Dear Colleagues,

Fiscal year 2020-21 started under a cloud of uncertainty. Would the extraordinary measure of remote learning continue to be necessary? What impact would this have on education and on the University? But most importantly, could students, faculty and staff be kept safe? Thankfully, under University leadership that emphasizes health and student success, classrooms methodically opened, based on data-driven decision-making.

Information technology was there every step of the way. UAIR built an award-winning COVID-19 dashboard to keep everyone informed of the latest numbers. UITS staff kept Test, Trace and Treat information flowing, and leapt into action to support the massive vaccine delivery site built on the University Mall. Over 64 campus IT staff coordinated regularly to solve problems and share best practices to provide the best support possible to campus constituents during remote work and through re-entry.

University IT faced more challenges than COVID-19, though. The most effective way to address the findings of the State’s IT Security Performance Audit was to upgrade security on the entire campus network, including every network connection. While others worked from home, departmental IT staff came to campus to inventory every building. UITS worked on rolling out the security and ordering, configuring and installing new network equipment.

In addition to responding to the audit, the Information Security Office also ensured the University was focused on mitigating the latest threat—ransomware.

Expanded online software offerings supported students and faculty. Streamlined access to campus supercomputers and improved online disclosure and protocol systems made research use of technology less cumbersome. A centralized online contract management system provided University business managers with an all-in-one tool. New Arizona Profiles dashboards gave campus leadership access to data at a glance.

This Annual Report captures some of the extraordinary work accomplished by the CIO Division over the past year. IT staff are laying the groundwork for even more to come in FY2021-22.

Sincerely,

Barry Brummund
Chief Information Officer
The University of Arizona

The FY21 Annual Report was designed and produced by the CIO Division Communications & Marketing Team.
INFORMATION TECHNOLOGY PARTNERED TO MAKE VACCINE DELIVERY POSSIBLE

Dozens of CIO Division staff provided operational support and technology services to open the largest vaccine point of distribution for our community and Southern Arizona.

A PARTNERSHIP THAT MADE VACCINE DELIVERY POSSIBLE

At the start of 2021, the 24/7 Support Center was helping 46,000 students start another spring semester of remote learning. But on January 11, they learned that in one week the University was opening a COVID vaccine point of distribution (POD) on the University Mall for Pima County residents.

Staff from across the CIO Division coordinated closely with the University’s COVID Incident Command, Facilities Management, and UA Health Sciences, as well as external partners Pima County Health Department and Tucson Medical Center.

CIO Division staff equipped and connected the new mobile of ces and tents on the Mall, including adding more Wi-Fi access points to the entire location. 30 iPads were ordered and filled with additional power bricks to allow continuous digital access to vital information.

The CIO Division staff used their student worker scheduling software and operational skills to schedule POD volunteer shifts. Many hours were spent training volunteers in using the technology and accessing the right information systems.

A united effort from CIO Division staff made sure the POD was open a week after the call to action was given.

“It’s just been a crazy amount of teamwork and coordination across multiple teams.”

Clancey Dollard
Director of 24/7 Support Center

Later, when the site crossed over from a Pima County POD to a State of Arizona vaccination site, CIO staff made sure the equipment, appointment system access and volunteer training were updated to meet the different system’s technology needs.

When spring temperatures began to rise on the mall, iPad cases with ice packs were located and ordered to keep the technology running, hours expanded to two shifts a day and iPads were increased to 125.

“For a few weeks there, as we converted from County to State, CIO Division staff really got their hands dirty in terms of training and outlining what that new workflow was going to look like.”

Clancey Dollard
Director of 24/7 Support Center

242,960
Total vaccinations given January 23, through June 25, 2021

4,406
Highest number vaccinations in one day

400-500
Daily number of volunteers

161
Number of days the POD gave vaccinations 7 days a week up to 12 hours daily

64
Number of tech staff who provided support at the POD (43 from UITS).

“I would say there’s just such a tangible feeling of one goal that we’re all working towards, and that just being part of the health of the community — it’s incredible.”

POD volunteer

When spring temperatures began to rise on the mall, iPad cases with ice packs were located and ordered to keep the technology running, hours expanded to two shifts a day and iPads were increased to 125.

“For a few weeks there, as we converted from County to State, CIO Division staff really got their hands dirty in terms of training and outlining what that new workflow was going to look like.”

Clancey Dollard
Director of 24/7 Support Center

All day, every day—from January 19 to June 25—technicians were on hand to distribute equipment, train volunteers, support technology issues, swap out battery and ice packs, and collect and sanitize equipment when the day is done.

It took pharmaceutical research and medical professionals to put shots in arms. But it took volunteers—and scheduling, training, and equipment for those volunteers—to move thousands of people a day through a quick and efficient process for getting those shots.
FOCUSING ON THE DIGITAL EXPERIENCE

A new department, Digital Experience Technologies, was formed in FY21 to focus on technologies that support the digital experience for the University community.

TRELLIS CRM SCALES UP ONBOARDING AND ADOPTION

Demand spiked from units across campus for Trellis services in FY21. Trellis reorganized to optimize onboarding and adoption by adjusting the team structure and other operational processes, bringing 498 new users onto Trellis products.

An enterprise Events Management tool that allows campus users to manage virtual, hybrid, and in-person university events, was also launched. Trellis Events was first piloted with the College of Optical Sciences, and further refined by working with beta users to mature its capabilities. Trellis Events was released for general availability in May 2021.

The University’s communications and marketing community continued to expand its use of Trellis Marketing Platform, a central email management tool for sending branded messages to University constituents.

More instructors took advantage of using Early Progress Reports, a comment-based feedback system integrated into D2L that allows instructors to provide feedback to students early in the semester.

TRELLIS CRm SCALES UP ONBOARDING AND ADOPTION

IMPLEMENTING EMPLOYEE EMAIL BEST PRACTICES

CIO Division staff worked closely with the OF ce of General Counsel and the Division of Human Resources to align email provisioning with security best practices.

Deprovisioning of University email accounts now aligns to practices of data separation upon termination. Retirees can request to maintain their University email address but it will be housed in the University’s Google platform. Making these changes has improved the University’s data security position and saved the administrative and financial overhead of maintaining unused email accounts.

QUICKSTART 2.0 RELEASED

Arizona Digital released Quickstart 2.0 codebase which provides colleges and units using Arizona Sites a new set of web features and enhancements. Improvements included new mobile navigation, a simplified page building experience, improved accessibility and modern architecture for easier integration with other websites. Quickstart 2.0, a culmination of collaboration with the Arizona Digital developers network, will be the new foundation on which all Arizona branded and mobile responsive websites will be built.

