MILESTONES OF SUCCESS: NEW ACHIEVEMENTS MOVE AU FORWARD

YEAR IN REVIEW: 2015-2016
OFFICE OF INFORMATION TECHNOLOGY
AMERICAN UNIVERSITY
 OUR MISSION

We will build and strengthen a robust, reliable, and secure framework of information and communication technology to support our activities as a world-class university. By investing in state-of-the-art technology and planning for the future, the university will exploit technology to harmonize a diverse and widely distributed campus; leverage learning, research, and innovation; and empower users in physical and virtual space.

— AU Strategic Plan, Enabling Goal No. 2

 OUR GUIDING PRINCIPLES

The Office of Information Technology (OIT) identified the following guiding principles to describe how our organization wants to operate in the long term and to govern our planning activities. These principles apply universally to all services and functions within our organization, providing direction and guidance as we transform our day-to-day operations:

• align with AU’s mission by supporting the academic enterprise in preparing our students to lead and serve
• focus on providing timely, accurate, and secure solutions to campus
• ensure compliance with internal and external standards and adopt best practices
• utilize metrics and analytics to benchmark performance and make informed decisions
• foster an environment to support staff and encourage professional development
• emphasize transparency of our budget, campus commitments, performance metrics, and processes
• anticipate future technology needs to maintain AU’s competitive edge
Much progress was made on the IT front over the past year. This report highlights many of our accomplishments to improve our infrastructure and advance institutional effectiveness through adoption of new applications and processes.

Our networks are the lifeblood of this university and demand seems to double every couple of years, so we work hard to keep up with the rapid growth. To that end, significant upgrades were made to our wired, wireless, and cellular network infrastructure, our fiber network backbone, and our Internet bandwidth. To support the campus plan, we addressed the technology infrastructure needs in advance of the Washington College of Law’s move to the new Tenley campus.

On the applications side, we said goodbye to several of our old legacy systems, Lotus Notes and Novell, and replaced them with Microsoft Office 365 and Active Directory services. In support of our mobile first initiative, we made our web site responsive to automatically render appropriately on mobile devices. We also rolled out a new mobile AU portal with interfaces to many of the Ellucian applications that support our campus.

Probably one of the most welcome changes was the implementation of the new Student Planning system that helps students plan and track their courses and program of study with linkage to their advisors. Other significant improvements included rolling out a new parent portal (or proxy), providing better support for international students, continuing improvements to security, addressing HR compliance issues, and improving system reliability and performance.

Finally, we participated in a new customer service survey through EDUCAUSE that benchmarked AU IT services against our peers; and I am pleased to report that we are performing well against similar research institutions.

I encourage you to share your questions, concerns, or comments with members of our team and with me, as we continue to build an outstanding IT environment for our university.

Regards,

DAVID SWARTZ
Vice President & Chief Information Officer
ORGANIZATIONAL OVERVIEW

Transparency and inclusion—in decision making, planning, budgeting, and day-to-day operations—run throughout the work in OIT. The organization comprises multiple teams that collaborate to provide services in three functional areas.

**ENTERPRISE SYSTEMS & SERVICES**
Enterprise Systems and Services improves the way AU conducts business with technology solutions that meet the needs of diverse constituencies. In the application analysis and development area, functional professionals partner with technical experts to design and deploy scalable, sustainable solutions. Business intelligence and reporting services help mature the university’s data and analytical reporting capabilities, while web and emerging technologies support innovative digital and mobile tools. The network operations and enterprise infrastructure teams jointly administer the university’s technology infrastructure, striving for reliability, availability, and stability of services on which the campus depends.

**INFORMATION SECURITY**
Information Security supports AU’s executive leadership and the community by evaluating the university’s digital information assets for sources of risk throughout the IT planning, implementation, management, and ongoing operational phases. The group translates discovered risks into business terms to help stakeholders determine whether to accept, defer, mitigate, or transfer those risks.

