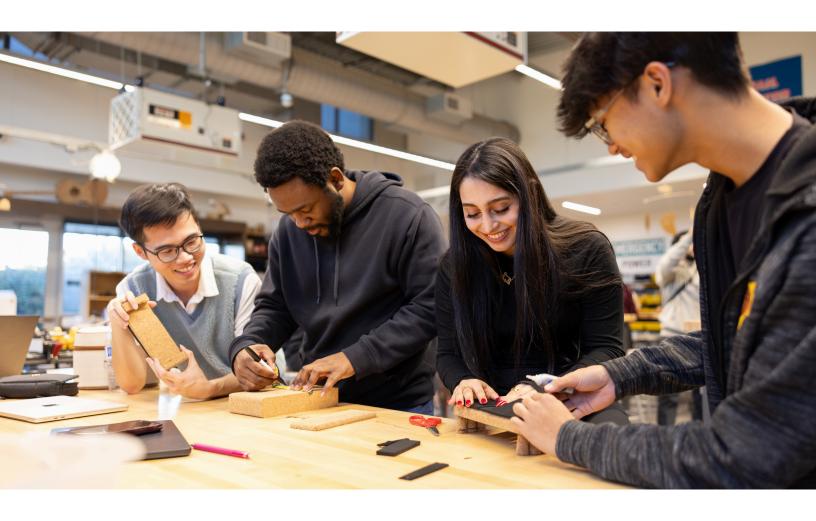
# Strategic Priorities

# **Enterprise Technology**

Accomplishments from October - December 2024





# FY25 Strategic Priorities

Enterprise Technology empowers a global community of students, faculty and staff by enabling human-centered digital experiences that elevate the future of education, discovery and societal advancement.

Our priorities are anchored in ASU's Design Aspirations and position us as a global beacon for integrating emerging and disruptive technology into learning ecosystems, communications and operations, all supporting amplifying human potential throughout our community's educational journeys.



- 1. Student and learner success
- 2. Generative AI for scaled learning
- 3. Transformation towards an Al-centric organization
- 4. Alignment and agility
- 5. Cybersecurity
- 6. Social impact and inclusive excellence
- 7. Data, analytics and insight
- 8. Technology enablement and digital infrastructure
- 9. Digital transformation

# 1. Student and learner success

Accelerate learning solutions and dynamic technologies to empower and enable students and learners to thrive.

- The Learning Experience team is excited to share the AI Creative Learning Labs creation at the Tech Hubs. These labs are pioneering experiences designed to foster creativity and innovation across multiple ASU campuses, with the potential for global reach through smaller nodes. These suites are integrated into existing Tech Hubs provide support, engagement, and consultations for students, staff, and faculty. Each location offers state-of-the-art creative resources, including computing facilities pre-loaded with Adobe Express and material digitization services, ensuring access to the tools needed to succeed.
- <u>ASU Portfolio</u>, a dynamic tool to support student reflection of learning and collection of learning artifacts, is moving forward to replace Digication for the Academic Enterprise. Efforts to begin socializing this to faculty and staff began this quarter. <a href="https://lx.asu.edu/sunsetting-digication">https://lx.asu.edu/sunsetting-digication</a>.
- In partnership with Web Accessibility and the Provost Office, a multi-unit working group was formed to assess the impact and needs for accessibility remediation in teaching and learning contexts. This group developed a broad plan to consider faculty communication, training, and support.
- NextLab teams completed 90 one-hour sessions, where students from Global Launch used VR headsets for language learning (studio associates provided support). Immerse provided VR Apps, and META provided headsets.
- While the Arizona Innovation Alliance has been disbursed, the ASU participants have agreed to continue to partner with peers at NAU and UA to discuss, create, and share resources to support Al adoption and research.
- QDesign and planning sessions continued with ASU Health faculty to identify learning space design needs and curricular integration plans.
- Executed fully on partnership with Work+ and SkillsFWD to enable TLN to Pocket to resume services workflow for student workers participating in the Work+ SkillsFWD program