In spring 2021, VCAT usage remained at the same high-level even when students returned to campus and visits to in-person OSCR labs increased. Bill Neumann, professor at Eller College Of Management, explained, “With VCAT, all students have equal access to a powerful desktop environment regardless of their personal technology resources.”

“In spring 2021, VCAT usage remained at the same high-level even when students returned to campus and visits to in-person OSCR labs increased. Bill Neumann, professor at Eller College Of Management, explained, “With VCAT, all students have equal access to a powerful desktop environment regardless of their personal technology resources.”

“In an instructor of technology-focused classes, I consider that the benefits of the VCAT virtual lab have been no less than transformative for the campus community and speak to our core values of adoption, compassion and inclusion.”

STUDENT SUCCESS THROUGH TECHNOLOGY

Student and Academic Technologies partners with faculty, staff and students to enable innovative instruction and student success.

REMOTE SOFTWARE KEEPS LEARNING GOING

Launched by the Office of Student Computing Resources (OSCR) in late 2019, Virtual Computing Access Technology, or VCAT, allows students access to University software anywhere, anytime, not just in campus computer labs.

VCAT’s easy-to-use web browser interface enabled on-demand access to software when a global pandemic required students to learn remotely.

In fall 2020, OSCR added more software offerings to VCAT, partnering with colleges who had specific requests. This strategic addition of licensing dramatically increased the number of user sessions, as VCAT became a primary way students accessed specialized software for their classes.

293%

Increase in Number of VCAT Users Per Day
From FY20 to FY21

FY21 METRICS

D2L LEARNING MANAGEMENT SYSTEM

(Version 20.217.3.19)

Unique Daily Users 43K
Peak Daily Logins 109.7K

ACCESS STUDENT

(Dracle PeopleSoft 9.2, PUM 8.5B.11)

Financial Aid Disbursed $667.2M

TOTAL ACADEMIC YEAR

Distinct Enrollment Requests 775.2K
Total Modifiable System 187

SUMMARY

Number of Sessions 167M
Number of Participants 13M
Meeting Minutes 699M

SUPPORTING UNIVERSITY COMMENCEMENT DURING AN UNPRECEDED YEAR

Over 30 IT professionals across multiple CIO Division teams came together to support the University’s Presidential Events hosting of Commencement activities for the Class of 2021. A total of 16 in-person graduation ceremonies were held between May 11 and May 13 for graduates and their families, marking one of the largest celebrations in modern University of Arizona history. Smaller ceremonies were needed to account for COVID-19 physical distancing requirements and limited attendance/seating. CIO staff supported the onsite technical needs and livestreams for the ceremonies, with just under 65,000 users visiting the commencement website during the week.

SERVICES

• UAccess Student
• Classroom & Lab Technologies
• Instructional Technologies

LEARN MORE

Learn more about Trellis CRM at trellis.arizona.edu
Learn more about Campus Web Services at web.arizona.edu

LEARN MORE

Bill Neumann,
Professor of Practice in MIS, Eller College of Management

Learn more about VCAT at vcat.arizona.edu
THE UNIVERSITY’S DIGITAL EXPERIENCE
Optimizing interactions across the entire portfolio of software applications
faculty, staff and students use every day.

Office of Scholarship and Financial Aid migrated to Trellis to replace four standalone systems that were used to serve students.

In partnership with Eller College of Management, HyFlex classrooms were built to enable new modes of teaching and learning.

Early Progress Reports adoption grew in FY21. EPRs sent increased 27% to 4.3K and number of courses increased 102% to 198.

Instruction

Redesigned Student Center was released with a new mobile experience and Google Analytics was implemented to understand usage patterns to evolve and improve the usage experience for students.

Student Tech

Gear-to-Go served an important need across the university throughout the pandemic, keeping instructional technology available to instructors and others.

OSCIR student computer labs have been a critical learning resource. They have easy access, good visibility, and proximity to food and other resources including technical consultants.

Centralized ordering of technology equipment for other units across campus enabled secured receipt of delivery and efficient distribution during the pandemic.

Arizona Mobile

Redesigned Arizona Mobile provided improved accessibility, delivered a new digital parking permit and mapped COVID test locations.

Multiple classroom modalities were supported to include asynchronous, synchronous, flex and fully remote learning environments.

Virtual Computing for Academic Technology (VCAT) saw dramatic increase in use driving a need for expanded licensing.

Zoom Virtual Drop-In New high-touch, expert outreach process enabled balancing across modalities of service: Email, Phone, Drop-in and Live Chat.

See more at annualreport.it.arizona.edu

Trellis Event Management debuted with Student Spring Take-A-Break Day. 13 events were created and the platform was released for general availability in May.

Campus ReEntry: system changes were made to UAaccess Student to support re-entry effectively.

Commencement 2021 online increased participation through hybrid modality, providing accessibility to those who might not otherwise has been able to attend in person.

The Digital Experience is Everywhere, Anytime

The University of Arizona has been focused on improving its digital experience even before the COVID-19 pandemic. We know students expect personalized, on-demand interactions powered by robust technology capabilities. As part of the University’s overall Strategic Plan released in 2018, supporting student success by developing high-quality digital experiences and relationship management has been a key goal in which the CIO Division has played an active partner.

Increasing enrollment, growth of online courses, and the impact of the pandemic on remote and hybrid learning, has prompted the CIO Division to lead several initiatives to develop a more modern digital technology ecosystem to meet student expectations.

The infographic on these pages highlights some of the changes and enhancements that occurred in FY21 and how they work to support the University’s digital experience.
TECHNOLOGY FOR WORLD-CLASS RESEARCH

Research Technologies provides key technology infrastructure and services to support Arizona’s world class researchers.

COMPUTE CAPACITY AND STREAMLINED EFFICIENCIES GET EVEN BETTER

In FY21, continued investment in our research community resulted in a new high performance computing system assigned the moniker “Puma.” With this added system, available research compute time has more than doubled. El Gato, Ocelote, and Puma together provide each campus researcher with 113,000 CPU hours of compute per month at no charge—nearly 40 times the computational power of a laptop.

Researchers can also submit jobs for additional “windfall” hours that are available whenever there is any idle capacity.

The High Performance Computing team spent time streamlining and standardizing access to and use of the resources. They created a common scheduler for submitting jobs, and shared storage and applications between the three systems. This makes it much simpler for researchers to get trained on using Research Data Center resources and gives them greater flexibility when using the systems.

