Digit@l Enablement

2023 REPORT

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Digit@l Enablement

Our goal is to create a campus that utilizes technology to improve communication, maximize efficiencies, and utilize synergies to enable faculty and staff to meet UNMC's mission.

Realizing this vision is critical to becoming a learning organization where best practices are integrated widely, failures are embraced as learning opportunities while not repeated, and a seamless and integrated use of technology to support our mission is allowed. Infusing technology at the core of our organization at varying levels has required a multi-year enterprise-level approach.

This report details the status of the recommendations and initiatives made by focus groups commissioned by Senior Vice Chancellor Dr. Dele Davies and led by Director of Academic Technologies Melissa Diers.

The maturity of the UNMC Digital Enablement initiative is dependent upon the collective effort of all academic units. The goals and recommendations are intended to advance trainees' active and adaptive learning, increase educational outreach in our communities, and provide automated and tech-enabled education to healthcare workers.

As technology capabilities advance and our expectations change, additional work will continue beyond the original recommendations. With the initial workgroup recommendations addressed, re-engaging conversations and planning efforts in a continuous improvement cycle will be necessary to ensure continued growth.

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FOCUS GROUPS

> STUDENT EXPERIENCE >>>

The learning experience and all student touchpoints.

Students, faculty, and staff succeed by seamlessly integrating technology into their teaching, learning, and research.

> DIGITAL SKILLS >>>

Students, faculty, and staff succeed if technology seamlessly integrates into their work.

Digital fluency is having the aptitude to effectively and ethically interpret information, discover meaning, design content, construct knowledge, and communicate ideas in a digitally connected world. The digitally enhanced campus offers opportunities to enhance skill sets to become digitally fluent and orchestrate self-learning utilizing digital technologies that allow individuals to take on their role as digital conductors.

> TECHNOLOGY INFRASTRUCTURE >>>

Service excellence provides support through robust and secure infrastructure and user-friendly processes.

The digitally enhanced campus is home to faculty, staff, and students throughout the year who rely upon the stability of the infrastructure, depend upon the security of the infrastructure, and push the limits of its possibilities. It integrates seamlessly into their learning and lifestyle.

> ANALYSIS & DECISION SUPPORT >>>

The potential gaps in systems and operations to ensure data are utilized and contribute to planning and decision-making.

A data learning community will thrive on the ability to convert data into decisive and informed actions and decisions.

THE WORK: *Updates on Focus Group Recommendations*

> STUDENT EXPERIENCE >>>

1 Empower Students to Succeed with Digital Inclusion

A. Learning environments should offer a uniform experience throughout the campus

To provide a uniform experience, the recommendation includes:

1. **A Connected Campus:** Provide reliable cell phone coverage and network accessibility (wired and wireless) at all locations, including Nebraska Medicine clinical and green spaces

2. **Information Technology Asset Management process** that tracks institutional technology investments, current state, and recommendations needed to ensure a uniform experience

3. **Learning Space Sustainability Plan**, which includes standards, schedule of upgrades, depreciation, lifecycle schedule, and sustainable funding models for office and classroom technologies. Assure the plan aligns with the Facilities Management & Planning Master Plan and college projected instructional strategies

4. **Offer online resources to assist with student onboarding**

2 Technologically Empower Students for Success

A. Simplify **access**

B. Fund and implement a physical **student Information Technology Help Desk**

C. Provide student **device discount program**

D. Creation of an Information Technology **service catalog** that contains information outlining Information Technology services offered to students, faculty, and staff

E. Define and implement **standards** for faculty and program usage of the Learning Management System and educational applications

F. Enable all colleges and students to have access to an **EPIC sandbox-learning environment**

G. Offer a **student learning and study system** with the ability to curate resources within the course and external to the Learning Management System

> SUMMARY OF STATUS

✓ **Completed Initiative (2018-2023)**	⚙ **Ongoing Progress**
✔ **1.A.4 Offer online resources to assist with student onboarding**	⚙ **1.A.1. Connected Campus**
✔ **2.A. Simplified access** with appstore.unmc.edu	⚙ **1.A.2. Information Technology Asset Management**
✔ **2.C.** Provide a student **device discount program**	⚙ **1.A.3. Learning Space Sustainability Plan**
✔ **2.E.** Define and implement **standards** for faculty and program usage of the Learning Management System	⚙ **2.B.** Fund and implement a physical **student Information Technology Help Desk**
✔ **2.F.** Enable faculty and students in all colleges and institutes to have access to an **EPIC sandbox-learning environment**	⚙ **2.D.** Create an Information Technology **service catalog**
	⚙ **2.G.** Offer a **student learning and study system** with the ability to curate resources within the course and external to the Learning Management System

Completed

✔ 1.A.4. Online Resources for Students

In collaboration with many departments and colleges, the Division of Student Success led the effort to offer the 2020 New Student Orientation entirely online through Canvas and Zoom. In response to the COVID-19 pandemic, the first virtual student orientation was successfully conducted. The Division of Student Success continues to update online resources on its New Student Onboarding website.

An additional response to quickly transitioning to remote learning was the creation of keeplearning.unmc.edu. In collaboration with the Division of Student Success, Academic Technologies, a division of Information Technology, curated online resources outlining UNMC student resources, including COVID-19 campus updates, essential support services (academic records, financial aid, student accounts, etc.), health and wellbeing, and technology. As our community experienced a drop in COVID-19 cases, the keeplearning.unmc.edu resources have averaged 31K page views, averaging 8 views per student.

✔ 2.A. Simply Access

The UNMC community can access resources from any location, device, or anytime.

The On-The-Go service package was created to simplify access. Whether you are between buildings on campus, at a UNMC cluster computer, or at a coffee shop with a personal or organizationally owned laptop, you are on the go. These services enable that activity. On-the-Go services package includes:

> **Multi-factor authentication** — A security system that requires more than one method of authentication to verify your identity

> **UNMC Appstore** — Access to web-deployed applications (Microsoft Office, Kronos, EPIC, .etc.), virtual labs, and intranet web pages. Can only be used on computers and does not function on tablets or smartphones.

