

# THE UNIVERSITY OF NEBRASKA ITS STRATEGIC PLAN

## NU MISSION

The University of Nebraska is one university comprised of four campuses: the University of Nebraska at Kearney (UNK), the University of Nebraska-Lincoln (UNL), the University of Nebraska Medical Center (UNMC), and the University of Nebraska at Omaha (UNO).

Where appropriate, the resources of the four campuses should be linked in cooperative efforts. To maximize the benefit of resources available to the institution, the University system should realize economies that may accrue from scale of operations whenever possible.

In 2017-18, teams from UNK, UNL, UNO, and the NU ITS Enterprise Systems team formed into a unified Information Technology Services division, aligning to the strategic needs of the University of Nebraska and each campus. The unified division also works closely with UNMC on procurement, security, and standardized technologies.

## ITS VISION

We deliver

**I**NNOVATIVE  
**T**RUSTWORTHY  
**S**OLUTIONS

*United and Optimized*

## ITS CORE VALUES (BE THE FIVE)

In collaboration with our academic communities, we will:

- Be **excellent** by exceeding expectations
- Be **champions** for our people and our partners
- Be **great listeners** who empower stakeholder needs
- Be **forward-thinking** through innovation to create solutions
- Be **trustworthy** through integrity, transparency, and communication

## ITS STRATEGIC GOALS

### Our Commitment to the Campuses



SERVICES

#### GOAL 1

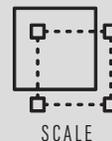
Provide an exceptional customer experience and outstanding, responsive IT **services** that are consistent and reliable across all locations, well understood, and valued by the faculty, staff, and students we serve.



SECURE

#### GOAL 2

Create a safe and **secure** environment that minimizes risk, protects privacy and data, and empowers the university community to do its work through transformative technology.



SCALE

#### GOAL 3

Work together to achieve economies of **scale** so that we optimize resources, deliver on our financial commitments, and reallocate resources for emerging needs and innovation.



PEOPLE

#### GOAL 4

Commit to investing in **people** so that we build an exceptional work environment with avenues for advancement and growth, and maintain a culture that embraces diversity in all forms. Empower our staff to facilitate broad collaboration and be outstanding partners to the students, faculty and staff across the campuses we serve.

## OUR INITIATIVES

Our initiatives propel us forward, help us deliver on our strategic goals, and empower the ITS commitment to relentlessly improving our services and support. We continually scout “what’s next” and regularly introduce new game-changing initiatives into our organization. In addition, we strengthen services by uniting people with processes, all while ensuring a strong foundation in which to base our operations.



Each of our four strategic goals will be met through the pursuit of targeted initiatives, which are bracketed by the following categories:

### Scouting Initiatives

As we regularly look ahead to what’s next and prepare for next-generation opportunities for higher education IT, our scouting efforts are critical in order to innovate on behalf of the campuses. To do so, we leverage thought-leaders and consortiums to help shape the landscape, create common solutions, and begin to identify what our next game-changing efforts could be.

### Game-Changing Initiatives

These initiatives are mission-centric and align directly to strategic priorities of the campuses we serve. Through their ability to transform the experience of our faculty, staff, and students, these initiatives change how we work and partner with our communities and stand to differentiate the University of Nebraska from our peers in higher education.

### Strengthening Initiatives

In order to continuously improve how we deliver, support, and communicate our services, we engage in purposeful strengthening initiatives. These efforts energize our valuable ITS staff around our core services, unite people and processes, and help us reach our goal of providing an exceptional customer experience.

### Foundation Building Initiatives

Our foundation provides a critical backbone of infrastructure, security, capacity, and systems in which the rest of our services are offered. At the core of all we do, ensuring the health of our foundation requires an intentional focus and targeted investment.

## SCOUTING

2020 +

Digital optimization / transformation

Automation, simplification, Artificial Intelligence

Interoperable teaching and learning environment

Next-generation campus cyber-infrastructure

Cloud-first strategy

## GAME CHANGING

2019 - 2020

### 1. Student Affordability

Empowering the adoption of digital course resources to increase student success and affordability

### 2. IT Accessibility

Committing to ensuring a highly accessible digital learning environment across the University of Nebraska

## STRENGTHENING

2019 - 2020

### 3. Service Management

Align IT services with university teaching, research and engagement activities

### 4. Staff Development and Engagement

Cultivate a collaborative culture that aligns our resources to support the NU mission