The three systems are now all connected, allowing them to interface with each other very quickly so researchers can do millions of small calculations—such as simulating 12 million galaxies over 400 million years.

MAPPING BENNU FOR OSIRIS-REX LANDING

The OSIRIS-Rex mission reached a milestone supported by the power of the University’s supercomputing systems in FY21. Landing the spacecraft on the rough surface of the Bennu asteroid required complex computational data modeling to select the right landing site. Lunar and Planetary Laboratory research professor Mike Nolan realized that the landing safety algorithm would not run quickly enough on a laptop to meet their time window. He suggested the team move the project to the Ocelote supercomputer in the Research Data Center where they could run multiple simulations in parallel, and at a higher resolution.

This greater processing capability allowed them to take the sites that were identified as the best places to collect samples, get even higher resolution photos, and re-run the calculations again. With the safest approach pre-calculated, OSIRIS-Rex successfully captured a sample from the Prime “Nightingale” sample site in Hokioi crater on Bennu on October 20, 2020, and is headed back to Earth.

SERVICES

- Supercomputing (HPC)
- Regulated Research Environment
- Research Support Services
- UAVITAE

DARK MATTER DISCOVERIES

Arizona theoretical astrophysicists have discovered a new way to study space. Using a supercomputer to create a model of what theory says a phenomenon should look like, they can see whether observations match the prediction. This was born out in the first photograph of a black hole, and now has been applied to dark matter.

Since dark matter can’t be seen with human eyes, associate professor Gurtina Besla, doctoral student Nicolás Garavito-Camargo, and their team turned to computational modeling. They used the popular “cold dark matter” theory to predict what happened when the Large Magellanic Cloud (LMC) traveled through the outer edges of the Milky Way galaxy. They used Research Data Center supercomputing to illustrate the wake that would be left behind in the Milky Way’s dark matter dragged on the LMC’s dark.

Harvard astronomers have been making observations of the area and confirmed what the Arizona computer model predicted. The Besla Group will continue their studies using different models for the dark matter particle in simulations on the new Puma system.

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LEARN MORE ABOUT HPC AT RC.ARIZONA.EDU
LEVERAGING TECHNOLOGY & ADMINISTRATIVE EFFICIENCIES

Administrative Technologies creates and implements innovative technology solutions used to operate and manage the business of the University of Arizona.

EDGE LEARNING SUPPORTS EMPLOYEE TRAINING & PROFESSIONAL DEVELOPMENT

The University makes a number of courses available to employees, from compliance trainings to professional development opportunities. To better unlock the potential of University employees, a more robust learning management system (LMS) was needed. Administrative Technologies collaborated with the Division of Human Resources and many others to launch the Employee Development, Growth & Engagement (EDGE) Learning platform in November 2020.

EDGE’s modern, mobile-friendly web interface provides a better user experience for employees and streamlines the online process for required trainings. The new system is helping the University foster its larger vision for employee career planning, professional growth and life-long learning. Required trainings, such as information security and harassment prevention, were available in EDGE upon system launch.

Moving forward, the new centralized LMS creates an opportunity for more colleges and departments to shift their professional development into EDGE Learning, giving greater visibility to the entire spectrum of continued professional growth for employees.

GROUNDWORK LAID FOR FINANCIALS MODERNIZATION

After a short delay due to the pandemic, the Financials Modernization Project completed its initial planning phase.

Tremendous effort was taken to engage the business community in sharing their needs and participating in the process.

Work continues on this multi-phase, multi-year project to provide increased financial clarity, a more standardized Chart of Accounts, and more streamlined business processes for financial management at the University.

SYSTEM METRICS

UACCESS EMPLOYEE
(PeopleSoft HCM 9.2.0.35 PeopleTools 8.57.16)

UACCESS FINANCIALS
(Kuali Financials v7.2021-10-30 with Rice 2.7.0)

UACCESS RESEARCH
(Kuali Coeus 5.2.1 with Kuali Rice 2.3.9)

EDGE LEARNING
(Saba 50.0.7.1)

SERVICES

- UAccess Employee
- UAccess Financials
- UAccess Research
- EDGE Learning
- Contract Information Systems

See more at annualreport.it.arizona.edu
# UARIZONA’S WORLD CLASS NETWORK

The data network is the foundation of information technology at the University of Arizona. It’s the backbone for all wired and wireless internet connectivity on the main campus in Tucson and at distance locations across Arizona.

## SECURING THE CAMPUS WITH WIRED NETWORK REGISTRATION

Networks across the University grew organically over the decades, as every aspect of the institution used the internet more and more. Some campus buildings had data jacks where anyone could connect to the network.

It was convenient for academic exploration, but it was not a best practice for cybersecurity. Personal information, financial information, and high-level research could be at risk of a breach. Other threats included online vandalism and ransomware. Securing the campus network is a critical part of protecting the University’s data, operations and reputation.

The Arizona Auditor General recommended that the University have stronger protocols in place to know who (users) and what (devices) were accessing its computer network.

The CIO Division partnered with network managers across campus on two major initiatives:

- Implementing the 802.1x security protocol, which requires registration, on the wired network.
- Replacing all Ethernet switches (hubs or splitters) with centrally provided manageable equipment.

The Division’s project team and campus partners implemented this work, building by building, within a very short timeframe of September to December. Campus IT staff were tasked with reviewing reports and providing information during highly challenging times when most of the campus was working remotely due to the pandemic.

> “The wired network registration project went very smoothly for us considering the scope and size of the project. The overall security of the campus network has greatly improved with these changes and it was no small task by the team; they should all be commended.”

Ashley Bidegain,
James C Wyant
College of Optical Sciences

Once building networks were completed, UITS expanded the project to those Ethernet jacks where people had plugged in switches for multiple devices. Replacement switches were ordered, configured, arranged for delivery, and larger, managed switches were installed. Where an additional Ethernet jack was the better solution, UITS technicians installed those without the usual charge for such an installation.

### NUMBER OF DEVICES

<table>
<thead>
<tr>
<th>SERVICES</th>
<th>NETWORK CORE</th>
<th>DISTRIBUTION NETWORK</th>
<th>WIFI ACCESS POINTS</th>
<th>UNIQUE WIRELESS DEVICES</th>
<th>UNIQUE WIRED DEVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Core &amp; Internet2 ISP</td>
<td>42</td>
<td>3.4K</td>
<td>10.4K</td>
<td>37.7K</td>
<td>40.2K</td>
</tr>
<tr>
<td>Campus Data Network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network &amp; Data Center Operations</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

These projects were highly collaborative, multi-step, campus-wide efforts. Accomplishing them during the pandemic against competing priorities was a huge job for all involved. However, the campus network now reflects best practices in security and is better positioned to respond to audit requests.