> **Intelligent Hub mobile device management** — an app that is installable on smartphones and tablets which creates a container to install apps (some apps which are available: Microsoft Outlook, OneDrive, EPIC, Kronos mobile, Haiku) and store data that is specific to UNMC.

> **Horizon Client Remote Desktop (RDP)** — Allows students with a UNMC issued desktop or laptop computer to connect to another UNMC computer from a remote location; whether across campus or the country.

> **Global Protect Virtual Private Network** — Solution to allow off-campus access to UNMC shared network drives and server connectivity needed for applications installed on organizationally owned devices.

✔ 2.C. Provide Student Device Discount Program

UNMC offers a discount program intended to provide employees and students with access to a variety of products and services at reduced rates.

✔ 2.E. Define and Implement Standards for Faculty and Program Usage of the Learning Management Systems

The University of Nebraska has three different tools for academic teaching and learning, training, and compliance.

› CANVAS (academic teaching and learning)

Canvas is the University of Nebraska's course delivery platform for credit offerings and UNMC compliance courses.

› CATALOG

NU Advance is the University of Nebraska System's course delivery platform for online non-credit, continuing education, and professional development offerings. You'll find courses of all types, for anyone who is looking to better themselves without committing to a degree.

More information at NU Advance catalog of services

› BRIDGE

Bridge is the University of Nebraska's solution that houses employee learning and professional development.

	NU ADVANCE	CANVAS	BRIDGE
Internal training (tracking reminders)			✔
External training (non-credit)	✔		
Payment	✔		
Academic (credit)		✔	
Academic credentialing		✔	
HR and professional development			✔
Ad hoc training for Canvas		✔	✔
Certificate/badge of completion	✔		✔

✔ 2.F. EPIC Sandbox Learning Environment

Students may now be granted access to the educational EPIC sandbox for training.

Access is not location-based. Additional requirements, including copyright notifications in the environment (technical) and facilitator training (operational), are required to extend access. Since the end-users are not EPIC users, the facilitators must be proficient users or credentialed trainers in the applications. Enhancing working relationships with the One Chart training team is ongoing.
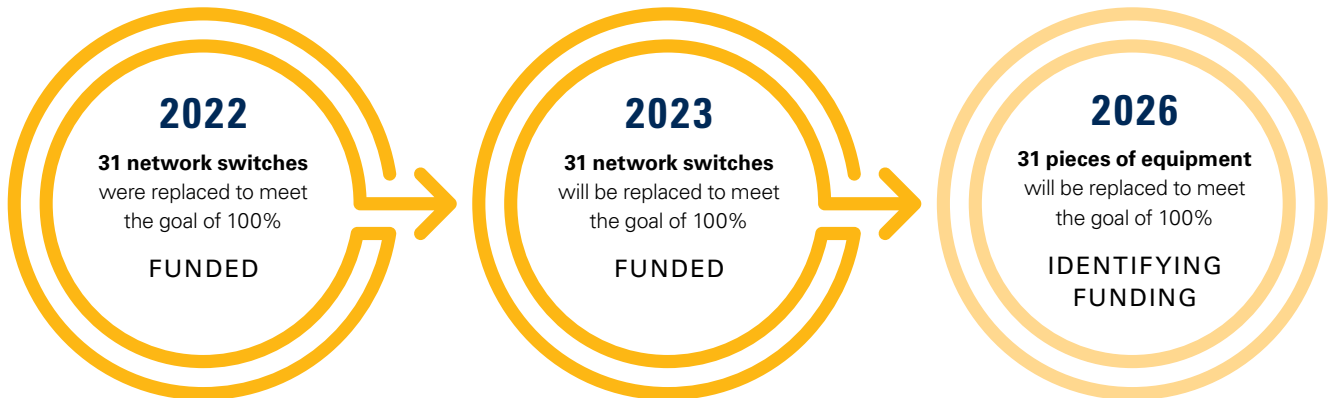
Ongoing

⚙ 1.A.1. Connected Campus

Building on the initial 2017 Digital Campus investment, ongoing investments in networking infrastructure continue to replace end-of-life equipment in buildings utilized for education. Equipment replacement priority is ordered from oldest to newest unless the focus is adjusted due to a business need.

› WIRED NETWORK INFRASTRUCTURE

Most networking switch infrastructure has been replaced over the past two years.
There are approximately 230 UNMC networking switches in total out of a total of 537 enterprise wide. A dozen switches are still to be replaced (they have been ordered). We expect to finish with all switch replacements in FY24. We have been on a journey to wired network segmentation for 2 years, and the journey will continue over the next 2 years as we fingerprint all devices, develop software policies, and put segmentation into production.

2022
31 network switches
were replaced to meet the goal of 100%

FUNDED

2023
31 network switches
will be replaced to meet the goal of 100%

FUNDED

2026
31 pieces of equipment
will be replaced to meet the goal of 100%

IDENTIFYING FUNDING

› WIRELESS NETWORK CONNECTIVITY (WI-FI)

Information Technology manages 1,877 (4,766 enterprise total) UNMC Wi-Fi access points across the campus. Equipment which supports the Wi-Fi network will require ongoing upgrades. The ongoing intent is to continuously budget and invest to ensure 100% of the equipment is within industry standards of service operation.

In addition to the funded Wi-Fi upgrades, the College of Dentistry – Children's Hospital and Medical Center, College of Nursing West Nebraska Division (Scottsbluff), and the College of Nursing Northern Division (Norfolk) have been added to the UNMC Wi-Fi network.

The Information Technology department analyzed the current Wi-Fi service to ensure coverage capacity and identified potential enhancements that needed additional funding. The analysis has been completed and IT is now addressing the remaining findings from the report.

2021

**14 wireless
access points**
were replaced to meet
the goal of 100%

FUNDED

2023

**837 wireless
access points**
will be replaced to meet
the goal of 100%

FUNDED

2027

**825 wireless
access points**
will be replaced to meet
the goal of 100%

IDENTIFYING
FUNDING

> CELLULAR PHONE & NETWORK COVERAGE

During the time span of 2018 to 2023, investments were made to deploy a multi-host cellular Distributed Antenna System (DAS). A DAS enhances the user experience with greater coverage strength for cellular phone users on our campuses.