### 5. Teaching & Learning with Technology

Helping our faculty and students meet their academic goals through services and support

## FOUNDATION BUILDING

2019 - 2020

### 6. IT Security

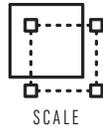
Balance university goals with the need to protect university and stakeholder assets

### 7. Optimization

Maximize the efficiency of our systems, services, processes, and resources to provide optimal value and a sustainable next-generation platform

### 8. Advisory & Partnerships

Listening and working closely with faculty, staff and students to align our work to their goals



## INITIATIVE 1: STUDENT AFFORDABILITY

*Responsible Leader: Marcia Dority Baker*

Decrease cost of attendance through coordinated open educational resources (OER) and inclusive access efforts in order to level the playing field for all students. Continue to provide reliable free or low-cost services to students, such as WiFi and printing.

### Selected 2019-20 projects that will help us move this initiative forward:

- Move from pilot to production of creating and delivering digital course content in the learning management system
- Incentivize and educate/promote the benefits of digital course materials to faculty, and promote our progress as we increase adoption
- Enhance partnership and collaboration with students, Academic Affairs, and Libraries, and align our ITS strategy to empower and deliver content
- Empower the Unizin Data Platform for a holistic view of student engagement in digital courses, including utilization of OER



### What success looks like:

\$1M+ in savings to students through the adoption of OER in Canvas courses by 200+ faculty



## INITIATIVE 2: IT ACCESSIBILITY

*Responsible Leader: Jason Buzzell*

Create a highly accessible digital learning environment at the University of Nebraska through extensive partnerships with system/campus 504/508 offices, Student Affairs, and compliance officers. Launch Virtual IT Accessibility Lab and liaison program for procurement testing and usability review, as well as accessibility outreach.

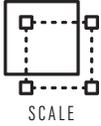
### Selected 2019-20 projects that will help us move this initiative forward:

- In partnership with NU Compliance, establish guiding ICT Accessibility Policy
- Establish NU ITS accessibility website, highlighting resources and guidelines
- In partnership with key units, establish and refine accessibility review processes within procurement cycle
- Leverage consortiums and partners, such as Information Technology Accessibility Group (ITAG) and Unizin, to establish Virtual IT Accessibility Lab (advisory board, working group and liaisons)
- Inventory and audit existing campus resources
- Partnering and testing usability of hiring tools and HR systems (such as PeopleAdmin and Firefly)



### What success looks like:

50+ partners engaged as IT accessibility liaisons across the university system



## INITIATIVE 3: SERVICE MANAGEMENT

*Responsible Leader: Neil Wineman*

Offer and support clear, reliable IT services that are aligned with university teaching, research and engagement activities.

- Collaborate with stakeholders to identify new services and decommission legacy systems
- Ensure that users entering our environment have a clear understanding of the core tools/systems available to them, and that access to these tools/systems is secure and easy to understand
- Focus on the holistic user experience NU-wide and focus on streamlining and simplifying
- Leverage campus-specific ITS communities of practice to respond to the needs of students, faculty and staff

### Selected 2019-20 projects that will help us move this initiative forward:

- Create appropriate communications and resources – including ITS' web presence – so users get the help and support they need
- Implement a common call center solution to provide 24/7/365 support across all supported locations
- Configure service request, problem, and knowledge management modules within the ITS service management system, Footprints
- Deploy ongoing customer satisfaction surveys through Footprints



### What success looks like:

Maintain a 90%+ customer satisfaction level across the services suite



## INITIATIVE 4: STAFF DEVELOPMENT AND ENGAGEMENT

*Responsible Leader: Lisa Vogt*

Celebrate and promote the people and purpose of NU ITS, how our staff help empower the mission of NU, and how NU ITS helps the campuses reach their strategic goals.

- Design and communicate career pathways within ITS by telling the inspiring success stories of employees who have moved up in the organization
- Driving retention through engagement
- Defining and building ITS culture

### Selected 2019-20 projects that will help us move this initiative forward:

- ITS Mentoring Program
- Engagement survey and stay interviews
- Professional development opportunities
- Locally hosted conferences, including the Higher Education Users Conference (HUEC), the Women Advance IT conference, and the Innovation in Pedagogy and Technology Symposium
- Recognize outstanding employee efforts through the Technology Excellence Award given in October and the Rick Fredericks Awards for Collaboration given in January

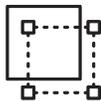


### What success looks like:

Increase retention of ITS staff



SERVICES



SCALE



PEOPLE

## **INITIATIVE 5: TEACHING AND LEARNING WITH TECHNOLOGY**

*Responsible Leaders: Jaci Lindburg, Heath Tuttle, Jane Petersen*

Directly support faculty and students in teaching and learning with technology, including offering a core suite of academic technology tools and systems, in addition to aligning IT staff for critical campus-level support of instruction.

