryland Interactive Distance Learning Network (MIDLN) technology with the University of Maryland Academic Telecommunications System (UMATS). This connection, planned for GBTC 311 and FLRS 411, will allow us to have access to advanced video conferencing. Faculty and students have the ability to work with colleagues elsewhere as easily as being in the same classroom.

Key Accomplishments

Business Intelligence

Business Intelligence (BI) is the use of information that enables organizations to best lead, decide, measure, manage and optimize performance to achieve efficiency and financial benefit. The college's strategic plan includes a BI strategy to "Enhance the abilities of faculty and staff to use, analyze and interpret data." In support of this strategy, IS recommended the creation of a Business Intelligence Competency Center which was endorsed by the Learning Response Team. The BICC, created in January 2007, is chaired by IS and includes representatives from each major area of the college's three divisions. The goal of the BICC is to identify, promote, and support the use of BI for strategic management and decision-making at AACC.



With agreement from the President, Vice Presidents and Enrollment Planning and Management Team, student recruitment and marketing was selected as the initial BI focus. A team has been created and will work with the project sponsors to define the key questions, value drivers, metrics and milestones pertinent to student recruitment and marketing.

"A Business Intelligence Competency Center (BICC) is a group of people chartered to link a company's business driven objectives with the information, applications, processes, training, policies and technology necessary to support business intelligence and performance management."

Gartner

aacc.edu



- Inclusion of "Ways to Take a Class" on the Advanced Course Search so users can search for accelerated, interactive, telecourse, weekend college, hybrid, online or traditional courses

Ways to Take a Class: **(One required)**

<input checked="" type="checkbox"/> Accelerated	<input checked="" type="checkbox"/> Hybrid
<input checked="" type="checkbox"/> Interactive	<input checked="" type="checkbox"/> Online
<input checked="" type="checkbox"/> Telecourse	<input checked="" type="checkbox"/> Traditional
<input checked="" type="checkbox"/> Weekend College	More Information

As the Web site continues to evolve in support of the integrated marketing plan, the Media and Web Services team welcomes a stronger collaboration with the Public Relations and Marketing Team.

In compliance with Web site development best practice to update site's design every 1 to 1.5 years, aacc.edu was enhanced to provide the following:

- MyAACC access from any page within aacc.edu
- More prominent location of "e-mail this page," "print," and "feedback" links
- More prominent location of Course Search and Site Search features
- Links to allow users to increase or decrease the font size
- Improved aesthetics

Web traffic is monitored and analyzed via NetTracker and is viewable in the "Online Stat Tracker" Executive Information System cube. Users can see activity on aacc.edu, MyAACC, online services and WebCT by date range, time of day, time interval, day of week and location.

Key Accomplishments

Smart Classrooms

In addition to Internet access and a permanently mounted projection unit, smart classrooms have a permanent PC, a VCR/DVD player, audio equipment and document camera—all of which can be controlled from a single remote control unit. In fiscal year 2007, equipment was purchased to outfit an additional 18 fully/modified smart classrooms. Installation will be completed by the end of the fiscal year.



The Media and Web Services team has produced training videos to assist faculty and staff in the usage of fully/modified smart classrooms.

Technical Call Center Quality Control

Who do you call when you have a technology question? Extension 4357 (HELP). The Technical Call Center receives nearly 30,000 calls a year so efficiency is important. A quality control process was developed, documented and implemented that includes call monitoring, feedback training for all staff and call/ticket evaluation sheets. The Technical Call Center effectively reduced the average call abandon rates from 21 percent to 8 percent, decreased the average call answer time from 43 seconds to 31 seconds and increased the first call resolution rate from 33 percent to 51 percent.



Voice over Internet Protocol

Voice over Internet Protocol (VoIP) is the routing of voice conversations over the Internet or through any other IP-based network. The Instructional Support Team installed a thirteen workstation VoIP in GBTC 203 to support new, noncredit Network Plus and VoIP classes.

