UK Information Technology Services

2024
ANNUAL REPORT

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Letter From the **CIO**

Dear Colleagues:

As we begin a new year, I want to take a moment to reflect on the achievements and milestones we have reached together. This year has been one of transformation, innovation, and resilience, and none of it would have been possible without your unwavering dedication and hard work.

One of the most significant events this year was the transition into a shared services model between the University of Kentucky (UK) Information Technology Services and UK HealthCare Information Technology. We positioned new and existing leadership into key positions to support strategic efforts, including naming a Chief Digital & Information Officer for UK HealthCare and a Deputy CIO of Enterprise Applications and Outreach. These adjustments have prepared our organization to better streamline our operations and enhance our ability to provide comprehensive IT support across the UK enterprise. Our teams' adaptability and collaboration have been instrumental in making the beginning of this journey a success.

We have made strides to better protect our data and systems at UK, UK HealthCare, and for the UK community. Teams have worked diligently throughout the year to make sure our solutions are up to date, our hardware is refreshed, and our access management fortifies us against cyber threats. Our awareness efforts to combat social engineering, scams, and phishing continue to protect and educate our community. The highlight of these efforts was hosting the largest CyberCon to date, which brought together experts and enthusiasts from across the region to share knowledge and strategies. Your commitment to protecting our digital environment is truly commendable.

This year also saw network upgrades across our campus and the state, including critical facilities like the Eastern State Hospital and the newly renovated Gray Design Building. These upgrades have not only improved connectivity but also enhanced the overall user experience for students, faculty, staff, patients, visitors, and more. Technical expertise and meticulous planning were key to the success of these projects.

Adding to the foundation of a strong, robust network, we continued to enhance our cloud storage and compute services to enable cutting-edge research, healthcare, academics, and operations. Skilled employees from different skill sets collaborated to build, test, and design easy-to-use and efficient applications to further enhance academic operations at UK. With every new year, I look forward to what's to come in these essential areas of innovation.

As a result of dedicated efforts by many teams, UK HealthCare achieved a Gold Star Level 10 from Epic. This proves our commitment to the Commonwealth of Kentucky to enable the best patient care through enhanced and effective use of the electronic health record. Many of our employees worked together to support advanced care in new initiatives like the EmPATH unit, a new approach to urgent behavioral healthcare that has helped over 1,500 patients since its opening.

Additionally, UK Healthcare upgrades made to the Enterprise Data Warehouse (EDW) will empower advances in patient care like providing data necessary to help reduce unplanned C-sections and hospital-acquired infections using AI and machine learning. The Bio Bank Optimization and Migration consents for research and registration project aims to ensure governance and compliance by verifying and cleansing Bio-Bank documentation to address data quality issues resulting from inefficient workflows during the transition to electronic processes. Whether providing at-the-elbow support to physicians, testing the latest feature updates or analyzing data trends, UK ITS teams helped healthcare providers make informed decisions and provide better care to Kentuckians.