### **Selected 2019-20 projects that will help us move this initiative forward:**

- Evolve, adopt, and upgrade effective learning spaces that best suit our faculty's pedagogical goals in the classroom
- Increase awareness and adoption of core suite of academic technology systems available enterprise-wide
- Pilot tools with effective interoperability to continue to improve and update the learning management ecosystem
- Gather more holistic data about student engagement and interaction in courses utilizing the Unizin Data Platform and train/promote to faculty
- Leverage various Unizin and BTAA teaching and learning subcommittees for additional partnership opportunities

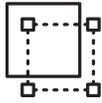


### **What success looks like:**

Increase overall adoption of Canvas with a goal of 100% utilized and increase utilization of specific features within the LMS



SERVICES



SCALE



SECURE

## INITIATIVE 6: IT SECURITY

*Responsible Leader: Rick Haugerud*

Balance faculty, staff and student goals with the need to protect university and stakeholder assets through deploying security tools and best practices.

- Reduce attack surface through decreasing the time to patch prioritized, exploitable vulnerabilities
- Inventory and review app security
- Utilize our leading cybersecurity tools to monitor and detect compromised accounts
- Educate and promote IT security to users across our campuses to increase understanding and gather feedback on our approach
- Create an environment where IT security is part of our culture and a part of everything we do through policies, education, inventory processes, risk assessments, and security practices that are transparent to our users

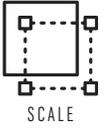
### Selected 2019-20 projects that will help us move this initiative forward:

- Expand usage of two-factor authentication, provided through Duo, to protect access to primary academic and administrative services
- Implement advanced email security services to mitigate spam, phishing, and email spoofing risks
- Implement data scrambling/masking in financial management system (SAP) to protect sensitive data in test environments and as a security protection in production environments
- Prepare identity and access management systems to be able to provide consistent single sign-on functions to university services hosted on cloud platforms such as AWS
- Eliminate aging firewalls protecting enterprise services by migrating services to a newer security environment
- Renewed focus on creating the best customer experience with a tiered support model



### What success looks like:

Increase NU-wide adoption of two-factor authentication to 90%+ of our users



## INITIATIVE 7: OPTIMIZATION

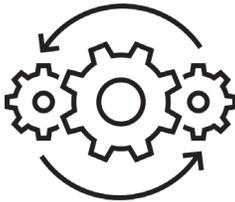
*Responsible Leaders: Carol Kirchner, Michael Ruhrdanz, Andrew Buker*

Maximize the efficiency of our systems, services, processes, and resources to provide optimal value and a sustainable next-generation platform.

- Maximize procurement value of key purchases through our membership and participation in consortiums such as Internet2, EDUCAUSE, MHEC, Quilt, Gartner, Unizin and BTAA
- Bring clarity/visualization to ITS budget and align budgeting cycle with strategic planning, project roadmaps, and purchasing agreements
- Help campuses adopt transformative technology to bring maximum value with limited resources while monitoring usage and performance of legacy systems and decommission when possible
- Continually reinvest in ourselves in order to fund the top, mission-centric efforts of our organization
- Pilot the same overarching systems on each campus and, if successfully reviewed by faculty, staff and students, align the purchase and contract to benefit the entire NU system, achieve scale, and realize efficiencies
- Next-generation infrastructure: Design and implement a next-generation network, computing, storage and data center environment to provide a consistent, scalable, and modern foundation for all other ITS and University services

### Selected 2019-20 projects that will help us move this initiative forward:

- Migrate UNK, UNL, and UNO main campus websites to AWS-hosted services
- Migrate FourWinds signage control system to a cloud platform
- Implement a common academic and event management system at UNK, UNL and UNO
- Implement a common call management system at UNK, UNL and UNO
- Support the direction of the Interim President to implement a common degree audit system at UNK, UNL and UNO
- Identify and track division-wide metrics and Key Performance Indicators to track progress toward strategic plan and corresponding annual report



### What success looks like:

Standardize where possible with a target of 80%+ similarity across NU system while maintaining agility and flexibility for single-campus solutions when needed



## **INITIATIVE 8: ADVISORY AND PARTNERSHIP**

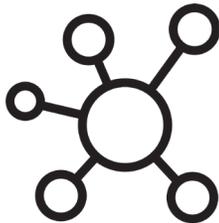
*Responsible Leaders: Bret Blackman, Heath Tuttle, Andrea Childress, Cheri Polenske*

Define our feedback and advisory channels with faculty and administration across the NU system in order to provide clarity and maximize the value of stakeholder input to the ITS environment, and to increase faculty-campus understanding of new initiatives and changes coming from ITS.