Gift of Education

IT worked closely with Public Relations and Marketing and with Business and Financial Resources to design and implement the Gift of Education card. The gift cards, which debuted in November 2006, can be purchased in any amount to pay for credit and non-credit course costs. As of May 25, 2007, 45 gift cards had sold with a total value of \$9,707.00.

WebAdvisor 3.0 Upgrade



WebAdvisor is Datatel's portal solution that interfaces with MyAACC and allows students, faculty and staff to access information about their classes, accounts and schedules and complete online transactions such as registering for classes, dropping classes, making a payment, using the course planning wizard, checking grades, viewing account balances and checking financial aid status.

The upgrade to the latest version (3.0) provides enhanced service and a more user-friendly interface, creating a more efficient system that saves the college time and money.

Primary Data Center Upgrade

The college's primary data center was renovated and expanded in preparation of the planned Careers building renovation. The project, completed in September 2006, resulted in an enlarged data center with a more functional layout of servers, complete isolation from the air conditioning and electric systems that feed the Careers building and the installation of a room-sized Uninterruptible Power Supply (UPS) and generator. These measures will maintain a continuous supply of power to the data center—even when utility power is unavailable—resulting in efficient 24/7 service.

Equipment Distribution

In order to optimize equipment functioning, Customer Support Services developed an equipment replacement plan, including a lamp stocking program. A Web based equipment request form was implemented in order to simplify the equipment request process, especially for adjunct faculty. By forging strong relationships with vendors, we are able to negotiate the purchase of top quality equipment at the most competitive prices.

How VoIP Works





An Eye Towards Fiscal Year 2008

Looking ahead to fiscal year 2008, the following are highlights of some of the major projects to be undertaken by IS:

- Coordinate with Distance Learning staff for the installation and integration of new equipment to support the University of Maryland Academic Telecommunications System (UMATS) connection in GBTC 311 and FLRS 411. IS will provide training to the Distance Learning staff and faculty on how to use this technology which will be operational for the fall 2007 term.
- Plan, in conjunction with the Capital Development Team, for the audio visual, data and telephone needs to support the Careers Building Renovation scheduled for January 2008 through January 2009. Network Services will support the technology needs of the renovated building and the technology required in the temporary and semi-permanent trailers that will be used during the renovation period. In addition to moving out of Careers to accommodate the renovation, the Customer Support Services team will move all faculty, staff and lab PCs, printers and other equipment out of Careers and reinstall the equipment at various locations on campus. The equipment move is scheduled to occur between December 18, 2007 and January 2, 2008.
- Initiate the Arnold campus migration to Windows Vista and Office 2007. Testing of existing software will begin in fall 2007 with roll out to staff in spring 2008 and roll out to the faculty and labs in summer 2008. This project includes required hardware upgrades and training faculty and staff in the new systems.
- Conduct a comprehensive requirements analysis for adopting a Business Intelligence (BI) platform, establish pricing parameters and continue to lead the BICC's efforts to make Business Intelligence more pervasive at AACC.
- Install Smart technology and an Emergency Operations Center in the new Central Services building and coordinate and move the PCs, printers, phones and other equipment needed to support the staff who will be moving in.
- Develop an online advising scheduling system to enable students to schedule advising appointments through MyAACC.
- Provide the technical support needed to implement ANGEL, a Web-based, enterprise learning management system. ANGEL combines a flexible architecture with a complete set of easy-to-use features and is designed to be used as a complement to traditional courses and for distance learning.
- Implement an online enrollment management system for managing prospective students via the college Web site.
- Conduct scheduled PC replacements on Arnold campus and at remote sites.

Useful Links

[Computer and Electronic Communication Access and Usage at AACC](#)

[Datatel Information](#)

[Gartner Research](#)

[IS Organization Chart](#)

[IS Tactical Plan](#)

[IS Forms, Policies and Procedures](#)

[Project and Operational List FY07](#)

[Smart/Modified Classroom Information](#)

Thank you to each area of Information Services for your contributions to this annual report.

Special thanks to the editor,
Laurie T. Heacock

Please direct comments and questions to
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