**IT CUSTOMER SERVICE**
IT Customer Service employs industry-standard best practices for service management, change management, and performance measurement. This front-facing group constantly seeks to provide the highest quality of customer service to the AU community. Customer Service is committed to manage end-user expectations, train the community on the latest technology, troubleshoot all IT-related issues, and equip faculty and staff with secure, reliable workstations.
OIT SENIOR LEADERSHIP TEAM

Sharjil Hasan, Director, Project Management Office; Hassan Marvi, Director, Network Operations; Kamalika Sandell, Associate Chief Information Officer; Terry Fernandez, Senior Director, Customer Services & Support; Laurie Ambach, Senior Director, Enterprise Applications & Analysis; Dave Swartz, Vice President & Chief Information Officer; Cathy Hubbs, Chief Information Security Officer; Mohammad Mirzabeigy, Senior Director, Enterprise Infrastructure
Expectations and demands for technology support have changed over the years, as faculty now increasingly conduct their classes remotely during weather-related closures. Through all weather conditions, AU faculty and students rely on the availability of OIT services and support. Therefore, most OIT employees work full days from home, during a weather-related closure, to fulfill our operational project commitments made to the campus.

**SPOTLIGHT ON THE UNSUNG HEROES OF SNOWZILLA**

BY THE NUMBERS HIGHLIGHTS OF SNOWZILLA ACCOMPLISHMENTS INCLUDE:

- 4 network operations center analysts stayed overnight in the data center throughout the storm to provide 24-hour monitoring of the IT infrastructure.
- 85 OIT staff members worked full days remotely, including 9 who worked around the clock to upgrade the MyAU portal environment on schedule.
- 466 Help Desk support requests received from Friday through Tuesday with 438 of them resolved during the closure.
- 4,000 concurrent users accessed the wireless network during the storm on Saturday and Sunday, with an additional 1,000 concurrent users per day connecting on Monday and Tuesday.
- 575 AU employees from across the university utilized AU’s Virtual Private Network (VPN) to work remotely.
- 360 people used the Sametime chat feature to communicate with colleagues throughout the storm.
SPOTLIGHT ON THE 2015 TECHNOLOGY EXPO

On September 25, 2015, over 100 students, faculty, and staff engaged with OIT experts during our second annual Tech Expo community outreach event. Stations around the room showcased fifteen distinct IT services or programs, including Business Intelligence & Analytics, Enterprise Applications, Email & Collaboration, Help Desk, Information Security, IT Asset Management, Internship Program, Mobile Devices & Phones, OIT Mentorship Program, Project Management Office, SharePoint & Web Development, IT Service Management, Gaming, IT Technical Training, and Wireless Network.

Vendor-donated prizes were raffled off to attendees who had visited at least half of the stations. After actively engaging in lively conversations with OIT staff members, students reported positive experiences learning about new services and opportunities. Staff colleagues from other departments shared a desire to borrow from our brilliant ideas for their own events.
Two years ago, OIT published The Road Ahead: IT Solutions Empower Campus, an ambitious roadmap charting our course and vision for the next four years. Since then, staff have worked diligently to make meaningful progress on 34 major initiatives. Although the roadmap encompasses several hundred individual actions, the plan remains a living document that changes as we adapt to the evolving needs of our institution.

All initiatives align under four strategic objectives:

1. Strengthen the core with a resilient, agile, and secure infrastructure
2. Enable transformation through change leadership, organizational maturity, and professional development
3. Forge partnerships to deliver inclusive IT services
4. Advance institutional effectiveness and efficiency through responsible stewardship

The roadmap initiatives focus on strengthening and securing our core infrastructure, while building in flexibility and agility in the methods we utilize to deploy our applications. The team completed numerous critical planned upgrades, as well as worked to transition key on premise services to cloud services, such as the migration from Lotus Notes email and calendaring to Office 365. Intentional focus to incorporate innovative thinking in our current product suite drives us to align with industry partners that demonstrate a progressive vision.

Over the last eighteen months, the university has focused heavily on re-imagining student services through the work of the initiative known as Reinventing the Student Experience (RISE). Our next iterations of the roadmap will estimate the impact of incorporating RISE planning into our existing products and services.

OIT continues to mature organizationally, incorporating industry standard benchmarks into our management practice, and through strengthening existing governance processes.