As we celebrate these accomplishments, I want to express my deepest gratitude to each and every one of you. Your proactive approach and problem-solving skills have been invaluable in navigating these changes and are the driving forces behind our success. Together, we have made great achievements, and I am confident that we will continue to reach new heights in the coming year.
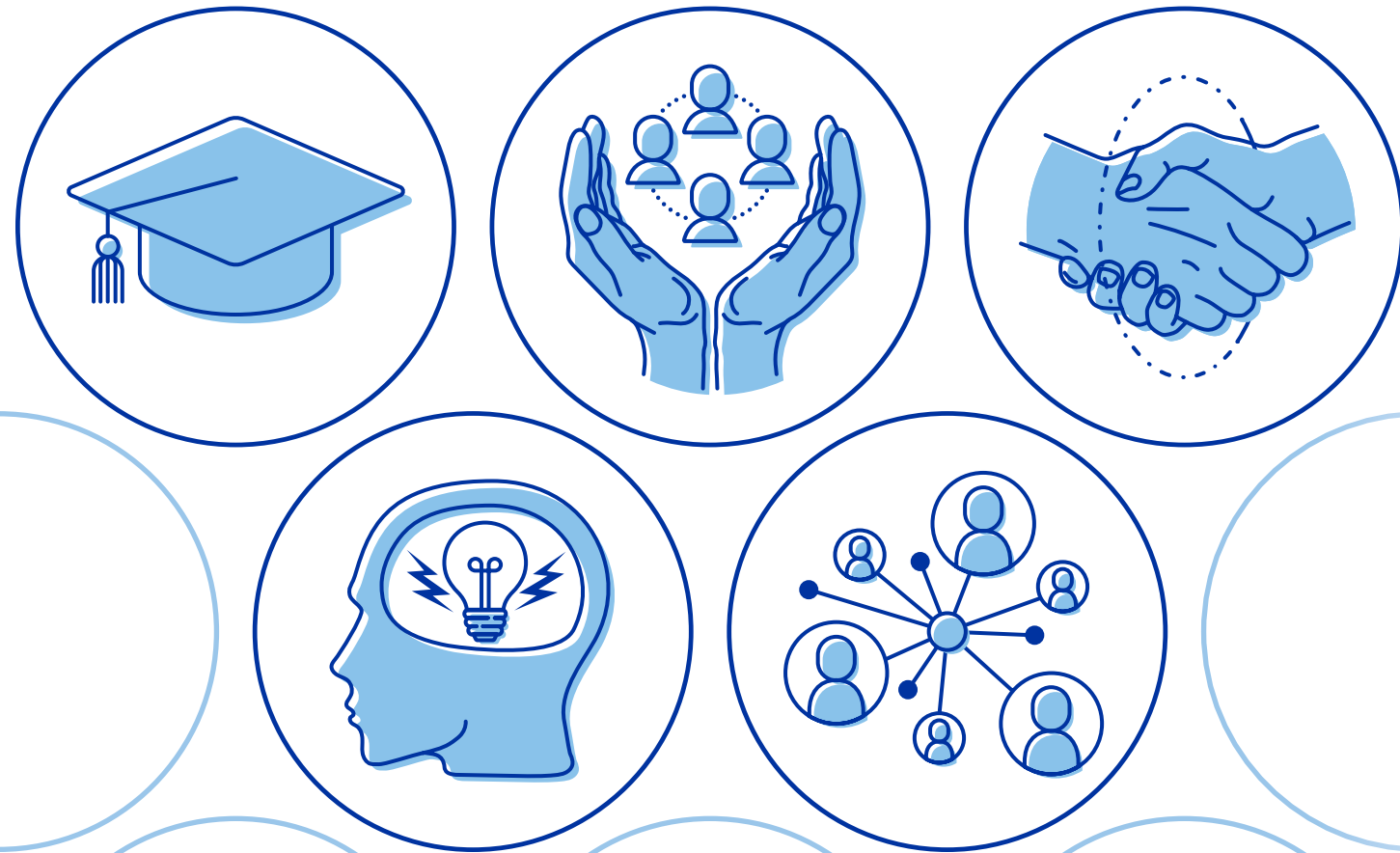
I appreciate your unwavering commitment and for being an integral part of our journey. Here's to another year of excellence and innovation!

Thank you,

Brian T. Nichols
Enterprise Chief Information Officer

PURPOSE-Driven **IT**
PLAN FOR UNPRECEDENTED RESEARCH, PURPOSEFUL AND OPTIMAL SERVICE AND EDUCATION

MISSION, VISSION, AND VALUES

UK Information Technology Services (UK ITS) provides and supports IT resources utilized by University of Kentucky (UK), UK HealthCare (UKHC), members of the University community, citizens of the Commonwealth, and beyond.

Mission

In support of the University's mission, UK ITS aims to advance the state of Kentucky by empowering the UK community through innovative and reliable technology solutions. UK ITS supports UK and UK HealthCare's commitment to education, research, healthcare, and servicing the Commonwealth by providing comprehensive, secure, and customer-friendly IT services.

Vision

UK ITS will strive to provide and protect an environment that features, "IT Abundance," wherein IT infrastructure, services, and solutions are innovative, readily available, and utilized to provide exceptional support to students, faculty, staff, and the broader UK community in their endeavors to uphold the mission of the University of Kentucky and UK HealthCare.