See more at annualreport.it.arizona.edu
CAMPUS PARTNERSHIPS FOR TECHNOLOGY SOLUTIONS
Connecting the University’s IT community members, resources, and clients across the institution.

FROM CONTINUITY TO COORDINATION
During the early months of the pandemic lockdown, campus and central IT staff were meeting five days a week. They needed frequent contact to solve issues, get answers, share tips and collaborate on solutions for serving students, faculty and staff. They were suddenly remote.

In the past year, the focus shifted towards giving updates on projects, sharing processes and recommendations, and discussing new or current IT issues. Meetings were reduced to two days a week. The name of the group changed from IT Continuity to IT Coordination, and the Microsoft Teams for the group has become a central sharing point for project information and news.

Developing shared knowledge, best practices, processes and resources for leveraging technology.

The tone for the meetings changed to reflect the general evolution in the relationship between the CIO Division and campus IT towards a partner role.

Central and distributed IT worked together towards common goals.

When the University needed to respond to the State Auditor General with accountability for network connections, 345 IT staff collaborated in the Microsoft Teams channel for wired network registration. 90 of those were IT leaders responding weekly on the progress they were making.

Establishing communities of practice.

In addition to the IT Coordination meeting, CIO Division staff focused on creating communities of practice around other technologies. For example, the Business Process Automation Collaborative (BPAC) is developing shared knowledge, best practices, processes and resources for achieving business goals from technologies like Power Automate and Adobe Sign.


Campus IT Partnerships supported this coordination with easy-to-use reporting tools, progress reports, and equipment ordering, in addition to making space for discussing the project in the bi-weekly meetings. Network managers from departments shared their tips and their questions, and UITS network staff were there to resolve issues together with them.

Mutual accountability and shared responsibility.

In addition to the IT Coordination meeting, CIO Division staff focused on creating communities of practice around other technologies. For example, the Business Process Automation Collaborative (BPAC) is developing shared knowledge, best practices, processes and resources for achieving business goals from technologies like Power Automate and Adobe Sign.

Pooling knowledge and resources gave IT staff major benefits: Support to meet important, yet basic requirements like videoconference technology and information security; and spending less time duplicating effort and more time on projects that support the high-value work of their departments.

FY21 METRICS

<table>
<thead>
<tr>
<th>IT Staff</th>
<th>CIO Division</th>
<th>282 (37%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus</td>
<td>483.3 (63%)</td>
<td></td>
</tr>
</tbody>
</table>

JOB FUNCTIONS

<table>
<thead>
<tr>
<th>CIO DIVISION:</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Support</td>
<td>62.5</td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>30.9</td>
</tr>
<tr>
<td>IT Network</td>
<td>28.0</td>
</tr>
<tr>
<td>IT Security</td>
<td>11.0</td>
</tr>
<tr>
<td>IT Project Management</td>
<td>21.0</td>
</tr>
<tr>
<td>IT Applications</td>
<td>71.0</td>
</tr>
<tr>
<td>IT WebDev</td>
<td>6.0</td>
</tr>
<tr>
<td>IT Instructional Tech</td>
<td>10.0</td>
</tr>
<tr>
<td>IT Analysis</td>
<td>32.5</td>
</tr>
<tr>
<td>Research/Data Science</td>
<td>8.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAMPUS IT</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Support</td>
<td>215.6</td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>112.4</td>
</tr>
<tr>
<td>IT Network</td>
<td>32.3</td>
</tr>
<tr>
<td>IT Security</td>
<td>12.0</td>
</tr>
<tr>
<td>IT Project Management</td>
<td>26.0</td>
</tr>
<tr>
<td>IT Applications</td>
<td>180.9</td>
</tr>
<tr>
<td>IT WebDev</td>
<td>59.1</td>
</tr>
<tr>
<td>IT Instructional Tech</td>
<td>44.0</td>
</tr>
<tr>
<td>IT Analysis</td>
<td>75.0</td>
</tr>
<tr>
<td>Research/Data Science</td>
<td>8.1</td>
</tr>
</tbody>
</table>

483 Number of Campus IT Employees. (63% of total IT staff)
282 Number of UITS IT Employees. (37% of total IT staff)
345 Number of IT Staff Collaborating in UArizona IT Coordination Team Channel

Map courtesy of UArizona Enterprise GIS

See more at annualreport.it.arizona.edu
The Information Security Office provides policies, tools and processes to protect the information resources of the University of Arizona, using a shared responsibility model. University units participate in the Risk Management Program to evaluate and apply appropriate security controls to help detect and prevent the execution of malicious code on laptops, desktops, servers and other endpoint devices.

- **80% Participation Rate in Risk Management Program**
- **85% Participation in Security Awareness Training**
- **100% (40K) faculty, staff and students enrolled in two-factor authentication**
- **2.6M Phishing and Spam Emails Blocked**
- **207.69TB Log Aggregation**
- **623.9M Firewall Blocks Per Day**

The University’s Information Security Awareness Training was migrated to the new EDGE Learning platform in FY2020. Faculty and staff receive frequent, targeted communications and tips to help them avoid clicking on malicious links or attachments.

- **Sophos**, offered centrally to all faculty, staff and students, provides antivirus detection and behavioral analysis detection. **Cryptoguard** is an additional tool with alerts configured that can help reverse attempts at encryption.

**Network Segmentation** creates separation between various units/colleges on the IP Address level. Sensitive data may exist on separate segments as well. (Maturity of implementation varies across the University).

**Two-factor Authentication** helps to prevent lateral movement.

**Network Segmentation** helps to prevent lateral movement.

**Participant in the Information Security Risk Management program are guided to evaluating and applying appropriate access controls. These controls restrict access to sensitive information to only those who need to know in performance of their job function.**

**Firewall** is a device that contains an updated list of known malicious IPs and Addresses.

- **Malicious domains** are monitored and blocked.

**Information Security Incident Reporting and Response Policy** requires units to coordinate with the Security Operations Center to mitigate the impact of any realized risk scenarios.

**Incident Response Plans** developed by units include seeking help from professionals in the Information Security Office to help users and units when there is a cybersecurity event.

**Cyber Insurance** protects against financial loss from paying ransom.

**SERVICES**
- Consulting Services
- Security Tools & Architecture
- Monitoring & Incident Response
- Training

More about Information Security at security.arizona.edu
SUPPORTING TECHNOLOGY NEEDS IN THE UNIVERSITY COMMUNITY

Optimizing the student, staff, faculty and research technology experience with anytime, anywhere support.