This document presents highlights of major accomplishments for the past year.
In Fall 2015, 25 faculty members piloted the online application that replaces the paper Student Evaluation of Teaching in their 51 course sections. Student feedback was very positive, while faculty shared mixed reactions. With the pilot judged an overall success, the Faculty Senate endorsed an expanded rollout of the electronic instrument to a larger group of sections for Spring 2016.

Converting this cumbersome paper process into an electronic one has the potential to save the university significant resources over the coming year. This initiative supports American University’s green initiative, while simultaneously elevating the type of work performed by AU staff and meeting the expectations of AU students who prefer to interact with the surveys via their phones, tablets, or computers.

Did you know?

This year alone, ITS will replace 92,299 individual paper scantrons; close to 60,000 pages of “narrative response” questions; 5,500 pages of instructions, all of which would have been manually divided and delivered in 5,500 envelopes.
Collaborative efforts of the Office of Student Accounts, Ellucian’s Accounts Receivable and Cash Receipts development team, and the Office of Information Technology have resulted in successful implementation of Person Proxy functionality for Student Finance.

Launched in December 2015, the new Person Proxy feature gives American University students the ability to provide proxy access to parents, guardians, relatives, friends, and employers, through Colleague Self-Service. Students have complete control over the individuals, level of authorization, and length of time for which each proxy has access. Authorized individuals can access their students’ real-time billing information and statements any time—with any device to make quick, easy and secure online payments.

Over time, American University plans to rollout additional proxy parts to allow more access for authorized individuals to their student’s financial and academic information, such as financial aid, grades, and transcripts; however, already Implementation of Colleague Self-Service for Student Finance and Person Proxy has resulted in a dramatic increase in the number of electronic payments received. In July 2016, a system enhancement eliminated the need for manual account creation of authorized individuals, resulting in quicker access and reduced overhead costs for the university.
PERFORMANCE METRICS
SERVICE DELIVERY & SUPPORT

High satisfaction reported by 1,484 AU employees attending OIT classroom-based or online training classes

- Instructor Presentation: 93%
- Knowledge of Subject Matter: 97%
- Course Met Expectations: 86%
- Overall Satisfaction with Amount Learned: 89%
At the request of American University’s Faculty Senate, OIT coordinated efforts with Public Safety, the Office of Campus Life, and the software vendor to incorporate photos for students and faculty within the Blackboard learning management system. Integration developed between Blackboard and the identification card badging system allows for the automatic upload of official AU ID card photos every fall and spring semester, ensuring display of the most recent photo on the class roster, home screen, and any online posts made by that individual.

Having the photos in Blackboard helps faculty and students to break the ice and recognize one another more quickly, so they may begin to build relationships and collaborate. In addition, faculty may verify the identity of students for test taking.
Student Planning expanded the student self-service capabilities offered within Eagle Service, and represented the most significant change to the way course registration occurs, since the process moved online many years ago. Deemed a resounding success, Student Planning users experienced no system issues or performance degradation.

In November 2015, students first used the Student Planning module to register for their Spring 2016 classes, marking the culmination of an extraordinarily collaborative multi-year effort that involved representatives from the Office of Information Technology, Office of the University Registrar, Office of Student Accounts, Financial Aid, AU Central, and Washington College of Law.

Both students and academic advisers reported overwhelmingly positive reactions to the system. One e-mail received from a senior stated, “He was graduating in May and so wouldn’t have another opportunity to register for classes using Student Planning.”

Student Planning enables students to plan classes utilizing a calendar format for the upcoming and future semesters, as well as to register for classes directly from their plan.
AU’s International Student & Scholar Services (ISSS) welcomes more than 1,200 new international students and scholars each year, and serves approximately 1,600 international students and scholars annually. These numbers continue to grow as AU’s reputation and unique offerings attract more and more international students.

Like all universities, American University has compliance requirements outlined by the U.S. Government and works with the Departments of Homeland Security and State to maintain compliance for our international students and scholars.