Values

We value customer engagement, collaboration, shared governance, innovation, teamwork, accountability, diversity, inclusivity, accessibility, and integrity.

We value the people of UK ITS who show initiative, grow interpersonal relationships, pursue excellence, and deliver it in terms of IT infrastructure, services, and solutions.

We value our relationships with the students, faculty, staff, visitors, and patients of UK and UK HealthCare - our customers, partners, and colleagues - and thus honor a service culture above all else.

We value the trust placed in us by University leadership, the Board of Trustees, and the University community, to be efficient and effective in the use of all resources.

We value the security of the technology resources and information entrusted to our care, and will be vigilant in maintaining the integrity of these critical items.

Committed to **Innovation:**

2024 YEAR IN REVIEW

In 2024, University of Kentucky Information Technology Services (UK ITS) continued to enhance and provide technology resources that empower the UK community, including students, employees, patients, visitors, researchers, and more. In a year of transition, teams primarily serving the academic campus and UK HealthCare came together more than ever before to think about the future of technology for our University community.

"I'm amazed and honored to join an incredible team of individuals and professionals focused on delivering state of the art technologies while continuously fostering an environment of collaboration, education, and ultimately improving the experience for patients across the Commonwealth. The collective work of our teams impacts all aspects of UK Healthcare and we've been afforded opportunities to expand this across the state and into our affiliates and partners."
- Katie Dickens, Chief Digital Information Officer

Providing a Foundation for Academic Innovation

Throughout the year, numerous UK ITS employees dedicated themselves to enhancing the student experience. Teams in Enterprise Applications and Outreach made enhancements to student-facing apps in the myUK portal, which improved advising, registration, and the financial aid processes. Additionally, teams installed new network infrastructure and AV equipment in new and renovated buildings, ensuring state-of-the-art

resources for all that use UK facilities. UK ITS supported cutting-edge student initiatives like UK Invests by automating payments and developing complex integrations. To better equip students with the technology resources needed at the beginning of the academic year, many teams collaborated to develop the Student Tech Checklist and distribute iPads to new students. Teams interacted with over 6,000 new students as they picked up their iPads—handing out the Student Tech Checklist— with the goal of removing any technology barriers before the first day of class.

"We saw well over 6,000 students in three days at The Cornerstone. To think about that many students getting to interact with the human side of IT, our employees, is really special to me." - Marci Adams, Assistant Director, Communications & Strategic Engagement

One of the unique and special opportunities at the University of Kentucky is having several UK HealthCare facilities, including the Albert B. Chandler Hospital, on our contiguous campus in Lexington. Developing, enhancing, and supporting technology resources at UK HealthCare provides an opportunity for our next generation of physicians and healthcare workers to learn in our many teaching hospitals and clinics. Our teams continue to support the future of Kentucky through technology advancement in our UK community.

Enhancing Patient Care

In 2024, UK ITS teams collaborated to install and implement essential

technologies for patient care across the Commonwealth. The new ICU floor at UK HealthCare's Albert B. Chandler Hospital was equipped with advanced remote electronic monitoring capabilities, ensuring seamless integration of patient-centered medical technology. Numerous projects executed by our teams function seamlessly in the background, ensuring optimal and effective operation of our healthcare services. For example, the Project and Portfolio Management (PMO) team supported replacing aging medication carousels at the Chandler Central Pharmacy to maintain efficient and safe medication dispensing.

"Despite tight deadlines, competing priorities, and complex requirements, the PMO ensured that our projects were delivered utilizing solid methodology, meticulous planning, effective risk management, and excellent team collaboration. The Project and Program Managers demonstrated their capability to consistently meet and exceed stakeholders' expectations, continuing to show we are the team to engage for successful project delivery." - Lynn Robinson, Executive Director, Project and Portfolio Management

Meanwhile, the ITS Performance Analytics Center of Excellence (PACE) gathered and validated data sources to enhance decision-making, workflow efficiency, and user experience across UK HealthCare systems. Through data-driven insights, PACE was able to deliver a tool to screen for social factors affecting health, connecting patients with resources and tracking

ITS participates in FCPS career fair at Rupp Arena.

data through the Health Disparity Dashboard. Throughout the year, these teams and many more UK ITS employees and partners completed numerous efforts to ensure patients could easily access the care they needed.