By 2024 the Omaha campus will have 87% coverage because of installing an antenna system in new buildings and major renovation projects. As 5G becomes more prevalent in the Omaha area, Information Technology is seeking funding to prepare for the required equipment replacement to offer 5G service on the Omaha campus.

The antenna system is comprised of equipment and established contracts with cellular providers. Currently, the Omaha campus has agreements in place with AT&T and Verizon to offer coverage utilizing UNMC's distributed antenna system. AT&T and Verizon make up 72% of our total campus personal cellular subscribers. To close the remaining 28% gap between cellular subscribers of other providers, UNMC finalized negotiations with T-Mobile to enter into an agreement to utilize UNMC's distributed antenna system (DAS). With the T-Mobile agreement, 98% of the Omaha campus will have strong cellular coverage.

Information Technology is scoping the request to investigate the need for increased cellular coverage on campuses located in Lincoln, Scottsbluff, Norfolk, Kearney, and Gering.
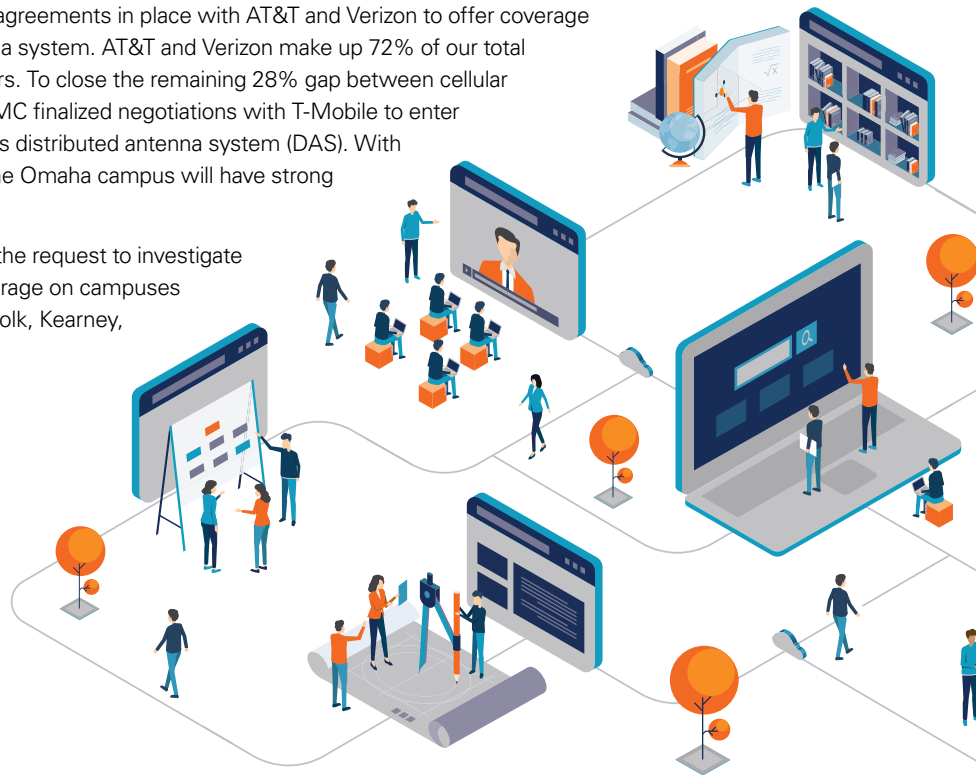
⚙ 1.A.2. Information Asset Management

Ensuring uniform experience. In 2022 Information Technology began the multi-year implementation of a web service platform (ServiceNow) to enhance the Information Technology Help Desk customer experience. ServiceNow aims to empower students to discover answers on their own through modules called Find Answers, Something Broken, and Request Something. This will result in reduced end-user frustration.

⚙ 1.A.3. Learning Space Sustainability Plan

The University of Nebraska Medical Center has experienced exponential physical and technological growth over the last two decades. As our expectation to integrate technology into our daily workflow has increased, the state appropriations, which have not increased over the previous two decades, have been outpaced.
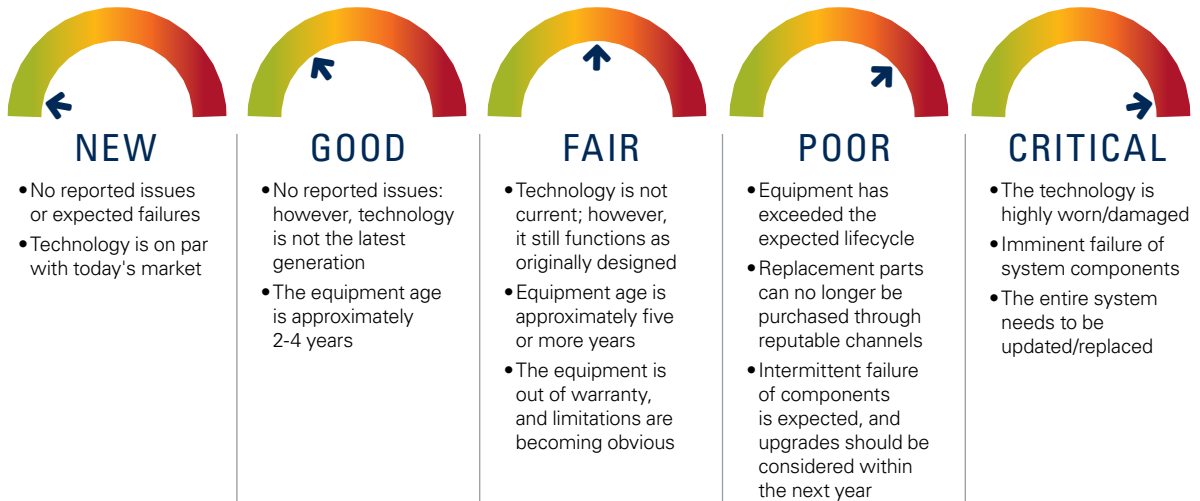
The number and types of devices the UNMC community uses have grown in recent years, including both UNMC-owned and Bring Your Own Devices (BYOD) that access wireless networks. This has increased the consumption of data on the wireless network. BYOD inherently ushered in multi-generation devices, which added layers of complexity to manage, and increased channel interference. Current assessments estimate that each student connects five to six devices to the UNMC wireless network.