When the federal government issued the original Student and Exchange Visitor Information System (SEVIS) regulations, no compliant, Colleague-compatible systems existed. This predicament forced AU to develop a homegrown management system. This year, OIT replaced the original system—developed using a programming language that will become incompatible, when AU moves Colleague’s database to Microsoft SQL Server in 2017. SEVIS regulations have continually become more complex and fluid, taxing OIT resources to ensure the system meets the ever-changing federal regulations, and highlighting the need the move to an off-the-shelf solution.

OIT and ISSS selected and implemented the University of Indiana’s Sunapsis system to replace the homegrown SEVIS compliance system. To support the change, OIT migrated 10,550 student records and 47,700 imaged documents from the legacy systems to Sunapsis. To support ongoing integration between Colleague and Sunapsis, OIT also built an XML interface that brings 94 Colleague data elements into Sunapsis nightly.

As an added benefit of using the off-the-shelf system, ISSS has joined an active and skilled user community of universities using the Sunapsis system. The new system will meet the upgrade requirements of the Federal Government, while OIT ensures uninterrupted data flow between the Colleague student information system and Sunapsis.

“
The new Sunapsis system will ensure that our F-1 and J-1 programs are in full compliance with SEVIS requirements which is critical to the university’s financial health and its reputation as a global university.”

— SENEM BAKAR
Director, International Student & Scholar Services

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### PERFORMANCE METRICS

**TECHNOLOGY SERVICE REQUESTS RESOLVED**

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<thead>
<tr>
<th>Service</th>
<th>Availability</th>
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<tr>
<td>ACTIVE DIRECTORY</td>
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<td>BLACKBOARD LEARN</td>
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<tr>
<td>BLACKBOARD TRANSACT</td>
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<td>C-CURE ACCESS SYSTEM</td>
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<td>COLLEAGUE</td>
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<tr>
<td>COMMONSPOT</td>
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<tr>
<td>EAGLEBUCKS PRINTING</td>
<td>100%</td>
</tr>
<tr>
<td>IMAGENOW</td>
<td>99.98%</td>
</tr>
<tr>
<td>ISUPPORT</td>
<td>100%</td>
</tr>
<tr>
<td>LOTUS NOTES EMAIL</td>
<td>100%</td>
</tr>
<tr>
<td>MICROSTRATEGY</td>
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<td>NETWORK</td>
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<tr>
<td>VIRTUAL PRIVATE NETWORK</td>
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</tbody>
</table>

Key services exceed the **99.9% availability target**
As part of the university’s campus plan, OIT partnered with the Washington College of Law (WCL) team, Planning & Project Management, and Facilities Management to design and build the technology infrastructure to support the move of the WCL to their new campus at Tenley. The effort required provisioning backbone fiber and creating diverse paths to the campus network, and installing the infrastructure to support critical IT services, such as wired and wireless networking, phone service, and Verizon cellular coverage, prior to the end of December 2015.

After extensive physical planning, site preparation, and configuration, the team relocated the WCL servers in January of 2016, moving them from 4801 Massachusetts Avenue to the OIT data center at 4200 Wisconsin Avenue. The relocation of these servers resulted in cost efficiency, better management, improved security, and increased service availability and reliability for all members of the WCL community.

— BILLIE JO KAUFMAN
Law Librarian, Washington College of Law
In partnership with the University Budget Office, Office of Academic Affairs, and Office of Institutional Research and Assessment, OIT successfully rolled out new tuition revenue and enrollment analytics. Prior to the development of this system, university administrators spent a significant amount of time reconciling various custom views of data.

The business intelligence platform enables administrators to leverage it for tuition revenue and enrollment reporting and allows for the retirement of those old custom reporting sources. The platform includes current metrics, historical trends, and a robust, interactive interface that allows users to drill down into the data for deeper analysis.

OIT has also successfully rolled out the first phase of retention analytics. Delivered with retention and graduation rates at the institution level and at the school level, the application provides the ability to drill down to specific programs, enabling departmental units to target attention on specific programs with retention rates lower than the desired threshold. The application also facilitates analysis across other dimensions, such as ethnicity, program, department, chosen major, and/or gender.