Fortifying Cybersecurity and Showing Resilience

In a complex institution like the University of Kentucky, securing our digital footprint is no easy task. Through efforts in monitoring, tooling, compliance, and education, the Enterprise Cybersecurity team, alongside members of other teams including Networking & Infrastructure and Enterprise Systems, executed various initiatives to keep our systems and information safe. Completion of

assessments like the HIPAA Security Risk Assessment and contributions to disaster recovery efforts supported UK and UK HealthCare with resilient systems and processes. Employees at UK were put to the test through phishing simulation exercises aimed to demonstrate the dangers of phishing.

With awareness and education at the forefront of proactively defending against cybersecurity threats, UK ITS hosted the largest CyberCon event ever. With more than 500 attendees hearing from leading cybersecurity experts in the public and private sectors, UK ITS was able to spread cybersecurity knowledge to the UK community. In collaboration with many stakeholder groups across the UK enterprise, cybersecurity is and will continue to be

a major priority for UK ITS.

"Across our University and HealthCare enterprise, I am grateful for the significant strides we've made to improve our security posture. The contributions from our team members and the Joint Task Force are meaningful." - Stephen Burr, Associate CIO & CISO Enterprise Cybersecurity

Resiliency is an essential component of a mature cybersecurity operation. One event that put resilience to the test was the global CrowdStrike outage in July 2024. The outage heavily impacted UK and UK HealthCare, resulting in thousands of UK workstations crashing. UK ITS teams mobilized quickly to restore critical systems and manually reboot computers. UK HealthCare and IT employees from across the

2024 YEAR IN REVIEW CONTINUED

enterprise, including many who had never provided desktop support before, collaborated to restore functionality to computers affected by the global outage.

"It was such a great experience, knowing that I am helping with a bigger part of research, and continuing to help medical facilities. It was cool to know I was part of the team helping with the global CrowdStrike outage – an experience I will never forget." - ***Ayah Abdeldayem,*** *Student Cybersecurity Analyst Assistant, Enterprise Cybersecurity*

Expanding Technology Resources to Serve Our Mission

Providing a strong network is at the foundation of our mission to support the UK enterprise with technology. To do this well, networking infrastructure must be constantly refreshed and upgraded. Projects aimed to enhance cellular coverage around and off-campus, upgrading network connectivity in academic and healthcare facilities, and ensuring new buildings are equipped with adequate infrastructure continued in 2024. Teams also executed an ongoing effort to decommission legacy analog telephones and launch a brand-new contact center to make and receive calls from various departments at UK.

"The connectivity, communication, and collaboration services we provide form the backbone of the university's technology ecosystem. My team's unwavering commitment to excellence drives our success and ensures we consistently meet the evolving needs of the university."
- ***Hector Rios,*** *Associate CIO, Enterprise Networking & Infrastructure*

Engaging the Community in

Technology

Engagement cannot be successful without generating awareness and understanding of technical services and systems. This often requires translating the work of UK ITS into things commonly understood by anyone. To highlight the innerworkings of campus technology and expertise of ITS employees, the team started a podcast – TechKnow – sharing knowledge from students, employees and experts from the local tech community.

"An AI tool could look at 10 million x-rays and figure out what's similar or what's different about them and find patterns in those x-rays. That may lead to cancer diagnoses, or it may help it help the radiologist find those differences faster and at a lower cost." - ***Adam Recktenwald,*** *Associate CIO & Enterprise CTO, Enterprise Systems*

The Communications & Strategic Engagement team led several engagement initiatives in 2024– reviving community groups that had been inactive since the COVID-19 pandemic. For the first time in several years, Women in Tech and the IT Community of Practice (IT CoP) groups met in person. Formed to engage IT professionals across campus, IT CoP continues to meet monthly to ensure all IT professionals at UK are informed of upcoming initiatives and available resources. UK ITS continues to invest in our community, participating in local K-12 Career Fairs and STEM nights to help educate students about careers in technology.
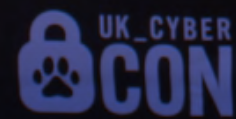
Photo booth picture captured at
UK_CYBERCON 24.