DELI geg THE CUSTOMER

Support Services is one of the most customer-facing units within UITS, responding to over 150,000 requests for information technology support in FY21. This department interacts with a broad range of students, faculty, staff and researchers on main campus, online, at distance sites and in our global programs.

Its driving force? Helping the University community find solutions to their IT challenges and making technology more accessible to them.

With a majority of the University community remote in FY21, it was critical that support continued to be available 24/7 via phone, chat and online, while in-person support continued at reduced hours. Top services supported included email, UAWiFi, passwords and two-factor authentication. The department also had a dedicated support group to assist staff as they transitioned to working remotely.

As the pandemic evolved, IT had to adapt how it operated, too. Support Services used and deployed technology solutions to create a better customer experience, regardless of where either customers or 24/7 Support Center staff were located.

NEW STRUCTURE TO SUPPORT MORE SERVICES FOR CAMPUS

UITs Workgroup and Network Consulting has traditionally provided units across campus with the personalized attention of a local IT support team. To better serve the 62 customer units, this year WNC evolved into two teams: Desktop Support and Managed Services. These more specialized units will help to scale up and update their services to better meet their customers’ increasing needs.

Both groups provide best-practice optimization and security to their customers. Now Desktop Support is working on endpoint management to better manage the workstation hardware and software that faculty and staff rely on. Managed Services now specializes in evaluating, implementing, and supporting the increasing number of cloud services that units use in their work.

We’ve strategically implemented technologies to give our faculty, students, and staff a more delightful IT support experience. It’s also allowed us to meet greater demand for our services while continuing to be responsive to customer needs and provide more consistent interactions.

Susan Legg
Executive Director
Support Services

Team members began using Trellis’ real-time “chat” platform to assist multiple customers simultaneously and still maintain very high customer satisfaction.

The call queue transitioned to Amazon Connect, giving the support technicians more flexibility.

As teaching and learning activities went fully remote in FY21, there was a dramatic increase in chat as a popular method of IT Support. These platform changes meant that the 24/7 Support Center maintained its high level of performance and customer satisfaction during the change to remote work. Surveys are sent to customers by a third-party vendor after their interaction is complete. The 24/7 Support Center has consistently kept a 4.9 on a five-point scale throughout the pandemic, outscoring peers in higher education.

150K Number of Requests for IT Support

48% Increase Over 2020 in Use of Chat for IT Support

4.9 Consistent Customer Survey Response on a 5 Point Scale Maintained Throughout Pandemic

We’ve strategically implemented technologies to give our faculty, students, and staff a more delightful IT support experience. It’s also allowed us to meet greater demand for our services while continuing to be responsive to customer needs and provide more consistent interactions.

Susan Legg
Executive Director
Support Services

TEAM MEMBERS BEGAN USING TRELLE’S REAL-TIME “CHAT” PLATFORM TO ASSIST MULTIPLE CUSTOMERS SIMULTANEOUSLY AND STILL MAINTAIN VERY HIGH CUSTOMER SATISFACTION.

AMAZON CONNECT

Calls
537K

Units Using
53

Agents
1.1K

Usage Increase over FY 20
358%

ACCESS MANAGEMENT

Adding Access
8.7K

Total User Accounts
7.6K

Roles Managed
850

FY21 METRICS

24/7 IT SUPPORT CENTER

Total Technical Support Requests
111K

Non-Technical Support Requests
38K

Classroom Support Requests
1K

Chat Increase over FY20
48%

CLASSROOM MANAGEMENT

Adding Access
8.7K

Total User Accounts
7.6K

Roles Managed
850

We’ve strategically implemented technologies to give our faculty, students, and staff a more delightful IT support experience. It’s also allowed us to meet greater demand for our services while continuing to be responsive to customer needs and provide more consistent interactions.

Susan Legg
Executive Director
Support Services

See more at annualreport.it.arizona.edu
EMPOWERING DECISION MAKING THROUGH DATA ANALYTICS

University Analytics & Institutional Research provides data that empowers campus decision makers, informs policy and practice, and tells the University of Arizona story.

HELPING DECISION-MAKERS INTERACT WITH UNIVERSITY DATA

Campus users and senior leadership needing to see commonly requested data have a new and convenient way to access it—Arizona Profiles.

University Analytics & Institutional Research (UAIR) delivered this set of UAccess Analytics dashboards as one of the University of Arizona's Strategic Plan initiatives. This effort is one of the largest products UAIR has launched and is part of the team's ongoing efforts to increase data accessibility and literacy.

Arizona Profiles is easy to understand and access. Decision makers can see at a glance trends and figures in areas such as workforce, faculty, demographics, students, and financials. A key pillar of the project was user-friendly design, with the UAIR Design System informing readability and clean tables and graphs.

Highly relevant information is immediately available at the top level. Viewers can click on links to access additional in-depth panels and dashboards to view source information and more specific data.

With nine distinct dashboards and 350 data measures, a great deal of data is right at the fingertips for the campus community.

The Arizona Profiles cover a diverse range of information across key areas beneficial to most UAccess Analytics users. By default, the profile pages will populate based on the user's college or department.

Additional information and resources are located on UAIR's website, with introductory videos and guides into specific profiles as part of the Data Exploration Series.

The launch of Arizona Profiles has already been a success. With hundreds of users and queries numbering in the hundreds of thousands, it is clear that Arizona Profiles have filled an important need. UAIR will continue to enhance the dashboards to make data accessible to campus.

"Never before has our campus had access to a centrally defined set of institutional metrics like Arizona Profiles. This tool has truly revolutionized our ability to have conversations about strategic goals and outcomes from a common starting point."

Liesl Folks, PhD, MBA
Sr Vice President for Academic Affairs and Provost

DASHBOARD DATA INFORMS PANDEMIC RESPONSE

The COVID-19 pandemic shone a spotlight on the importance of data driven decision making for campus leadership. Because complex policies can impact tens of thousands of students and employees—accurate information is vital.

This made developing the COVID-19 dashboard a critical UAIR project in FY21. UAIR collaborated with numerous campus units on the project, and continues to adapt the dashboard when circumstances change, as when vaccination rates were added.

Top-level information includes positivity rates, test numbers, isolation bed availability, vaccine administration details, and breakdowns by race/ethnicity and age. Data is sourced from Campus Health, state, federal, and other institutional data sources.

The COVID-19 Dashboard has served as a reliable source of information for internal and external stakeholders and a key component in the University's overall pandemic response strategy.