In partnership with the Office of the University Registrar and the Office of Institutional Research and Assessment, OIT integrated enrollment management data in MicroStrategy to provide robust self-service, ad-hoc reporting capabilities for academic units. This ongoing and iterative effort reached an important milestone with this first production release.

This first iteration includes demographic data for students, such as cohort, gender, race, email, and address information. Section rosters can include student academic details like primary school, primary program, academic history, and grading information.
In March 2016, OIT modified all of the web pages on the AU website to make them responsive and mobile ready. With over 40,000 web pages in total, the timing of this effort was critical. Google had announced that beginning in April 2016, websites lacking mobile sensitivity would receive lower ranking in search engine results.

OIT dedicated significant resources from the web development team to ensure the university mitigated this significant risk in a timely manner.

In collaboration with University Communications and Marketing, OIT also assisted in the redesign of the AU homepage to incorporate contemporary design trends. Next steps include redesigning most frequently used web sites as confirmed by Google Analytics, with initial emphasis on school pages, admissions, and campus life.
The Office of Parking and Traffic Services manages all parking assets and activities across the university, including distributing permits, issuing citations, and managing special events. As student enrollment has grown, parking management becomes more critical. AU managed parking using a collection of separate legacy programs cobbled together over time, which did not communicate with one another.

At the same time, Washington College of Law (WCL) utilized a separate system, not interoperable with Main Campus systems. With the planned merger of Main Campus and WCL parking operations when the Tenley Campus opened, a critical need existed to replace the legacy systems with a single system for both campuses.

To support this initiative, OIT partnered with Parking and Traffic Services to implement the T2 Flex Unified Parking Management solution. AU chose the product of parking management leader, T2 Systems, because of its integration capabilities with key systems, including Digital Payment Technologies, PayByPhone/ParkMobile, Ellucian Colleague, Active Directory, Blackboard Payment Gateway, Verizon Wireless Cellular Data, and Parking Access Revenue Control Systems.

The unified solution brought permit management, enforcement, citation collection services, and event parking under one consolidated system. To eliminate the need to issue permits under the old system, AU implemented the integrated solution in October 2015 to coincide with the move of the WCL to the new Tenley campus. Additional work remained after the initial go live to implement the full suite of features, with all work concluding in August 2016.
The Affordable Care Act (ACA) required that American University meet a 95% compliance target for 2015 or face penalties of up to $8M. The federal regulations require that AU perform compliance testing monthly and annually. While Human Resources (HR) actively participated in Ellucian’s ACA Beta program in 2015, AU contracted with Equifax, recognized as a HR Top Product of the Year by Human Resource Executive Magazine and as a Technology Innovation Award Winner by Ventana Research, to provide a platform to support our ACA compliance—a wise choice given the severity of the penalties and uncertainty around Ellucian’s new solution. Third party experts continuously audit the Equifax platform to ensure the accuracy of all calculations, models, and reports.

To support HR’s implementation of the platform, OIT delivered three detailed data feeds from Colleague: Employee Census, Payroll History, and Leave of Absence. In addition, OIT worked with HR to add new screens to Colleague to ensure tracking of all data necessary for ACA compliance monitoring in the enterprise resource planning system. The platform used this data in its business intelligence system to test for compliance and to prepare the necessary 1095-C Employer PROVIDED Health Insurance Offer and Coverage forms for 2,771 American University Employees in 2016. Equifax set strict timelines for implementing the ACA solution on which the HR-led project team consistently came in ahead of schedule, ensuring AU’s compliance with the ACA.
OIT upgraded the hardware and operating system used by the Ellucian Colleague enterprise resource planning system to improve overall system performance and ensure ongoing support, as the old system approached the end of vendor support.

As a result of moving Colleague to a new server architecture, AU gained the ability to use newer and faster disk drive technology, as well as to take advantage of increased processing power to efficiently process single threaded requests. The systems’ new operating system, Solaris release 11, provided improved patch management capabilities to simplify performing updates and issuing global security certificates.