ADVANCING IN OUR STRATEGIC GOALS

Year after year, we aim to deliver comprehensive, secure, and user-friendly IT services that facilitate these commitments. Through these aligned strategic goals, UK ITS not only supports but actively propels the mission of the University of Kentucky and UK HealthCare, driving forward the transformative impact of technology in education and healthcare services across the Commonwealth.

GOAL 1   The University shall maintain a robust and plentiful IT environment to enable student success and faculty advancement.

GOAL 2   The University shall provide ready access to easy-to-utilize IT infrastructure and services.

GOAL 3   Information Technology Services shall provide an exemplary customer service focus in all its work.

GOAL 4   The University shall ensure the security and integrity of its infrastructure and information.

GOAL 5   The University shall maintain and provide access to data to make timely, strategic and informed decisions to support the University's mission of teaching, research, service and patient care.

GOAL 6   Information Technology Services shall be trusted and effective stewards of University resources.

GOAL 7   Information Technology Services shall effectively communicate and engage with the UK community.

GOAL 8   The University shall maintain a modern, state-of-the-art network and infrastructure.

GOAL 9   The University shall consistently enable and support innovation and research through strategic investments.

GOAL 10   Information Technology Services shall support the University's objective to build partnerships and collaborations.

PUTTING STUDENTS FIRST

GOAL 1: THE UNIVERSITY SHALL MAINTAIN A ROBUST AND PLENTIFUL IT ENVIRONMENT TO ENABLE STUDENT SUCCESS AND FACULTY ADVANCEMENT.

Starting Their Journey with Technology

• Supported students during orientations and start-of-term events including Merit Days, Big Blue Nation Orientation, and Technology Takeover by troubleshooting issues and promoting technology resources for a smooth transition into the academic environment.

Cybersecurity and Awareness Efforts

• Continued Cybersecurity Awareness efforts, impacting 212,224 individuals in 2024 through training sessions and phishing awareness simulations. Organized several online awareness campaigns throughout the year including Data Privacy Week, Safe Internet Day, and International Fraud Awareness Week. Campaigns like Artificial Intelligence Week featured the launch of two AI-focused courses on the myUK Learning platform.

• Hosted online events like "Careers in Cyber," attracting 165 participants and fostering connections between students and industry professionals.

• Conducted Cybersecurity Awareness Month activities in October aimed to engage students, including hosting the largest UK_CYBERCON event with 550 attendees.

• Completed enterprise-wide phishing simulation and assigned dynamic training to improve user education.

• Brought cybersecurity knowledge and expertise to student and faculty focused events including UK Online's National Distance Learning Week and UK's Curiosity Fair.

Infrastructure and Technological Improvements

• Completed critical network and wireless upgrades across the academic campus, including Miller Hall, William T. Young Library, Memorial Hall, and regional locations like the Robinson Center for Appalachian Resource Sustainability facility in Jackson, Kentucky, significantly improving internet access and Information Technology services for faculty and students.

• Custom applications and enhanced features developed to streamline student processes like advising, financial aid, and registration, as well as initiatives like UK Invests aimed at financial literacy.

Introducing the Student Tech Checklist

To ensure students can access and use essential technology needed throughout the academic year, UK ITS partnered with UK Smart Campus to create the Student Tech Checklist. The checklist consists of six resources identified as essential to students' success while attending UK.

Largest UK_CYBERCON Audience

UK_CYBERCON 24 draws largest ever audience to networking, educational event. As part of Cybersecurity Awareness Month, UK ITS hosted an event to engage students, faculty, and staff with cybersecurity topics and industry speakers to further awareness and education.

A student receiving their iPad at the 2024 Fall Tech Takeover.