UNMC has made significant strides to complete upgrades to classrooms using both institutional and federal funding. However, additional ongoing funding is necessary to maintain the quality needed to support our students' best possible learning environment. The technology expectations of our students outstrip current resources as costs have risen along with the number and types of changes. A new campus technology fee was proposed in Fall 2019 and 2021. The Student Senate did not support the resolution; therefore, the fee was not moved forward. UNMC leadership will continue to review the current college-level technology fees to ensure a campus-level technology fee would contribute to maintaining and enhancing the existing technological experience available to all students.

In addition to our continued work for the student campus-level fee, to ensure an ongoing equitable learning environment experience, a learning environment sustainability plan is being drafted. This plan will include life cycling, projected budgets, standards, and budgetary planning to support technological innovation within education.

UNMC INFORMATION TECHNOLOGY ANALYZES THE TECHNOLOGY CONDITION IN CLASSROOMS USING THE AUDIO-VISUAL SYSTEM CONDITION ASSESSMENT (AVSCA).

NEW
- No reported issues or expected failures
- Technology is on par with today's market

GOOD
- No reported issues: however, technology is not the latest generation
- The equipment age is approximately 2-4 years

FAIR
- Technology is not current; however, it still functions as originally designed
- Equipment age is approximately five or more years
- The equipment is out of warranty, and limitations are becoming obvious

POOR
- Equipment has exceeded the expected lifecycle
- Replacement parts can no longer be purchased through reputable channels
- Intermittent failure of components is expected, and upgrades should be considered within the next year

CRITICAL
- The technology is highly worn/damaged
- Imminent failure of system components
- The entire system needs to be updated/replaced

The technology in more than 100 classrooms has been upgraded and is now rated good or new. UNMC leadership addressed the critical needs across campus and closed the funding gap by systematically allocating all $3.4 million of federal relief funds received and targeted for higher education (HEERF) on a series of core technology upgrades (classrooms and network infrastructure). As the coronavirus pandemic continues, UNMC has received three cycles of funding, all being used to upgrade technology on all our campuses and enhance remote learning.

The initial round of funding (CARES: HEERF 1) was used to add and expand technologies to support remote and distance learning initiatives within the physical classroom environments. Multiple classrooms on all campuses were newly equipped with web conferencing to support the switch to a hybrid instructional approach or fully remote education experience. The replacement of existing end-of-support video and content equipment also occurred. Ceiling microphones were installed in rooms that previously didn't have audience microphones in lieu of traditional push-to-talk microphones to minimize physical touchpoints. Occupancy sensors were added to collect data on room utilization and increase efficient scheduling.

The next phase of funding (CRRSAA: HEERF 2) focused on transitioning spaces, which had a poor to critical AVSCA score. To accommodate the anticipated need for physical distancing, capacity, and current capabilities determined the priority ranking. Analog classroom equipment was replaced with digital equipment and in-classroom computers along with digital door signage to enhance the student experience. Additional upgrades will include the Wi-Fi coverage of the green space near the Omaha campus ice

rink and College of Dentistry green space, College of Dentistry – Children's Hospital & Medical Center, Scottsbluff, and Norfolk Wi-Fi coverage.

All UNMC divisions (Omaha, Lincoln, Kearney, Scottsbluff, and Norfolk) have or are on schedule to receive substantial classroom technology upgrades. These upgrades also include significant technological improvement in multiple locations in Durham Research Center I and Durham Research Center II to support the educational needs of graduate students.

UNMC Information Technology will continue to ramp up technology enhancements through funds provided by ARPA: HEERF 3. The projects include replacing the student printing platform and campus-level connectivity upgrades (cellular and Wi-Fi).

The proposed Information Technology budget for fiscal years 2023-2026 has been submitted to UNMC leadership.

⚙ 2.B. Physical Student Information Technology Help Desk

Funding was not approved for a physical Student Information Technology Help Desk. To enhance existing student support:

Information Technology offers pop-up student help desks at the beginning and end of each semester. The pop-up IT Help Desk is one-to-one assistance offered by an Information Technology specialist to resolve issues such as connecting to the wireless network, accessing UNMC email on a personal device, and configuring two-factor authentication.

> Information Technology hired a Service Desk Manager to increase efficiency in the day-to-day workflows of support services and incorporate best practices to ensure the highest level of service.

> Information Technology hired three additional Information Technology Help Desk analysts to increase our ability to respond to new requests.

⚙ 2.D. Creation of an Information Technology Service Catalog

In 2022 Information Technology began the multi-year implementation of a platform (ServiceNow) to enhance the Information Technology services catalog.

⚙ 2.G. Offer a Student Learning and Study System with the Ability to Curate Resources

The Echo360 Active Learning Platform (ALP) enables students to organize, store and share content in a personalized learning library, inside and outside the Learning Management System (Canvas).

Information Technology, Academic Technologies continues to promote the advanced utilization of Echo360 Active Learning Platform (ALP) by mentoring faculty to create content collections or consider a level of permission, allowing students to copy recorded media into their learning library and educate students of the potential features of the learning library.

> DIGITAL SKILLS >>>

1 **Promote digital fluency and require digital literacy with the creation of an Office of Digital Innovation that is staffed with specialists, which will facilitate the implementation of:**

A. **Track and dissemination of lessons learned** about best and failed practices to ensure knowledge is available from one unit to the next.

B. Support the continual process of learning by **providing resources and time to develop digital fluency** to contribute to the daily work and progress in their role at UNMC for all students, faculty, and staff.

C. Creation of a technology innovation **virtual or physical lab** that promotes the utilization of emerging education-related technologies.