# 1. Student and learner success

## (continued)

- In collaboration with the Learning Engineering Institute and First-Year Writing Programs, LX conducted an IRB-approved longitudinal study on faculty and student perceptions and practices for adopting AI, self-efficacy for using AI, and experiences using AI as a writing companion. Extend to apply the study in disciplines other than writing. Year 1 qualitative assessment collection completed. This consisted of 25 hours of faculty semi-structured interviews. Year 2 surveys of faculty and student experiences were collected in Q2. Data will be analyzed and published to inform future practice.
- Al at the Tech Hub has weekly events where faculty, staff and students from across the University attend to brainstorm and collaborate on project ideas. In December, there were over 40 ASU community members working on 35+ different projects.
- In collaboration with the Office of the University Provost, Learning Enterprise, EdPlus and academic units, ET hosted the inaugural AI Community of Practice Unconference bringing together faculty, staff, and students from across the university to share how they are using AI in their work, studies, and research and consider future applications of AI through the lens of Principled Innovation. <u>ET News</u> <u>Story</u>
- The Spring 2025 Innovation Challenge has begun.
- Fall 2024 wrapping accomplishments:
- The Green Workforce Analyst (GWA) project used ChatGPT to define green job capacities, build a custom AI to assess occupations and analyze workforce sustainability at scale. It evaluated 872 occupations and 13,000 tasks, earning recognition at the National Sustainability Society Conference for its innovative approach.
- Trusted Learner Network made significant advancements toward a full-scale production launch. Due to the data migration complexities identified during testing, the target timeline has been adjusted to early Q3 2025 to ensure a smooth transition. This initiative is on track to scale up with strategic units and programs in Spring 2025, providing a strong and well-prepared rollout.



# 1. Student and learner success

# (continued)

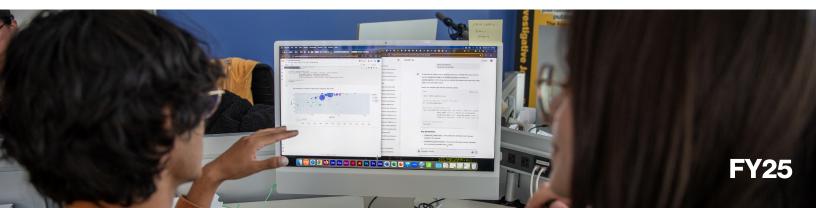
- The CHART project used ChatGPT to analyze team communication in high-stakes environments, such as search-and-rescue simulations, automating the classification of coordination, conflict resolution, and strategic planning processes. By developing custom MyGPTs, the team improved efficiency, achieved 80% inter-rater agreement, and uncovered challenges in measuring team performance solely through final scores, highlighting the complexities of team dynamics in critical operations.
- Projects are live in ChatGPT Edu and ASU's MyAl Builder.
- The META Quest for Education Pilot has Launched with 40 VR headsets for fleet management. META received UI/UX feedback.
- Igloovision has begun working with Decision Theater and Thunderbird. IglooVision will develop an immersive display solution for use across ASU.
- Enterprise Technology, Office of the University Provost, and EdPlus collaborated to create an institution-wide pilot process to test new features developed by Instructure Canvas. This improves transparency for new releases across the Academic Enterprise and Learning Enterprise and strengthens ASU's contribution to feedback on new developments in Canvas.
- Phase 1 of the SkillsFWD grant has been completed. This includes the technical development and multi-platform integration across TLN, CredID and SmartResume. Student workers complete the Work+ Skills Assessment with their supervisor to receive credentials in CredID.
- <u>CredID MVP</u>, a system to issue and receive digital credential awards, launched for pilot use in October 2024. University College has served as the pilot use case for the SkillsFWD grant and has successfully created 25 credentials and issued 1102 awards. Phase I development is underway to create Canvas LMS integration for credentials.
- Executed a partnership with Center for the Future of Arizona, Pipeline AZ, Rio Salado College and National Retail Federation to bring digital verifiable credentialing for students at Rio Salado College, anticipated first students in Q3 2025.



# 2. Generative AI strategy for scaled learning

Leverage AI and emerging technologies to advance learning at scale.