TAKING CARE OF OUR PEOPLE

GOAL 2: THE UNIVERSITY SHALL PROVIDE READY ACCESS TO EASY-TO-UTILIZE IT INFRASTRUCTURE

New Tools and Expansion

- New tools for tracking Customer Services interactions, facilitating seamless escalation to Tier 2 support when needed.
- Expanded the automated Chief Information Officer approval process to include healthcare software purchases, streamlining procurement workflows.
- Launched communication campaigns to promote tools like the Duo Mobile app, emphasizing its advantages over other multi-factor authentication methods for cybersecurity and ease of use.
- Collaborated with vendors, UK Legal, and Procurement to support enterprise licenses for solutions like Adobe, Microsoft, and SAP.

2024 Compliance Project

The Enterprise Applications team collaborated with UK's Distance Learning Compliance Team to implement new processes that meet recent federal regulations on Financial Responsibility, Administrative Capability, Certification Procedures, and Ability To Benefit (ATB). This project ensured UK's certification procedures comply with federal rules, helped inventory UK's licensure programs, and set up automated processes for direct disclosures. It also raised campus-wide awareness about compliance and data management for distance education and licensure programs. The project earned two prestigious awards: the Compliance Innovations Award and the Licensure Programs Award, recognizing excellence in global compliance research and triple-level compliance.

GOAL 3: INFORMATION TECHNOLOGY SERVICES SHALL PROVIDE AN EXEMPLARY CUSTOMER SERVICE FOCUS IN ALL ITS WORK

Empowering the University Community

- Continued to provide tech support operations to the enterprise and further develop self-service forms and how-to articles to empower customers to find the technology information they need.
- Participated in customer service training for Enterprise Network & Infrastructure employees to improve their technical support capabilities and client interactions.
- Provided at-the-elbow electronic health record (EHR) support for UK HealthCare staff, ensuring overall efficiency and quality of healthcare services provided to patients.
- Developed partnerships with various data stewards across UK HealthCare to provide training, best practices, and knowledge sharing in PACE spoke and hub data model.

1,863

KNOWLEDGE BASE ARTICLES UPDATED IN 2024

For the UK Tech Help Center and ITS Customer Service agents

ENSURING GREATER TRUST, TRANSPARENCY, AND ACCOUNTABILITY

GOAL 4: ENSURE THE SECURITY AND INTEGRITY OF INFORMATION TECHNOLOGY INFRASTRUCTURE AND INFORMATION

Cybersecurity Enhancements

- Blocked over 3.5 million phishing attempts and automated remediation of more than 1.6 million email threats through enhanced spam detection policies and proactive cybersecurity measures.

- Conducted risk assessments for 257 vendors working with university systems, identifying vulnerabilities and securing third-party integrations.

- Upgraded critical network security components, such as firewalls and Virtual Private Network (VPN) systems, across campus and healthcare facilities to enhance protection for sensitive data.

- Implemented a custom phishing detection rule to mitigate targeted attacks and initiated trials of cyber-attack management solutions.

- Developed a centralized log collection system across healthcare workstations to identify and address security issues more effectively.

- Completed Fidelity-required security assessment for UK Invests.

- Completed HIPAA Security Risk Assessment and results reported to IT Governance Security Committee.

- Initiated UK HealthCare Business Continuity Risk Assessment.

- Completed Microsoft Major Incident Response Plan.

- Completed HealthCare business continuity awareness audit.

- Decommissioned legacy single sign on applications, including GLUU, for enhanced login security.

Healthcare Technology Enhancements

- Upgraded the tool used to manage electronic medical record access for 30,000 users and providers.

- Processed security exceptions to support moving the electronic medical record to the cloud.

- Enhanced application security by implementing advanced protections for app developers, ensuring secure code practices.

Email and Endpoint Security

- Elevated email security posture by enabling additional controls, significantly reducing junk and phishing incidents across the organization.

- Initiated live testing with Microsoft Intune's endpoint management, setting security baselines and best practices to protect and standardize device security.

- Advanced automation capabilities to proactively flag and secure accounts with high-confidence indicators of compromise.

Network and Infrastructure Improvements

- Configured remote access for a utilities and energy management vendor to troubleshoot issues.

- Decommissioned over 70 unused network connections in preparation for decommissioning aging hardware.

- Blocked an outdated network zone to reduce the attack surface, continuing the transition to a more modern solution.

- Began implementation of a new management platform to enable real-time tracking of UK's cyber risk exposure.