SYSTEM METRICS

UACCESS ANALYTICS
(Oracle Business Intelligence Enterprise Edition 12c)

SERVICES
- Employee Data
- Student Data
- Financial Data
- Budget Data
- Space Data
- Website/Interactive Fact book
- External Reporting
- Enterprise Data Warehouse
- Sponsored Research Data

See more at covid.arizona.edu/dashboard

See more at UAIR.arizona.edu
BENCHMARKING & STRATEGIC PLANNING

The CIO Division conducts an annual benchmarking analysis to assess our strategy and operations relative to higher education peers and IT units across the University of Arizona. The analysis compares strategic priorities, services, organizational design, personnel, operating and capital expenditures, suppliers, and operational maturity to inform data-driven decision-making with University leadership, IT leadership, and IT staff. This information is published in the University’s IT Annual Report to foster transparency and support strategic planning activities.

EXTERNAL BENCHMARKING

The University of Arizona, a land-grant university with two independently accredited medical schools, is one of the nation’s top public universities in the U.S. News & World Report (USNWR) national university rankings. The University is also ranked in the top 25 in research expenditures among public institutions and is a member of the Association of American Universities (AAU). In FY21, UArizona’s IT expenditure was 6.0%, which was the smallest expenditure compared to higher education peers in all other benchmark categories.

INFORMATION TECHNOLOGY AT UARIZONA

The University of Arizona’s IT community is comprised of 765.7 professionals across central and distributed job functions that support college, institutional, auxiliary, and enterprise-wide services. The annual expenditure in FY21 for IT across the University was $104.8M.

UNIVERSITY INFORMATION TECHNOLOGY SERVICES

The CIO Division operates and manages central IT services for University of Arizona faculty, staff, and students. Within the division, there are 306.8 total IT FTEs represented in 19 UCAP IT job families. The annual expenditure in FY21 for the CIO Division was $68.2M.

HIGHER EDUCATION IT BENCHMARKING

<table>
<thead>
<tr>
<th></th>
<th>UArizona</th>
<th>ABOR Peers</th>
<th>Public AAU</th>
<th>USNWR Public 2022 Top 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty FTE1</td>
<td>2,863</td>
<td>3,330</td>
<td>3,049</td>
<td>2,800</td>
</tr>
<tr>
<td>Student FTE2</td>
<td>39,479</td>
<td>43,309</td>
<td>36,887</td>
<td>36,548</td>
</tr>
<tr>
<td>Research Expenditures3 (in the thousands)</td>
<td>$734.3M</td>
<td>$841.3M</td>
<td>$694.6M</td>
<td>$639.3M</td>
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<tr>
<td>Total Expenditures4 (net of hospital)</td>
<td>$2,162.0M</td>
<td>$2,895.0M</td>
<td>$2,341.9M</td>
<td>$2,226.8M</td>
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<tr>
<td>IT FTE1</td>
<td>782</td>
<td>985</td>
<td>842</td>
<td>820</td>
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<tr>
<td>IT Expenditures3</td>
<td>$120.5M</td>
<td>$204.3M</td>
<td>$151.8M</td>
<td>$152.8M</td>
</tr>
<tr>
<td>IT Staff per 1,000 Students</td>
<td>39.8</td>
<td>22.8</td>
<td>22.3</td>
<td>21.2</td>
</tr>
<tr>
<td>IT Exp. as % of Total</td>
<td>6.0%</td>
<td>6.9%</td>
<td>6.3%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

Sources:

1. Integrated Postsecondary Education Data System (IPEDS): Spring 2020 Human Resources Component
2. IPEDS: Spring 2020, Fall Enrollment Component
3. NSF Higher Education Research and Development Survey FY19
4. IPEDS Spring 2020, Finance Component
5. Educause Core Data Service Survey FY20

UNIVERSITY IT FY21 WORKFORCE & IT EXPENDITURES

<table>
<thead>
<tr>
<th></th>
<th>CIO</th>
<th>Provost</th>
<th>Health Sci</th>
<th>CFO</th>
<th>Auxiliary</th>
<th>RII</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start FY21</td>
<td>302.9</td>
<td>260.7</td>
<td>108.0</td>
<td>70.3</td>
<td>29.5</td>
<td>22.3</td>
<td>793.6</td>
</tr>
<tr>
<td>Hires/Transfers In</td>
<td>22.0</td>
<td>24.0</td>
<td>16.2</td>
<td>10.0</td>
<td>2.0</td>
<td>4.0</td>
<td>78.2</td>
</tr>
<tr>
<td>Attrition</td>
<td>42.4</td>
<td>34.4</td>
<td>15.4</td>
<td>8.5</td>
<td>3.0</td>
<td>2.3</td>
<td>105.9</td>
</tr>
<tr>
<td>End FY21</td>
<td>282.4</td>
<td>250.3</td>
<td>108.8</td>
<td>71.8</td>
<td>28.5</td>
<td>24.0</td>
<td>765.7</td>
</tr>
<tr>
<td>Turnover Rate</td>
<td>14.0%</td>
<td>13.2%</td>
<td>14.2%</td>
<td>12.1%</td>
<td>10.2%</td>
<td>10.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>% Receiving Compensation Increase</td>
<td>97.7%</td>
<td>91.9%</td>
<td>88.3%</td>
<td>92.9%</td>
<td>37.5%</td>
<td>84.9%</td>
<td>84.9%</td>
</tr>
<tr>
<td>% Receiving Promotion</td>
<td>9.9%</td>
<td>6.5%</td>
<td>3.7%</td>
<td>5.7%</td>
<td>3.4%</td>
<td>9.0%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Compa Ratio (Average % of Midpoint)</td>
<td>85.1%</td>
<td>83.8%</td>
<td>88.3%</td>
<td>84.3%</td>
<td>79.3%</td>
<td>83.8%</td>
<td>84.7%</td>
</tr>
<tr>
<td>Supervisor (Count)</td>
<td>46</td>
<td>124</td>
<td>56</td>
<td>42</td>
<td>14</td>
<td>16</td>
<td>294</td>
</tr>
<tr>
<td>IT Staff/Supervisor Ratio</td>
<td>6.1</td>
<td>2.0</td>
<td>1.9</td>
<td>1.7</td>
<td>2.0</td>
<td>1.5</td>
<td>2.6</td>
</tr>
</tbody>
</table>