This upgrade involved much more than just swapping out one machine for another, as Colleague connects to almost every other system used by AU. Detailed and precise planning, including multiple rehearsed upgrade attempts, ensured a seamless upgrade for our end users with no unanticipated impact on the actual live implementation.
OIT proactively plans for capacity increases and upgrades to strengthen and secure AU’s technology infrastructure. Recent improvements include upgrading the maximum capacity for both of the University’s Internet service providers, Lightower and Cogent, from 2.5G to 5G each, for a total of 10G.

OIT upgraded the campus cable television system from analog to digital technology, resulting in both a reduction of physical space needs and power consumption. All channels now broadcast in high definition.

OIT replaced aging network equipment with state-of-the-art network electronics, including advanced firewalls, load balancers, and switches. These changes facilitated the move of additional servers and services to CoreSite, in an effort to mature our business continuity and disaster recovery capabilities.

OIT upgraded the network in all residence halls, providing a 10-fold bandwidth increase from the core to these sites. 802.11ac wireless access points replaced the older 802.11n technology, increasing capacity from 100 megabits per second to 1 gigabit per second per wireless access point.

DID YOU KNOW?
In total, OIT installed 573 new wireless access points, 47 switches, 14 routers, and 3 network controllers. In addition to overseeing the design, installation, and configuration of the new electronics, the team supervised the work of multiple cabling contractors, and coordinated with Facilities Management, Housing & Dining Programs, and Public Safety to ensure a smooth implementation of the project.
OIT employed a phased approach to migrate American University’s directory authentication services and enterprise file and print services from Novell’s eDirectory to Microsoft’s Active Directory (AD) infrastructure. This effort allowed us to better meet the campus’ growing need for enterprise applications requiring AD integration, as well as reduced licensing and support costs.

In previous years, OIT set up the AD infrastructure and joined AU-owned Windows 7 or 10 workstations to the domain, enhancing AU’s ability to manage these assets. Next, OIT migrated all print services from Novell to AD.

Custom Apache solutions enabled us to recreate the user personal web space functionality within the new environment.

Once the file migrations completed, OIT decommissioned the legacy Novell servers, allowing AU to recover their licensing costs.

**DID YOU KNOW?**

Over the past year, OIT migrated 32 terabytes of data off of 21 Novell servers. The process took many months, as our staff copied the network volumes in batches, based on the drive type and security requirements.
For decades, most systems only required knowledge of a password to access computer services. Unfortunately, attackers take advantage of this “single key” required to unlock the proverbial door, as they have become increasingly adept at devising ways to acquire that single key. Once they have your key or password, they may begin masquerading as you, by utilizing your login username and password. Detection of this type of access challenges our security team, since your legitimate username and password permitted access to our systems. Once attackers have gained access, they may quietly explore AU’s systems—looking for ways to stay inside our network undetected with the intention of exploiting weaknesses to gain additional privileged access and ultimately more profitable rewards.

To combat this threat, OIT has begun to implement multi-factor or two-factor authentication. Multi-factor requires a user to enter an additional piece of information when accessing a service, in addition to their password. At AU, a unique number, sent to them via their mobile device each time they login, serves as the secondary authentication. The use of this second factor increases the difficulty for the attackers to gain access and has proven an effective security strategy. This year, we successfully implemented this requirement for OIT staff. Campus partners with privileged access will next transition to using multi-factor.
PERFORMANCE METRICS
SERVICE DELIVERY & SUPPORT

68,158 support requests with an average resolution time of 26 business hours for OIT and 9 business hours for the Help Desk.

- Time to Resolve: 91%
- Accuracy: 94%
- Professional Attitude & Courtesy: 97%
- Overall Support: 94%
After conducting months of compatibility testing of AU-supported applications, the Office of Information Technology began rolling out new Windows 10 workstations in May, preinstalled and configured for American University faculty and staff members. The NextGen Workstation Replacement Initiative provides for replacement of eligible, existing university-owned workstations, at least four years of age. The new workstations utilize native encryption and anti-virus capabilities built-in to the system, improving the integration and overall end user operating experience. OIT and our campus technology support partners may upgrade Windows 7 workstations over time to Windows 10, as warranted.
Attackers continue to use email as their primary means of exploiting users—a method often referred to as Phishing. The attacker sends a message purportedly from a legitimate source with a sense of urgency, often requesting that you click on an embedded link to provide your password or banking information.