- Deployed new hardware to augment the current privileged account access control solution.

- Resolved issues with automated cyber-attack response.

- Initiated the creation of a more secure log-in solution for Citrix sessions for both HealthCare and campus.

5,716,453
EMAIL THREATS PREVENTED
16% decrease from 2023

624,635
CYBERSECURITY INCIDENTS REMEDIATED
1,261% increase from 2023

How AI is transforming third-party risk assessment at the University of Kentucky

UK ITS developed a new third-party risk assessment process leveraging AI, resulting in meaningful cybersecurity enhancements that have benefited our university community.

Chase Bronaugh splicing fiber optic cables together.

GOAL 5: MAINTAIN AND PROVIDE ACCESS TO DATA TO MAKE TIMELY, STRATEGIC, AND INFORMED DECISIONS TO SUPPORT THE UNIVERSITY'S MISSION OF TEACHING, RESEARCH, SERVICE, AND PATIENT CARE.

Keeping Systems Up-To-Date

- Published and updated knowledge base articles to improve access to Information Technology resources and support strategic decision-making for various university stakeholders.

- Completed a Campus F5 network upgrade to strengthen the reliability and accessibility of enterprise data systems.

- Collaborated with researchers to integrate advanced data management solutions, supporting teaching, research, and patient care missions effectively.

- Created a tool to screen for social factors affecting health in five areas: transportation, utilities, housing, food, and safety. This screening helps staff understand and address patient needs beyond their medical conditions, which is essential for state and federal programs.

- Updated the UK HealthCare Enterprise Data Warehouse (EDW) and began a transition to Azure, a project that will continue through fiscal year 2025. One key goal is to reduce unplanned C-sections and hospital-acquired infections in babies.

- Developed, implemented, and supported enhancements in the myUK portal to simplify and streamline administrative processes like Title IX, financial aid, and application for Free Application for Federal Student Aid (FAFSA).

Lending Expertise to College of Healthcare Information Management Executives (CHIME)

Roshan Hussain, former Chief Data Officer leading the Performance Analytics Center of Excellence (PACE) team, presented at the 2024 CHIME Fall Forum in San Diego. The session entitled "*Modernized EDW: On-Prem to Cloud Enablement of Enterprise Analytics*" discussed UKHC's migration journey from a legacy, on-prem data warehouse to an Azure Databricks lakehouse.

GOAL 6: INFORMATION TECHNOLOGY SERVICES SHALL BE TRUSTED AND EFFECTIVE STEWARDS OF UNIVERSITY RESOURCES.

- Ensured University resources are effectively managed via a comprehensive vendor risk management review process, a shared services model with UK HealthCare IT, and proactive support of vendor license changes.

- Presented progress towards a centralized IT Service Management (ITSM) model and showcased expertise and commitment to resource management during Educause's NERCOMP Annual Conference in Providence, RI.

- Partnered with network service providers to implement proactive measures, enhancing communication reliability across the university's wide area network, which is essential for supporting remote facilities.

- Achieved cost reductions by decommissioning 1,957 analog voice lines, leading to savings of approximately $9,300 per month.

- Advocated for sustainability through Information Technology initiatives like consolidating network services and reducing redundancies, ensuring effective resource utilization.

GOAL 7: **INFORMATION TECHNOLOGY SERVICES SHALL EFFECTIVELY COMMUNICATE AND ENGAGE WITH THE UK COMMUNITY.**

Starting Their Journey with Technology

- Increased social media outreach significantly, with over 4,800 followers and an almost 75% increase in impressions across platforms from the previous year.

- Gained almost 1,500 new subscribers across the enterprise to UK ITS email notifications.

- Published 116 editorial articles to inform the university community on technology resources, best practices, and upcoming events, gaining over 68,000 views and resulting in a 76% year-over-year increase in web traffic to its.uky.edu.

- Began the transition to a more modern contact center solution, which will enhance communication across various departments, including healthcare and administrative teams.

- Worked with the Physical Plant Division and University of Kentucky HealthCare on ensuring adequate cooling systems for communication hubs to prevent outages and maintain service reliability.