UNIVERSITY IT BY JOB FAMILY

<table>
<thead>
<tr>
<th></th>
<th>CIO</th>
<th>Provost</th>
<th>Health Sci</th>
<th>CFO</th>
<th>Auxiliary</th>
<th>RII</th>
<th>Grand Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Support</td>
<td>62.5%</td>
<td>73.7</td>
<td>43.4</td>
<td>16.0</td>
<td>12.0</td>
<td>8.0</td>
<td>215.6</td>
<td>28%</td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>30.9</td>
<td>48.2</td>
<td>15.8</td>
<td>7.0</td>
<td>7.5</td>
<td>3.0</td>
<td>112.4</td>
<td>15%</td>
</tr>
<tr>
<td>IT Network</td>
<td>28.0</td>
<td>3.0</td>
<td>0.3</td>
<td>32.3</td>
<td>3.0</td>
<td>0.3</td>
<td>32.3</td>
<td>4%</td>
</tr>
<tr>
<td>IT Security</td>
<td>11.0</td>
<td>1.0</td>
<td></td>
<td>12.0</td>
<td></td>
<td>1.0</td>
<td>12.0</td>
<td>2%</td>
</tr>
<tr>
<td>IT Project Mgmt</td>
<td>21.0</td>
<td>2.0</td>
<td>2.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>0%</td>
</tr>
<tr>
<td>IT Applications</td>
<td>71.0</td>
<td>46.8</td>
<td>22.0</td>
<td>33.0</td>
<td>2.0</td>
<td>6.0</td>
<td>180.9</td>
<td>24%</td>
</tr>
<tr>
<td>IT Web Dev</td>
<td>6.0</td>
<td>32.1</td>
<td>6.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>91.8</td>
<td>1%</td>
</tr>
<tr>
<td>IT Instructional Tech</td>
<td>10.0</td>
<td>24.0</td>
<td>10.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>44.0</td>
<td>6%</td>
</tr>
<tr>
<td>IT Analysis</td>
<td>33.5</td>
<td>20.5</td>
<td>9.3</td>
<td>9.8</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>10%</td>
</tr>
<tr>
<td>Research/Data Science</td>
<td>8.5</td>
<td></td>
<td></td>
<td>8.5</td>
<td></td>
<td>8.5</td>
<td>8.5</td>
<td>1%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>282.4</td>
<td>250.3</td>
<td>108.8</td>
<td>71.8</td>
<td>28.5</td>
<td>24.0</td>
<td>765.7</td>
<td>100%</td>
</tr>
<tr>
<td>% of Total</td>
<td>37%</td>
<td>33%</td>
<td>14%</td>
<td>9%</td>
<td>4%</td>
<td>3%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

UNIVERSITY IT PERSONNEL & EXPENDITURES - IT JOB FAMILY GROUPS

<table>
<thead>
<tr>
<th></th>
<th>CIO</th>
<th>Provost</th>
<th>Health Sci</th>
<th>CFO</th>
<th>Auxiliary</th>
<th>RII</th>
<th>Grand Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>$20,381,686</td>
<td>16,280,366</td>
<td>6,893,699</td>
<td>4,695,969</td>
<td>1,562,844</td>
<td>1,387,055</td>
<td>51,202,469</td>
<td>28%</td>
</tr>
<tr>
<td>ERE</td>
<td>6,253,789</td>
<td>5,000,086</td>
<td>2,105,872</td>
<td>1,447,306</td>
<td>473,767</td>
<td>428,283</td>
<td>15,709,002</td>
<td>6%</td>
</tr>
<tr>
<td>Software, etc.</td>
<td>17,762,095</td>
<td>6,010,817</td>
<td>3,217,588</td>
<td>2,743,209</td>
<td>1,674,596</td>
<td>789,243</td>
<td>32,197,539</td>
<td>10%</td>
</tr>
<tr>
<td>IT Equipment</td>
<td>457,452</td>
<td>2,998,077</td>
<td>1,392,953</td>
<td>311,010</td>
<td>281,978</td>
<td>266,058</td>
<td>5,707,628</td>
<td></td>
</tr>
<tr>
<td>Total FY2021</td>
<td>44,855,022</td>
<td>30,289,346</td>
<td>13,610,111</td>
<td>9,197,595</td>
<td>3,993,175</td>
<td>2,871,489</td>
<td>104,816,738</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: sponsored/gift expenses $3,54 million

Source: UAccess Financials Payroll Expenditure Listing (PEL) with SET G-MF Income/Expenses - Productions All Funds Reconciliation Transfers

See more at annualreport.it.arizona.edu
RETRAINING IT TALENT IN A GLOBAL ECONOMY

The CIO Division developed and completed a new performance management process that incorporates the University’s Career Conversation model in conjunction with an expanded evaluation process based on three (or four for managers) Impact Factors.

The CIO Division HR team engaged with senior leadership teams on Impact Factors and Employee Ratings. After supervisors evaluated employees, the Division HR team conducted 15 calibration sessions to discuss performance expectations for each impact factor and ensure equitable assessments of the University Career Architecture Work Dimension guidelines across the department.

Expanded Evaluation Process
Impact Factors that correspond to the work dimensions outlined by the University Career Program.

Delivering Results
Getting the expected work done and demonstrating knowledge, skills, and abilities appropriate to job function and level.

Managing Self
Assuming responsibility, pursuing growth, and demonstrating flexibility, adaptability, and expertise.

Working with Others
Communicating and working effectively with others, promoting inclusivity, and approaching all that we do with integrity, compassion, and customer focus.

Setting Directions
Leading teams, strategies, or services effectively in relation to level expectations, (people managers only).

Evaluation Process Results in an Overall Combined Rating
- Exceeding Expectations: Frequently or consistently exceeds expectations for most/all behaviors.
- Achieving Success: Consistently meets expectations for most/all behaviors.
- Developing Contributions: Improvement needed in one or more behaviors to meet all expectations of the role.
- Does Not Meet Expectations: Failed to meet expectations for many/most behaviors.