Universities and organizations have adopted the highly-effective method of the attackers, but for a different purpose—training. This training involves an ongoing campaign where purposefully crafted messages get sent out to the community. If a user clicks on an embedded link, their computer does not get infected or their password stolen, instead the system shares awareness tips advising how they could have detected that message as a fake.

Through the campaign, AU staff and faculty will learn to better recognize and appropriately respond to phishing attempts, since phishing remains one of the primary methods malicious actors use to compromise credentials and other sensitive information. Designed purely as an educational exercise, this effort will not be punitive. A full one-year cycle will complete in spring 2017; and OIT will share the trending data at that time.
Every year, American University has multiple disability and Family and Medical Leave Act (FMLA) claims submitted by employees. Administration of disability and FMLA claims is a labor intensive process, regulated by complex rules. Human Resources outsourced Disability and FMLA claim administration to Prudential, beginning in March of 2016, to ensure compliance with federal and state regulations, as well as to reduce the administrative burden on the HR Benefits office.

OIT developed a weekly eligibility file for all employees, as a critical part of the project. OIT completed the interface development work within eight weeks of project request submission, exceeding HR’s expectations.
At an all-staff meeting last year, OIT staff expressed a desire for greater recognition of staff, by staff. A group of volunteers, known as the World Café Implementation Team, put those ideas into action by articulating a plan for a new OIT STAR Awards recognition program. Launched in April 2016, the program empowers OIT staff to nominate their colleagues for a monthly STAR Award for doing something notable, using entirely subjective criteria that may include: having a great attitude, displaying care for others, fostering teamwork, showcasing creativity, and/or performing exceptional service.

A monthly departmental email message acknowledges each of the nominees. Additionally, a randomizer tool selects one lucky person each month to win a small gift card. Our STARs for the last quarter included: Steve Gamble, Lee Sweet, Filemon Palero, and Patricia Stewart.
OIT Help Desk resolves 81% of all support requests during the initial contact.

- 33,133 - EMAIL
- 27,498 - PHONE
- 5,498 - WALK-IN
- 1,706 - INSTANT MESSAGE
Recipients of the 2016 University Staff Performance Award for Innovation & Change included OIT staff members—Matteo Becchi, Jill Ivey, Glenn Kwak, Randy Saba, and Kristina Whitchurch—along with Sam Berhanu, Ryan Bien, Jonnel Clothier, Darrell Cook, Rebecca Davis, Michael Giese, Dhamma Jama, Gene Logan, Lana Ludanova, Doug McKenna, and Tara Sabbagh, for the successful implementation of the self-service module for students to plan and register for their courses.

This challenging and complex project required input and participation from numerous student and staff stakeholders to ensure the best possible end user experience. The multi-year project culminated with the successful launch of the student planning module. The intuitive system received positive reviews from students and sets the stage for future self-service modules.
RESOURCES

With more than $26 million in total expenditures last year, OIT accounts for approximately 4.36% of the university’s overall budget.
RESOURCES

OIT EXPENDITURES FROM 2012—2016

- **2012**: $20,817,244
- **2013**: $22,005,848
- **2014**: $23,270,394
- **2015**: $24,136,530
- **2016**: $26,847,073
At the end of the Fall 2015 semester, the Office of Information Technology administered a campus-wide IT Customer Feedback Survey, as part of the Higher Education TechQual+ Project, to assess the quality and effectiveness of technology services provided to our community. Survey results will guide our future planning and prioritization decisions.

Analysis of the survey showed generally positive results with no major gaps, although some areas scored stronger than others. For the whole campus, the largest issues included Internet reliability, Wi-Fi-coverage, easy to use AU websites, Internet speed, and data to inform decision-making.
Peer benchmarks revealed great parity across organizations. AU performed better in six of the thirteen areas: having adequate wireless coverage, having adequate cellular coverage throughout campus, getting timely resolutions to user problems, having knowledgeable IT support staff, receiving understandable IT communications, and getting access to training or self-help information that increases my effectiveness with technology.