- Continued providing Cybersecurity@uky.edu, IsThisEmailSafe@uky.edu, and ITSaboutYou@uky.edu to customers.

Launching the TechKnow Podcast

UK ITS launches new "TechKnow" podcast to inform the UK community of the latest cyber threats, tech trends, and ITS news by sharing ITS employees' expertise. Episodes are published on Spotify, listen by searching "TechKnow".

Women in Tech (WiT)

WiT hosts Events Aimed to Empower Women in Tech, formerly Women in IT, launched its first programing since the COVID-10 pandemic. Women in Tech hosted various events including panels sessions to share expertise and networking coffee hours. Through these initiatives, the group fostered a supportive community and contributed to the advancement of women in technology at the University of Kentucky.

Robust Network Installation on New ICU Floor of Albert B. Chandler Hospital

UK HealthCare's Albert B. Chandler Hospital opened a new intensive care unit (ICU) floor with remote electronic monitoring abilities (eICU). Behind the scenes, UK ITS partnered with UK HealthCare IT and collaborated to install the infrastructure and network needed for the latest patient-centered medical technology.

Investing in New Technology for more Reliability and Cost Savings

Thanks to an initiative by the Networking and Infrastructure team, recurring connectivity costs were eliminated through a cost-effective point-to-point wireless solution, demonstrating a strategic and responsible use of resources.

INSPIRING INGENUITY

GOAL 8: THE UNIVERSITY SHALL MAINTAIN A MODERN, STATE-OF-THE-ART NETWORK AND INFRASTRUCTURE.

- Collaborated on the OpenRoaming proof of concept, aiming to provide seamless wireless connectivity for students, faculty, and visitors across campus and healthcare facilities.
- Completed multiple infrastructure upgrades, including Eastern State Hospital, Frazee Hall, and the Gray College of Design, integrating Distributed Antenna Systems and modern wired and wireless networks.
- Continued progress on the migration of the Kentucky Regional Optical Network, enhancing network redundancy and reliability for affiliated institutions like Western Kentucky University.
- Completed the implementation of a new Microsoft Azure cloud architecture, increasing bandwidth capacity, enhancing security, reducing operational overhead, and enabling the progress of critical initiatives like Epic and EDW.

GOAL 9: THE UNIVERSITY SHALL CONSISTENTLY ENABLE AND SUPPORT INNOVATION AND RESEARCH THROUGH STRATEGIC INVESTMENTS.

- Partnered with research-focused entities, including the Institute for Biomedical Informatics, to expand high-performance computing resources for different fields, from healthcare to computational sciences.
- Launched proof-of-concept initiatives, such as Degree Analytics, which leverages network-derived location data to analyze behavioral patterns, providing insights that inform strategic decisions and enhance campus life.
- Collaborated with Institute for Biomedical Informatics to safely procure data for sensitive studies areas.

BRINGING TOGETHER MANY PEOPLE, ONE COMMUNITY

GOAL 10: **INFORMATION TECHNOLOGY SERVICES SHALL SUPPORT THE UNIVERSITY'S OBJECTIVE TO BUILD PARTNERSHIPS AND COLLABORATIONS.**

- Planned programming and presented at monthly Information Technology Community of Practice (IT CoP) meetings, discussing software licensing, email safety, and mobile identification adoption.
- Collaborated with the FBI and University of Kentucky Police to enhance campus cybersecurity.
- Participated in STEM outreach initiatives, engaging K-12 students and educators across Kentucky.
- Facilitated infrastructure consultations for UK HealthCare's Community Connect network, strengthening community partnerships and IT service integration.
- Deepened partnerships with the FBI to identify compromised credentials and share actionable threat intelligence.
- Discussed password management solutions with City of Bowling Green representatives.
- Participated in a technical threat briefing presented by a strategic partner.
- Attended a medical device security customer advisory board meeting, receiving feedback and product education.

IT Community of Practice reunites in person at newly renovated Gray Design Building

IT CoP, coordinated by UK ITS, met in-person in 2024 for the first time since 2020. Comprised of IT professionals from throughout the university, the committee met in the newly renovated Gray Building, formerly the Reynolds Warehouse, that houses the College of Design.

An Equal Opportunity University

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