- The CreateAl Platform now supports approximately 3,000 beta users. The Al Acceleration team launched the CreateAl Lab User Group, which includes 600+ faculty and staff members supported by weekly user group sessions. A data mart in ASU's enterprise data warehouse was successfully launched to report more key KPIs.
- Implemented enhancements to MyAl Builder and ASU GPT include document upload and analysis, improved sharing and collaboration features, an Al-powered inapp help assistant, and project-based API key management for enhanced security and guardrails.
- To support the growth of ASU's AI Communities of Practice (AI CoP), two weekly
  office hours are hosted for AI explorers and builders across ASU. CreateAI Lab User
  Group sessions are held to help users apply CreateAI tools to their specific use
  cases. General AI support sessions include guidance on external tools like ChatGPT
  are also available.
- Continuing refinement of Dreamscape Learn's AI Companion to improve its
  response style and approach while maintaining high factual accuracy. Collaborating
  with EdPlus to integrate contextual Canvas data and implement Canvas gating to
  ensure responses align with student progress. These efforts aim to enhance the
  companion's effectiveness and student experience.
- Onboarded in February, new Spring 2025 Innovation Challenge Specialists support
  participants, spotlight their work, and share tips, tricks, and insights within the #ai
  channel to drive collaboration and engagement.
- Introduced two AI Avatars on ASU Virtual Campus. An ASU Campus Guide and an Impact Water Expert—were developed for the EngageVR platform to provide interactive, on-demand assistance to users in ASU's virtual campus.
- EDge AI (Educational AI at the Edge) Utilizing AI to address the digital divide Next Lab created a Llama-powered AI proof of concept on a single board computer (Raspberry Pi) to enable AI access in remote or low-connectivity areas.



# 3. Transformation towards an Al-centric organization

Cultivate and advance an appreciative, inclusive, and AI-forward culture to enhance the employee experience and support ongoing professional growth, aligning with ASU's Charter and Design Aspirations

- Hosted multiple inclusive and AI-forward events, including the Codeflow Spark
  Challenge supported by TIAA and W.P. Carey. The Falling Walls Lab global platform
  in collaboration with ASU Global Futures Collaboratory, with one finalist from School
  for the Future of Innovation in Society who competed at the finale in Berlin,
  Germany, and a co-designed Skills Challenge with QS ImpACT for 500 online global
  participants.
- Engineering leveraged Pluralsight to create tailored learning pathways and upskilling opportunities for team members with an increased focus on AI development.



# 4. Alignment and agility

Advance operational alignment and ensure strategic execution through maturation of how we identify, define, prioritize and deliver work with directives from the President's Office, Office of the Chief Operating Officer and the ASU Enterprises

- Received five Copper Anvil Awards for excellence in Communication and Public Relations.
- Patient in Your Pocket, a Collaboration with Mayo Clinic, signed an agreement to deliver a proof-of-concept using Unreal Metahuman to create a realistic simulation of stroke symptoms, advancing medical training and awareness.
- Apple Vision Pro in Health Education: The aim is to develop a production pipeline for immersive learning content by exploring the AVP for creating high-quality 180degree immersive health content.
- Partnered with the Office of Human Resources to design a "train-the-trainer" Al curriculum to equip Subject Matter Experts across ASU with our Al tools to solve their specific use cases and drive time and cost savings.
- New help articles offered guidance on features like MyAl Builder, prompt creation, and advanced tools such as Retrieval-Augmented Generation (RAG).
- Piloted storytelling initiatives that mix text-based or in-person presentations as appropriate for the story and target audience.
- The Networking Upskill program continues with Cohort Two in partnership with Sun Corridor Network.
- Published Enterprise Technology 2024 Year in Review.
- Ongoing community engagement in alignment with the university's commitment to social responsibility. 133 staff members reported volunteer hours, and 231 completed a United Way Pledge.



# 5.Cybersecurity

Elevate cybersecurity posture and ensure a safe, trusted and secure digital ecosystem.