D. **Incentivize the participation** in technology events, authorship, and representation at local, regional, national, or international events.

E. Creation and administration of digital skills challenges and **provision of badges**, **certificates**, and **prizes to incentivize** completion of those challenges.

F. Creation, funding, and administration of granting opportunities made available to individuals, departments, and academic units to **develop programs** in coordination with the Office of Digital Innovation that improve digital literacy.

G. Implemented by Human Resources, the **establishment of digital literacy requirements** regarding recruitment of faculty and staff.

H. **Identification and integration of digital literacy competency assessments**, in the evaluation, promotion, and tenure guidelines for faculty and staff.

I. Definition of the required number of **continuing education credits regarding digital literacy needed by faculty for promotion and tenure**.

J. Advocate the completion of **interactive digital literacy training modules for all onboarding students, faculty, and staff**. The modules should be specific to different roles within the institution. The modules would include competency self-assessment to assist students, faculty, and staff to identify the areas of deficiencies.

> SUMMARY OF STATUS

⊘ Completed Initiative (2018-2023)

✔ **1.B.** Support the continual process of learning by **providing resources and time to develop digital fluency** to contribute to the daily work and progress in their role at UNMC for all students, faculty, and staff

✔ **1.C.** Creation of a technology innovation **virtual or physical lab** that promotes the utilization of emerging education-related technologies

⊗ Not Implemented

✖ **1.A. Track and disseminate lessons learned** about best and failed practices to ensure knowledge is available from one unit to the next

✖ **1.D. Incentivize participation** in technology events, authorship, and representation at local, regional, national, or international events

✖ **1.E.** Creation and administration of digital skills challenges and **provision of badges, certificates, and prizes to incentivize** completing those challenges

✖ **1.F.** Creation, funding, and administration of granting opportunities made available to individuals, departments, and academic units to **develop programs** in coordination with the Office of Digital Innovation that improve digital literacy

✖ **1.G.** Implemented by Human Resources, the **establishment of digital literacy requirements** regarding recruitment of faculty and staff

✖ **1.H. Identification and integration of digital literacy competency assessments** in the evaluation, promotion, and tenure guidelines for faculty and staff

✖ **1.I.** Definition of the required number of **continuing education credits regarding digital literacy faculty need for promotion and tenure**

✖ **1.J.** Advocate the completion of **interactive digital literacy training modules for all onboarding students, faculty, and staff**. The modules should be specific to different roles within the institution. The modules would include competency self-assessment to assist students, faculty, and staff in identifying the areas of deficiencies

Completed

✔ 1.B. Providing Resources and Time to Develop Digital Fluency

Many individuals continue to offer resources to develop digital fluency. Some accomplishments have included:

> PROVIDE MICROSOFT 365 TRAINING

Information Technology hosted Microsoft training. All sessions are recorded and stored in the Information Technology Stream site, which currently holds more than 60 previous training sessions on a variety of technologies. Some topics were included:

- Microsoft PowerPoint
- Tips, shortcuts, and what's new with Microsoft Teams
- Microsoft Cloud Storage
- Microsoft Forms
- Microsoft Stream
- Microsoft OneNote
- Microsoft Lists
- Microsoft To Do
- Microsoft Planner
- Microsoft Project for the Web

> IT ACADEMIC TECHNOLOGY

IT Academic Technologies has the pleasure of supporting our faculty, staff, and students

- Service owner of Anthology Ally, Canvas, Echo360 Active Learning Platform (ALP), Evaluation Kit, Go URL, JAWS, Poll Everywhere, Pressbooks, student printing, and Turnitin.

- The IMPACT Professional Development Program offers the UNMC community opportunities to expand upon technical skills supporting our institutional learning. Academic Technology offers both the experience necessary, and the skills needed to navigate the technological landscape of the modern higher-learning environment.

- Monthly posts to iLearn, an online UNMC internal library of self-directed learning opportunities and resources that features presentations and materials by local and national experts to support your professional development.

- In response, the necessity of quickly converting from on-campus education to remote education was the creation of keeplearning.unmc.edu and keepteaching.unmc.edu. These resources offered helpful hints about utilizing educational technology and strategies for teaching remotely. Since the return to campus, the resources have been updated to continue to offer self-service support.

- Created modules that include instructions on how to use institutionally supported applications (Anthology Ally, Canvas, Echo360 Active Learning Platform (ALP), Evaluation Kit, Poll Everywhere, and Turnitin) in the Canvas Commons.

- Created a Teaching with Technology Faculty Checklist.

- Created faculty and student Tech Guides, to promote the major institutionally supported services and applications.

- Twice a week an Instructional Designer is available for consultation in the Leon S. McGoogan Health Science Faculty Commons.

- 24/7/365 Learning Management System support via chat or phone call.

- One-to-one or one-to-many Instructional Design consultations.
- Created an optional guide of best practices when utilizing the Learning Management System.

> FACULTY DEVELOPMENT

- Offers resources through events, workshops, and online resources.
- Go2Knowledge is an online training platform designed to provide on-demand instruction for the on-the-go learner. The platform offers a wide variety of training options from six different categories, including technology and online learning, student success, teaching and learning, student populations, institutional effectiveness, and campus safety and security.

> HUMAN RESOURCES RE-IMAGINING U: STRATEGIC EMPLOYEE DEVELOPMENT

Re-Imagining U is a collaborative employee training and development program managed by the Human Resources offices at both UNMC and UNO. Program participants could customize their learning and skill development in a way that is right for them. Re-Imagining U courses are offered repetitively over two semesters each year. Content is derived from needs indicated by employees and leaders in our current strategic vision and employee engagement surveys. Courses are either individual (meet once for 1 – 2 hours) or cohort format for deeper learning (4 meetings over four months for 1.5 – 2 hours each).

> RESOURCES

Information Technology, Academic Technology created:

✔ 1.C. Creation of a Technology Innovation Virtual or Physical Lab That Promotes the Utilization of Emerging Education-Related Technologies

In 2021, the Faculty Commons opened its doors to faculty. The Faculty Commons is a dedicated space for faculty members to have the opportunity to test ideas, ask questions, check out resources, or focus on teaching projects. Additionally, various experts from Faculty Development, the Interprofessional Academy of Educators, and Information Technology Academic Technology offer virtual and in-person office hours.