CIO DIVISION FY21 WORKFORCE & IT EXPENDITURES

CIO DIVISION WORKFORCE ANALYSIS

<table>
<thead>
<tr>
<th>Workforce</th>
<th>Digital Experience</th>
<th>Student &amp; Acad Tech</th>
<th>Research &amp; Discovery</th>
<th>Admin</th>
<th>UAW</th>
<th>Info Sec</th>
<th>Office</th>
<th>Support Services</th>
<th>IT/Facilities</th>
<th>Managed Cloud Services</th>
<th>Campus IT Partnerships</th>
<th>CIO Admin</th>
<th>CIO Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start FY21, All</td>
<td>42.9</td>
<td>40.3</td>
<td>18.2</td>
<td>30.2</td>
<td>42.1</td>
<td>12</td>
<td>51.5</td>
<td>57</td>
<td>14.2</td>
<td>20.4</td>
<td>328.8</td>
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<td></td>
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<tr>
<td>Transfers</td>
<td>4.1</td>
<td>-17.6</td>
<td>12.2</td>
<td>-1.5</td>
<td>11</td>
<td>8.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hires</td>
<td>5</td>
<td>1</td>
<td>7.7</td>
<td>1.5</td>
<td>0.5</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attrition</td>
<td>8.1</td>
<td>0.4</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>11</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>44.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>End FY21, All</td>
<td>43.9</td>
<td>22.85</td>
<td>16.3</td>
<td>29.2</td>
<td>41.1</td>
<td>10</td>
<td>59.1</td>
<td>52.5</td>
<td>11</td>
<td>2</td>
<td>18.9</td>
<td>306.85</td>
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</tr>
<tr>
<td>Turnover Rate</td>
<td>18.9%</td>
<td>1.0%</td>
<td>11.0%</td>
<td>6.6%</td>
<td>16.7%</td>
<td>21.4%</td>
<td>8.8%</td>
<td>n/a</td>
<td>n/a</td>
<td>9.8%</td>
<td>13.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Receiving Compensation Increase (FTE count)</td>
<td>93.4%</td>
<td>100.0%</td>
<td>79.8%</td>
<td>95.9%</td>
<td>65.7%</td>
<td>100.0%</td>
<td>84.6%</td>
<td>95.4%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>89.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Receiving Promotion</td>
<td>4.7%</td>
<td>5.0%</td>
<td>11.0%</td>
<td>6.6%</td>
<td>21.4%</td>
<td>16.7%</td>
<td>9.7%</td>
<td>8.8%</td>
<td>4.9%</td>
<td>9.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compabilities (Average % of Midpoint)</td>
<td>83.8%</td>
<td>80.5%</td>
<td>89.5%</td>
<td>82.0%</td>
<td>91.4%</td>
<td>90.1%</td>
<td>83.8%</td>
<td>88.3%</td>
<td>88.3%</td>
<td>94.3%</td>
<td>85.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor (Count)</td>
<td>6</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>9</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>51</td>
<td></td>
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CIO DIVISION IT FTE BY JOB FAMILY

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<th>Job Family</th>
<th>Digital Experience</th>
<th>Student &amp; Acad Tech</th>
<th>Research &amp; Discovery</th>
<th>Admin</th>
<th>UAW</th>
<th>Info Sec</th>
<th>Office</th>
<th>Support Services</th>
<th>IT/Facilities</th>
<th>Managed Cloud Services</th>
<th>Campus IT Partnerships</th>
<th>CIO Admin</th>
<th>CIO Total</th>
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<td>IT Support</td>
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<td>1.0</td>
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<tr>
<td>IT Security</td>
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<td>Research/Data Science</td>
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* added new category in CIO Research/Data Science - recategorized

Source: UAaccess Employee HCM Census Data
All Active Employees
## Service by Department

<table>
<thead>
<tr>
<th>FTE</th>
<th>Personnel Expenses</th>
<th>Ops/Capital Expenses</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

### Digital Experience Tech (9531)

<table>
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<th>Ops/Capital Expenses</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Services</td>
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<tr>
<td>Student Email and Collaboration</td>
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<td>35,323</td>
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<tr>
<td>Trellis</td>
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<td>599,140</td>
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### Student & Acad Tech (9523)

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<th>Ops/Capital Expenses</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Services</td>
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<td>DRC support</td>
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### Research & Discovery Tech (9524)

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<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Performance Computing</td>
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<td>$662,955</td>
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<tr>
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### Admin Tech (9522)

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<tbody>
<tr>
<td>Financial Services Systems</td>
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### UAIR (9940)

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<tbody>
<tr>
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<tr>
<td>Customer Experience &amp; Support</td>
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<td>External Reporting</td>
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<tr>
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### Support Services (9530)

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<td>211,480</td>
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<td>Classroom Technologies</td>
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<tr>
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<td>840,437</td>
<td>679,916</td>
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</tbody>
</table>

### End of Life Equipment Deferred Maintenance Costs

The university has accumulated deferred network infrastructure maintenance due to the lack of increase in the FTE fee since 2008. The university has network and classroom technology equipment that is end of life and needs to be refreshed.

- **Network Equipment**: $12.4M
- **Classroom Equipment**: $2.9M

Total Expenses ($61,395,231/Total SCH for FY21 ($1,224,842) = $50.13 per SCH)
## CIO FY21 FUNDING SOURCES & USES

### Revenues

<table>
<thead>
<tr>
<th>Digital Experience Tech</th>
<th>Student &amp; AcadTech</th>
<th>Research &amp; Discovery Tech</th>
<th>Admin Tech</th>
<th>UMR</th>
<th>Information Security Office</th>
<th>Support Services</th>
<th>Infrastr &amp; Found Tech</th>
<th>Managed Cloud Services</th>
<th>Campus IT Partnerships</th>
<th>UITS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
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<tr>
<td>Strategic</td>
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</tr>
<tr>
<td>Student</td>
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### CARRY FORWARD IN

**$8,112,220**

### Expenditures

<table>
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<th>Digital Experience Tech</th>
<th>Student &amp; AcadTech</th>
<th>Research &amp; Discovery Tech</th>
<th>Admin Tech</th>
<th>UMR</th>
<th>Information Security Office</th>
<th>Support Services</th>
<th>Infrastr &amp; Found Tech</th>
<th>Managed Cloud Services</th>
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<th>UITS</th>
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<td>$2,697,415</td>
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<tr>
<td>Capital Exp, Non-IT</td>
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<td>$2,697,415</td>
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<td>$1,457,189</td>
<td>$2,697,415</td>
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<td>$18,736,036</td>
</tr>
<tr>
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<td>$2,697,415</td>
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</tr>
<tr>
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<td>$1,457,189</td>
<td>$2,697,415</td>
<td></td>
<td>$18,736,036</td>
</tr>
</tbody>
</table>

### CARRY FORWARD OUT

**$14,039,785**

### Revenue Minus Carry Forward

- Unpaid invoices and commitments* ($926,000)  ($721,130)  ($1,657,130)
- Technical Deficit ($2,462,600)  ($2,580,950)
- Financial/Health UITS ($1,393,800)

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*Carry forward for institutional project funding and unpaid invoices from FY2021

Source: UAccess Financials, Payroll Expenditure Listing PELi with SET G/MF Income/Expense - Productions, All Funds Reconciliation Transfers

See more at annualreport.it.arizona.edu