- The Risk Register has been built into the ServiceNow Risk Module to utilize the
  existing enterprise tool familiar to technology staff across ASU. The risk-scoring
  methodologies are being finalized. Piloting the register and supporting
  documentation are in progress. This is to provide a centralized view of identified
  threats and their impact and mitigations, enabling proactive cybersecurity risk
  management. It aligns security efforts with business goals, ensuring informed
  decisions to minimize disruptions and losses.
- Streamlined vendor risk management by leveraging ServiceNow to create a vetted vendor list that is currently in production and growing organically. Regulated data considered during Vendor Risk Assessment is carried over to reflect categories of data a vendor can secure. As part of preparing for the new review model, the team automated vendor risk scoring, which provided Procurement with view-only access to Vendor IT Risk Assessment data and developed training materials.
- Data Privacy Fundamentals training has been successfully migrated to Workday Learn. NIST (National Institute of Standards & Technology) Privacy Framework training topics have been established.
- Developed and validated queries to identify unmanaged endpoints by comparing user data from Active Directory and Endpoint Management data. Defined key fields to determine ownership and status of endpoints.
- The Security Operations Center Metrics dashboard is 100% complete. The following steps are to wrap up testing and data validation. The metrics provide visibility into incident trends, response times and enable data-driven decisions.
- The Security Operations Center presented staffing proposals to leadership focused on a consolidated operating model.
- October was Cybersecurity Awareness Month, and various events were held to
  engage faculty, staff, and students and increase cybersecurity awareness.
  Highlights included a live panel on cybersecurity careers, a student-focused
  CyberStop engagement table, a "WarGames" movie night, a wine mixer networking
  event with key speakers, and a virtual fireside chat featuring experts from
  institutions such as Harvard, Louisiana State University, and Charles Schwab. These
  events reached a broad audience (~230) and showcased insights from 10
  distinguished speakers across academia and the private sector.
- The Custom Cybersecurity training option has been evaluated and approved. This
  will allow ASU to be more nimble in providing relevant content, including AI-focused
  topics.
- Developed Release Management framework that will provide a standardized method for deploying applications that will entail expectations of automated testing (both quality assurance and security) to reduce the risk profile of the web applications supported by ASU.

# 6. Social Impact and Inclusive Excellence

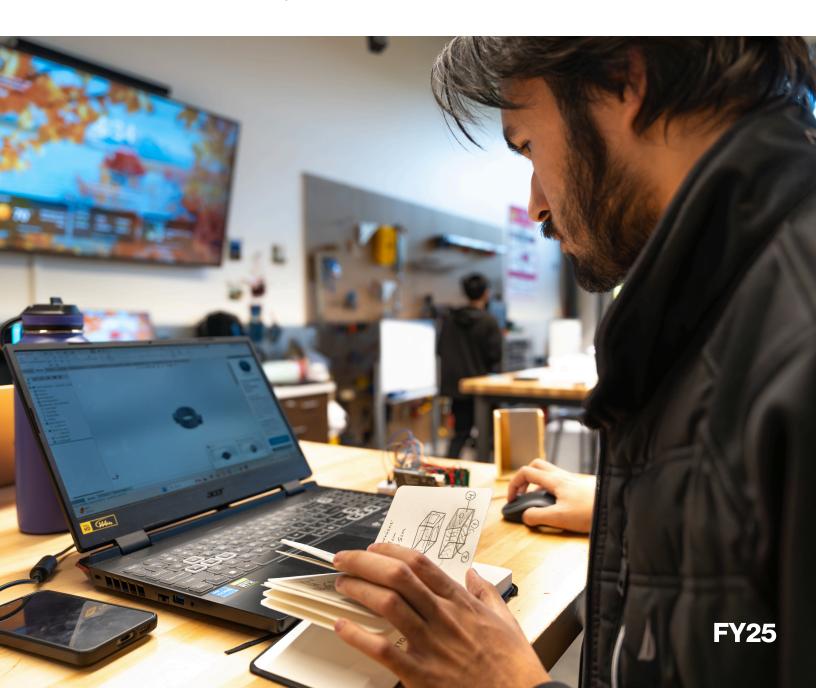
Advance communities we serve through strategic partnerships, digital inclusion and technological innovation. Our commitment to fostering inclusive environments and empowering communities enables us to deliver on ASU's Charter.

- Launched 1G of broadband service at Institute for Digital Inclusion Acceleration (IDIA)'s Tempe, Chandler, and Guadalupe Hives.
- Presented the City of Surprise Digital Twin at the Westmarc Economic Development Committee and Arizona League of Towns and Cities conference, with a final handover planned for December.
- Submitted a collaborative application with the City of Surprise and ASU Knowledge Enterprise to further digital twin development and innovation.
- Partnership with the City of Kingman for Urban Planning. Working with Mayor Watson from Kingman to develop a digital twin integration for enhanced urban planning and resource management.
- Developing city relationships with Avondale, Lichfield Park and the City of Goodyear.
- Enterprise Technology delegates attended the QS ImpACT Skill Challenge awards in London.
- ASU Next Lab managed the QS Future 17 Sustainable Development Goals (SDG)
  program at The School for the Future of Innovation in Society (SFIS). Enrollment has
  increased this year, and previous student participants are now mentors in the
  program.
- In Collaboration with the Rob and Melani Walton Center for Planetary Health,
   Enterprise Technology helped host the Falling Walls Lab, where a diverse and
   interdisciplinary pool of students and early-career professionals pitch solutions to
   the world's most pressing challenges, offering breakthrough ideas globally and
   locally.
- The UNESCO Chairs in Reorienting Education towards Sustainability have introduced ASU Next Lab to the School of Hope and GlobalMentee. ASU Next Lab has been asked to collaborate on bringing Edge AI to groups of displaced refugees.
- 15,000 total AZ-1 website views, offering resources and information to support digital equity statewide
- 8,900+ public broadband map views, helping communities and leaders make datadriven decisions about connectivity needs
- 100+ resources shared for broadband availability, maps, digital skills, telehealth, and more