The E-Learning lab continues to offer free services and equipment and provides developers with the tools they need to create their projects.

Not Implemented

✖ The dedicated Office of Digital Innovation (recommendations 1.A, 1.D, 1.E, 1.F, 1.H, 1.I, 1.J) was not implemented.

> TECHNOLOGY INFRASTRUCTURE >>>

1 Anywhere, Anytime, IT

A. **Student Experience Recommendations** (A connected campus, an Information Technology Asset Management process, and a Learning Space Sustainability plan)

B. Coordinate accreditation and curricular standards to **ensure the academic technology guidelines are addressed**

C. Establish an **agile team across technical disciplines to administer a command center** of specialists who collaboratively work together to predict, troubleshoot, and resolve campus technology-related issues

D. Develop an **intranet-facing scorecard** that displays the current state of the services provided by the IT enterprise. The metrics displayed should be critical success factors that are necessary to deliver value to the student, faculty, and staff.

E. Create a **repository of classroom technical capabilities** and room scheduling available on all devices

F. Implement a **downtime notification process** to notify the community of education systems

2 Cultivate and Advance Technology's Role in Education

A. Ensure Information technology leadership is an **integral participant in enterprise strategic planning**

B. Develop a process to proactively identify and **mentor the community to embrace technology**

C. Develop a process to **support the increasing needs of persons with disabilities or impairment** — Universal Design for Learning (UDL), an accommodation-ready instructional framework

D. Populate the **institutional digital asset and archive platform to highlight dependencies and features sets of every software to avoid duplication or loss of opportunity to collectively bargain**

E. Increase the number of instructional designers and technologists to **assist faculty, students, and staff**

3 Foster a Learning Community that Values Data

A. Proactively gather **education research needs to assess the technological support** needed for pedagogical requirements and curricular change

B. Implement resources to support the **use of standardized data and analytics to improve decisions**

C. Develop processes to ensure **systems are interoperable, expandable,** and have elasticity by relying on analysis from the IT enterprise architecture team

D. Implement a **shared governance process** with input from stakeholders that aligns and prioritizes initiatives

> SUMMARY OF STATUS

✓ Completed Initiative (2018-2023)	⚙ Ongoing Progress
✔**1.A**. **Student Experience Recommendations** (A connected campus, an Information Technology Asset Management process, and a Learning Space Sustainability plan	✿**1.D.** Develop an **intranet-facing scorecard** that displays the current state of the services. The metrics displayed should be critical success factors necessary to deliver value to the student, faculty, and staff.
✔**1.B.** Coordinate accreditation and curricular standards to **ensure the needed educational technology requirements are addressed**	✿**2.C.** Develop a process to **support the increasing needs of a person with disabilities or impairment** — a Universal Design for Learning (UDL) framework, and accommodation-ready instruction
✔**1.C.** Establish an **agile team across technical disciplines to administer a command center** of specialists who collaboratively work together to predict, troubleshoot, and resolve campus technology-related issues	✿**2.D.** Populate the **institutional digital asset and archive platform to highlight dependencies and features sets of every software to avoid duplication or loss of opportunity to collectively bargain**
✔**1.E.** Create a r**epository of classroom technical capabilities** and room scheduling available on all devices	✿**2.E. Increase the number** of instructional designers and technologists **to assist faculty, students, and staff**
✔**1.F.** Implement a **downtime notification process** to notify the community of education systems	✿**3.A.** Proactively gather **education research needs to assess the technological support** needed for pedagogical requirements and curricular change
✔**2.A.** Ensure Information Technology leadership is an **integral participant in enterprise strategic planning**	✿**3.B.** Implement resources to support the **use of standardized data and analytics to improve decisions**
✔**2.B.** Develop a process to proactively identify and **mentor the community to embrace technology**	✿**3.C.** Develop processes to ensure **systems are interoperable, expandable**, and have elasticity by relying on analysis from the IT enterprise architecture team
	✿**3.D.** Implement a **shared governance process** with input from stakeholders that aligns and prioritizes initiatives

Completed

✔ 1.B. Coordinate accreditation and curricular standards to ensure the educational technology needs are addressed across divisions

UNMC Office of Accreditation and Assessment (OAA) provides guidance and support to initiatives related to institutional assessment outcomes of student learning (curricular and co-curricular) in accordance with Higher Learning Commission (HLC) criteria for accreditation.

An overview of the accreditation and curricular standard to ensure all requirements are addressed across divisions have been led by the leadership of current OAA initiatives:

> Implementation of ITEACH institutional learning outcomes (ILOs)