- Engage in a constructive, meaningful capacity with decentralized ITS, particularly around the areas of procurement, security, and service management
- Routinely interact with faculty-led IT committees
- Elicit ongoing campus feedback in order to make well-informed decisions that meet stakeholder demands and add maximum value
- Engage with the State of Nebraska to increase knowledge and partner whenever possible, particularly with Network Nebraska
- Build in data-driven decisions and build an IT culture that is proactive through partnership and communication
- Empower researchers both on-campus and across the state, inside and outside the University of Nebraska, to fulfill our mission
- Contribute to the enhancement and creation of products and services by participating in appropriate communities, consortiums, and organizations that are driving IT progress and helping shape the future of technology in higher education, such as Internet2, EDUCAUSE, MHEC, Quilt, Gartner, Unizin and BTAA

### **Selected 2019-20 projects that will help us move this initiative forward:**

- Senior Leadership Team meetings with campus stakeholders
- Develop an Enterprise Services roadmap for student services and enterprise resource planning software
- Define strategic planning process that is heavily influenced by stakeholder input in various formats and align to portfolio management process



### **What success looks like:**

Increase overall number of partners/committee representation across our campuses

Increase the depth at which we gather feedback from stakeholders



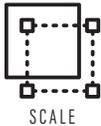
SERVICES



PEOPLE



SECURE



SCALE

## SCOUTING EFFORTS AND INITIATIVES

As we innovate and regularly look ahead to what's next, our scouting efforts are critical. Some examples of projects and efforts we're planning for include:

- Outline next-generation network infrastructure to establish a consistent and scalable foundation and to stay ahead of increasing demands for bandwidth
- Determine core strategies to leverage digital within both current process optimization to entirely restructured business transformation for the campuses and our statewide partners
- Service Transformation: Identify and prioritize opportunities to leverage automation, dig data analytics, Artificial Intelligence, Machine Learning, and other innovative approaches to simplify services and improve user experiences. Examples include password resets, virtual server requests, intelligent account security, and zero-touch provisioning.
- Plan for an interoperable teaching and learning environment that is seamless from physical learning spaces to the learning management ecosystem; learning spaces are ready to adopt to a variety of instructional needs of faculty and learning styles/needs of students at multiple locations
- Scope a tiered cloud-first strategy across IT divisions and procurement processes; look to cloud services as a solution to challenges before considering on-premise solutions. Examples include end-user file storage, server and desktop backup, disaster recovery capacity, and next-generation data center environments.

## WE HEARD YOU!

**This strategic plan and specific projects highlighted throughout were shaped in direct response to important feedback we gathered from faculty, students and staff at UNK, UNL, UNO and Central Administration in an April 2019 survey.**

Key takeaways from the survey:

- Students, faculty and staff were very satisfied with a number of our core services, including Canvas, Zoom and Box.
- Survey respondents would like to see ITS respond and solve problems more quickly, and to see overall communication improve, particularly on the roll-out of programs like two-factor authentication.
- Survey respondents would like clarity in knowing who to contact in ITS for specific types of services and support.

We shape our overall service approach and specific project implementation timelines through regular engagement and requests for feedback from a variety of faculty-led standing committees on each campus, including:

- *Faculty Senates*
- *Academic Information Technology Committee (UNK Faculty Senate Subcommittee)*
- *Library Committee (UNK Faculty Senate Subcommittee)*
- *Information Technologies & Services Committee (UNL Faculty Senate Subcommittee)*
- *Academic Solutions Council (UNL Executive Vice Chancellor's Office)*
- *Academic Technologies Advisory Committee (UNL)*
- *Technology Resources & Services Committee (UNO Faculty Senate Appointed Committee)*
- *Faculty Senate Subcommittees, committee assignment varies by project (UNO)*