# 7. Data, analytics and insight

Advanced enterprise-wide data maturity to drive data-informed outcomes.

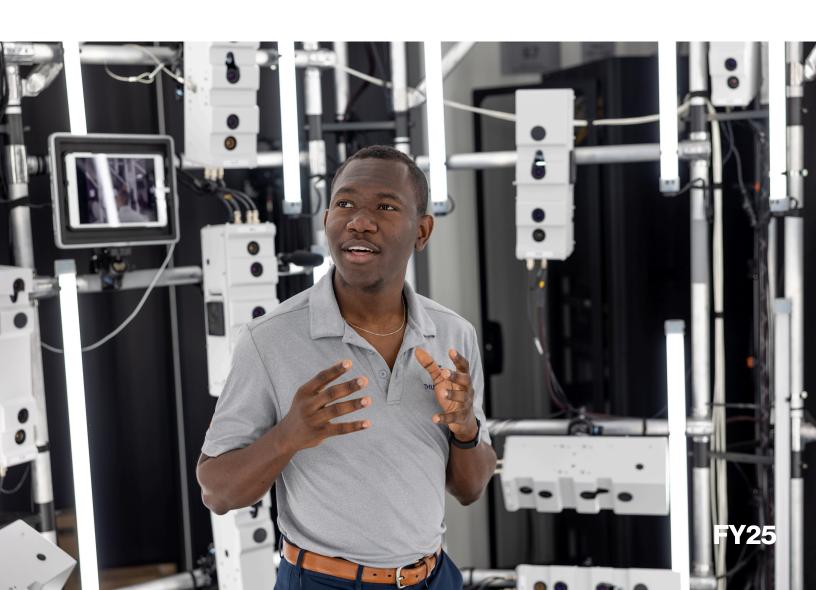
- Successfully supported Human Capital Management data warehouse work during transition to Workday
- Making some progress on Natural Language Query (NLQ) work. Aiming for Q3
  prototype. Making excellent progress on metrics across Enterprise Technology
  areas (Cybersecurity, Learning Experience, SPA)
- Resolving technical debt and navigating implementation challenges with Open Metadata data discovery tool.



# 8. Technology Enablement and Digital Infrastructure

Ensure ASU has a reliable, future-ready digital environment.

- Network Transformation continues through FY25 with over 138,000 network ports migrated, achieving 99.49% of the Q2 goal.
- Completed the charter for Morpheus implementation targeted for Q3FY25.
   Morpheus will make the consumption of cloud resources easier for those in the ASU community that either don't have cloud experience or have small-scale infrastructure to roll out.
- Enterprise Technology has fortified ASU's digital infrastructure by enabling AWS Identity Center, RDS Proxy, and AWS Graviton. These cloud-native services strengthened identity and access management capabilities and improved handling of sensitive application passwords.



# 9. Digital Transformation

Enhance faculty and staff success through unified and optimized technology experiences.

- Delivered proofs of concept using Agentic AI for Business & Finance and the Experience Center.
- The Experience Center AI Concierge Bot Phase 2, the EC Concierge transitioned from proof of concept to beta and went live in Q2. Leading up to Spring Rush, internal knowledge management teams ensured content in the Knowledge Base is both relevant and current. Knowledge repositories were also refined to improve the bot's handling of high-volume scenarios.
- Partnered with Business & Finance IT to enhance their Al infrastructure and facilitate
  access to the CreateAl platform, enabling them to deliver a successful proof-ofconcept for automating financial workflows using CreateAl and Microsoft Studio.





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