> ExamSoft, computer-based testing software

> AEFIS, a cloud-based assessment data management platform

Information Technology has a strong partnership with the Office of Accreditation and Assessment to maintain the understanding of technology needs of the institution.
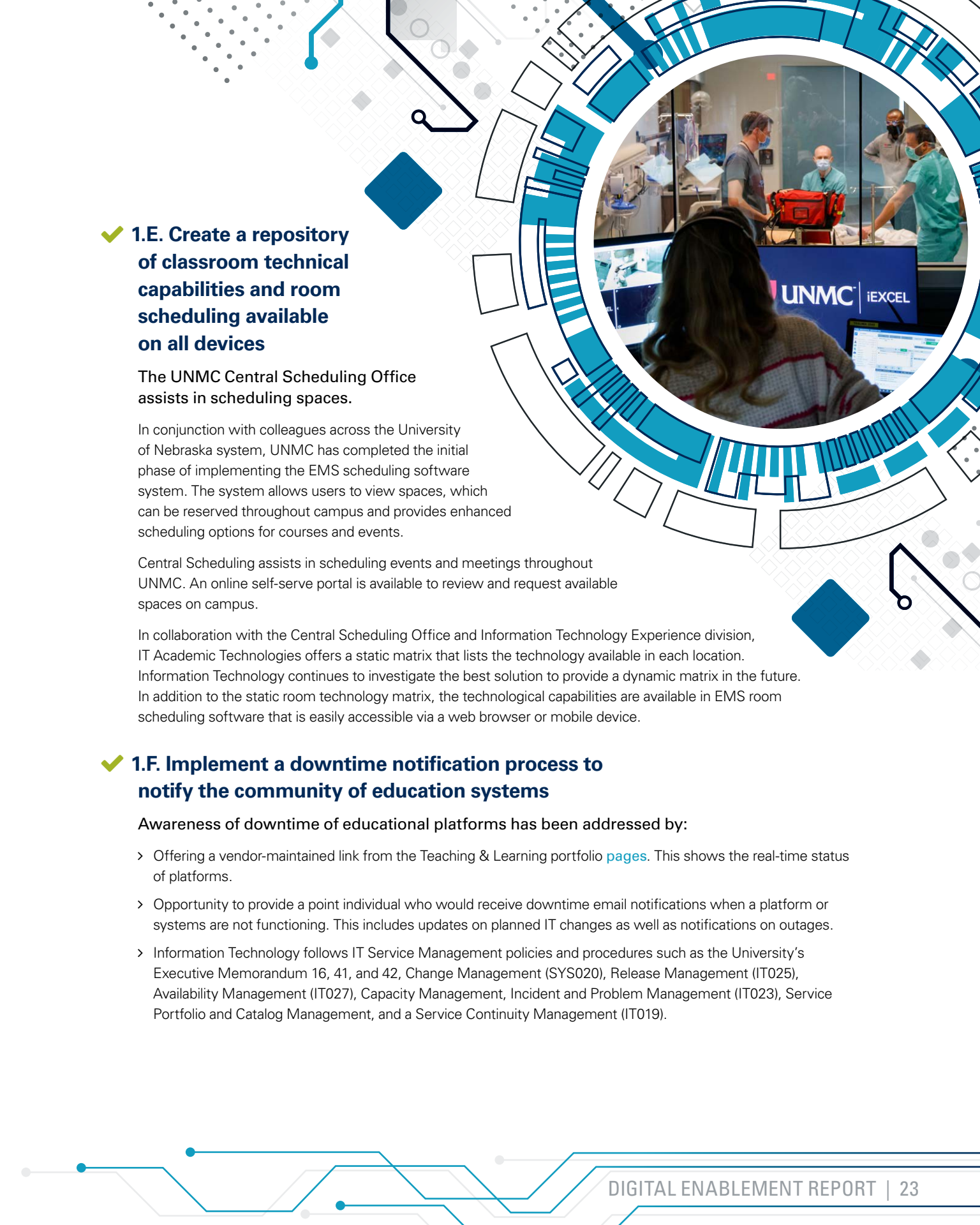
✔ 1.C. Command Center

Information Technology conducts a daily meeting open to all members of the IT department, IT partners, and interested colleagues to communicate items that are impacting/disturbing day-to-day operations.

The format is for each area in IT (Facilitator on Duty, Information Security, Enterprise Applications, Operations, Research Information Technology Office, Academic Technologies, DevOps, PMO, Business Office, Data Warehousing and Analytics, and IT Partners) to provide a quick update per area. This includes:

> **Lookbacks:** used to report significant enterprise issues that have occurred in the last 24 hours

> **Lookaheads:** go-lives or downtime that will occur in the next five days

> **Start the Clock:** raising active mission-critical issues that need resolution by the end of the day.

✔ 1.E. Create a repository of classroom technical capabilities and room scheduling available on all devices

The UNMC Central Scheduling Office assists in scheduling spaces.

In conjunction with colleagues across the University of Nebraska system, UNMC has completed the initial phase of implementing the EMS scheduling software system. The system allows users to view spaces, which can be reserved throughout campus and provides enhanced scheduling options for courses and events.

Central Scheduling assists in scheduling events and meetings throughout UNMC. An online self-serve portal is available to review and request available spaces on campus.

In collaboration with the Central Scheduling Office and Information Technology Experience division, IT Academic Technologies offers a static matrix that lists the technology available in each location. Information Technology continues to investigate the best solution to provide a dynamic matrix in the future. In addition to the static room technology matrix, the technological capabilities are available in EMS room scheduling software that is easily accessible via a web browser or mobile device.

✔ 1.F. Implement a downtime notification process to notify the community of education systems

Awareness of downtime of educational platforms has been addressed by:

> Offering a vendor-maintained link from the Teaching & Learning portfolio pages. This shows the real-time status of platforms.

> Opportunity to provide a point individual who would receive downtime email notifications when a platform or systems are not functioning. This includes updates on planned IT changes as well as notifications on outages.

> Information Technology follows IT Service Management policies and procedures such as the University's Executive Memorandum 16, 41, and 42, Change Management (SYS020), Release Management (IT025), Availability Management (IT027), Capacity Management, Incident and Problem Management (IT023), Service Portfolio and Catalog Management, and a Service Continuity Management (IT019).

✔ 2.A. Ensure Information Technology leadership is an integral participant in enterprise strategic planning

Information Technology leadership participates and conducts many committees and planning sessions.

On a quarterly basis, the Information Management Governance Cabinet meets to:

> Establish and align Information technology strategies to enterprise strategies and objectives

> Authorize initial Information technology priorities

> Establish accountability by setting and monitoring success criteria

> Serves as a communication platform for agreed Information technology strategies

> In FY24, Information Technology will work with Business and Finance on setting up an Academic Governance Committee to help with prioritization and funding for IT requests.

✔ 2.B. Develop a process to proactively identify and mentor the community to embrace technology

The Education Technology interest group (ETC) of the Interprofessional Academy of Educators connects members with an interest in using and experimenting with new educational technology.