Responses to open-ended questions highlighted the IT services that were perceived as either most helpful or poorly performing.

Fortunately, planned service improvements will address many of the “poorly performing” services.

- Wi-Fi and cellular coverage significantly improved with the addition and upgrade of hundreds of access points and antennas in campus buildings, in large part due to the partnership with Verizon.
- Simplified guest wireless access will soon require no authentication or campus sponsor.
- Office 365 replaces Lotus Notes for faculty and staff data for their email, calendar, and contacts.
- In 2016, Internet capacity doubled to 10 gigabits per second.
- The MyAU portal and AU homepage also received refreshes to their design to make them mobile-friendly and easier to search.
- Development of a long-term plan is underway to address AU’s modernization of classroom technology.

### SUMMARY OF PERCEIVED SERVICE LEVELS BY UNIVERSITY ROLE

<table>
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<tr>
<th></th>
<th>STUDENTS</th>
<th>FACULTY</th>
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<tr>
<td>Fast Internet</td>
<td>Support for Online Learning</td>
<td>Web Sites</td>
<td></td>
</tr>
<tr>
<td>Reliable Internet</td>
<td>Classroom Tech/Spaces</td>
<td>Collaboration Tools</td>
<td></td>
</tr>
</tbody>
</table>
OIT PORTFOLIO BY UNIVERSITY DIVISION

- Technology Infrastructure: 28%
- Finance & Treasurer: 24%
- Academic Affairs: 18%
- President, Communications & Marketing, & General Counsel: 10%
- Development: 10%
- Campus Life: 10%
In addition to OIT’s mandate for maintenance, innovation, and support, technology staff maintains existing infrastructure and applications, invests in new functionality, and responds to quick-service requests. OIT received over 200 project requests last year.

To manage these projects, campus portfolio owners from all areas of AU prioritize their projects and determine campus-wide priorities as a group. OIT teams collaborate extensively, both within OIT and in the community, to manage scope, protect sensitive data, define schedules, determine budgets, and deliver on commitments.

OIT uses TeamDynamix, a project and portfolio management solution, to prioritize project efforts, actively monitor project portfolios and adapt to change, effectively manage resources, and meet commitments on time and on budget.

As part of OIT’s professional development initiative, the PMO delivered several training sessions focused on project management concepts, tools, techniques, and best practices to help AU colleagues manage stakeholder expectations and improve project delivery. Upcoming project management training sessions can be found online via AsuccessfulU.
Over the past year, OIT has continued to advance its goals of maturing our architecture by aligning with industry-standard best practices.

- Ensuring continuity of operations through use of business continuity data centers
- Incorporating security measures throughout our technology and operational processes
- Measuring our current performance and tracking historical trends to support management decisions
- Virtualizing as many services as possible to offer redundancy, simplify maintenance, and support AU’s goal of carbon neutrality

**99.96%**
SERVICE AVAILABILITY FOR CORE SERVICES, TRANSLATING TO FEWER THAN 4 HOURS OF UNPLANNED DOWNTIME PER YEAR FOR SERVICES INCLUDING BLACKBOARD LEARN; ELLUCIAN’S COLLEAGUE; NETWORK INFRASTRUCTURE; EMAIL, FILE, AND PRINT SERVICES; AND THE AU PORTAL

**96%**
OF SERVERS VIRTUALIZED TO SUPPORT CARBON NEUTRALITY
Articulating the roles and responsibilities for each group within OIT to support a particular service

Streamlining the handling of incidents, problems, and changes through formalized processes and use of an integrated case management system

Benchmarking our organizational maturity against peer higher education institutions

SERVICE-LEVEL AGREEMENTS, THE FORMALIZED SERVICE STRUCTURE ALLOWING FOR CONSISTENT SERVICE DELIVERY AS NEGOTIATED WITH CAMPUS PARTNERS

The orange line indicates the average perceived service level ranking of our peer research institutions. The teal line indicates the perceived service level ranking for IT at American University. Numerical ratings represent the perceived service level, based on a 9-point scale.