The group goals include sharing best practices for integrating technology into education and fostering collaboration to develop innovative projects and scholarship across campus. Members of the group may collaborate in various areas based on interest. Potential topics include:

> Technology tools supporting accessibility and Universal Design for Learning (UDL)

> Use of UNMC-supported technologies and explore opportunities with new technologies

> Sharing experiences, successes, and lessons learned when using new technologies

> Engagement in education technology opportunities and events

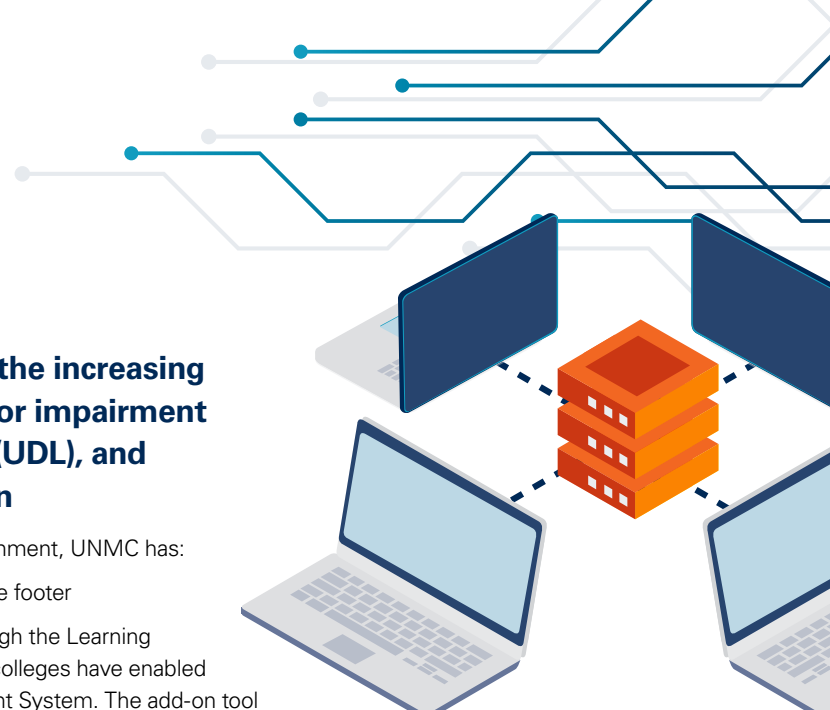> Collaborative support of scholarship and research related to education technology

Ongoing

⚙ 1.D. Develop an intranet-facing scorecard that displays the current state of the services provided by the IT enterprise.

An internal-facing scorecard is available, which displays the current state of services provided by Information Technology. In 2022 Information Technology began the multi-year implementation of a platform (ServiceNow) to enhance the ability to offer a scorecard that reflects the state of Information Technology services.

⚙️ 2.C. Develop a process to support the increasing needs of people with disabilities or impairment — Universal Design for Learning (UDL), and accommodation-ready instruction

To support a highly inclusive digital learning environment, UNMC has:

> Added an Accessibility Statement web presence footer

> Contracted Anthology Ally, a tool available through the Learning Management System (Canvas). Currently, two colleges have enabled the Ally feature within the Learning Management System. The add-on tool offers three primary features:

1. Media conversion to alternative accessible or preferred formats for course content (semantic HMTL, audio, ePub, electronic braille)

2. Ability to check and provide feedback and guidance on how to fix the identified accessibility issues to the instructor

3. Institutional scorecard for accessibility

> Contracted unlimited Echo360's automatic speech recognition (ASR) transcriptions service (sometimes referred to as machine captioning). The ASR service translates the recording's speech into text (captioning), giving the viewer the ability to read, search and download the transcription.

> The ability to assign Zoom host or another meeting attendee manually type captioning or Zoom's live transcription feature to provide automatic captioning through closed caption settings

> Negotiating NU-wide contract for a unified human captioning service.

> Licensed JAWS screen reader for any NMC faculty, staff, or students.

> Information Technology provides advice and guidance on determining options to meet the hardware or software needs to meet the requirements for staff and students with specific Americans with Disabilities Act (ADA).

⚙️ 2.D. Populate the institutional digital asset and archive platform to highlight dependencies and features sets of every software to avoid duplication or loss of opportunity to collectively bargain

Ardoq is a software tool used to document and represent the UNMC ecosystem. The tool offers insight into a deeper understanding of company-wide capabilities and applications. Additionally, it can assist Information Technology during an incident recovery process, showing dependencies and identifying the order to recovery based on the importance of the application to the enterprise.

In addition, to avoid duplication or lack of collective bargaining, as part of the Information Technology project intake process, requesters are made aware of existing licenses and leadership is informed of duplicative requests to promote collective bargaining.

While Ardoq is the current software tool, such functionality will ultimately reside in ServiceNow.

⚙ 2.E. Increase the number of Instructional Designers and Technologists to assist faculty, students, and staff.

The following colleges and units have added internal specialists to offer support directly:

> UNMC E-Learning

> College of Public Health

> College of Medicine: Genetics, Cell Biology, Anatomy, Internal Medicine, OB-GYN, Emergency Medicine

⚙ 3.A. Proactively gather educational research needs to assess the required technological support for pedagogical requirements and curricular change

The Interprofessional Academy of Educators IAE) Leadership Team includes two Education Researchers who can assist academy members as they navigate the process of increasing their scholarship in education.

As active members, the IT Academic Technologies team collaborates with leadership to assess technological support.

⚙ 3.D. Implement shared services governance processes with input from all stakeholders that align and prioritize initiatives

Ensure alignment of technology strategy with strategic goals and is transparent and widely distributed. Publicly report and communicate on all IT large projects.

Management committees contribute to a shared services governance process. The different colleges, institutes, clinical programs, service lines, and administrative areas across the enterprise are engaged in these management committees and provide their prioritized technology needs. This creates a forum that intakes new technology projects that creates visibility, transparency, and a mutual understanding of:

> Life Cycle Management (LCM) plan (includes infrastructure, network, wireless, devices, classroom technologies, existing solutions, and conference rooms)

> Active project status, which includes Information Technology resources

> New project vetting, which includes Information Technology resources (define, analyze, prioritize, and commission)

> Backlog of project requests to assist with introducing new technologies into the enterprise as we can align Information Technology resources to priorities or discuss what can be done to get additional resources.

A dashboard supplies a guide to the project status.
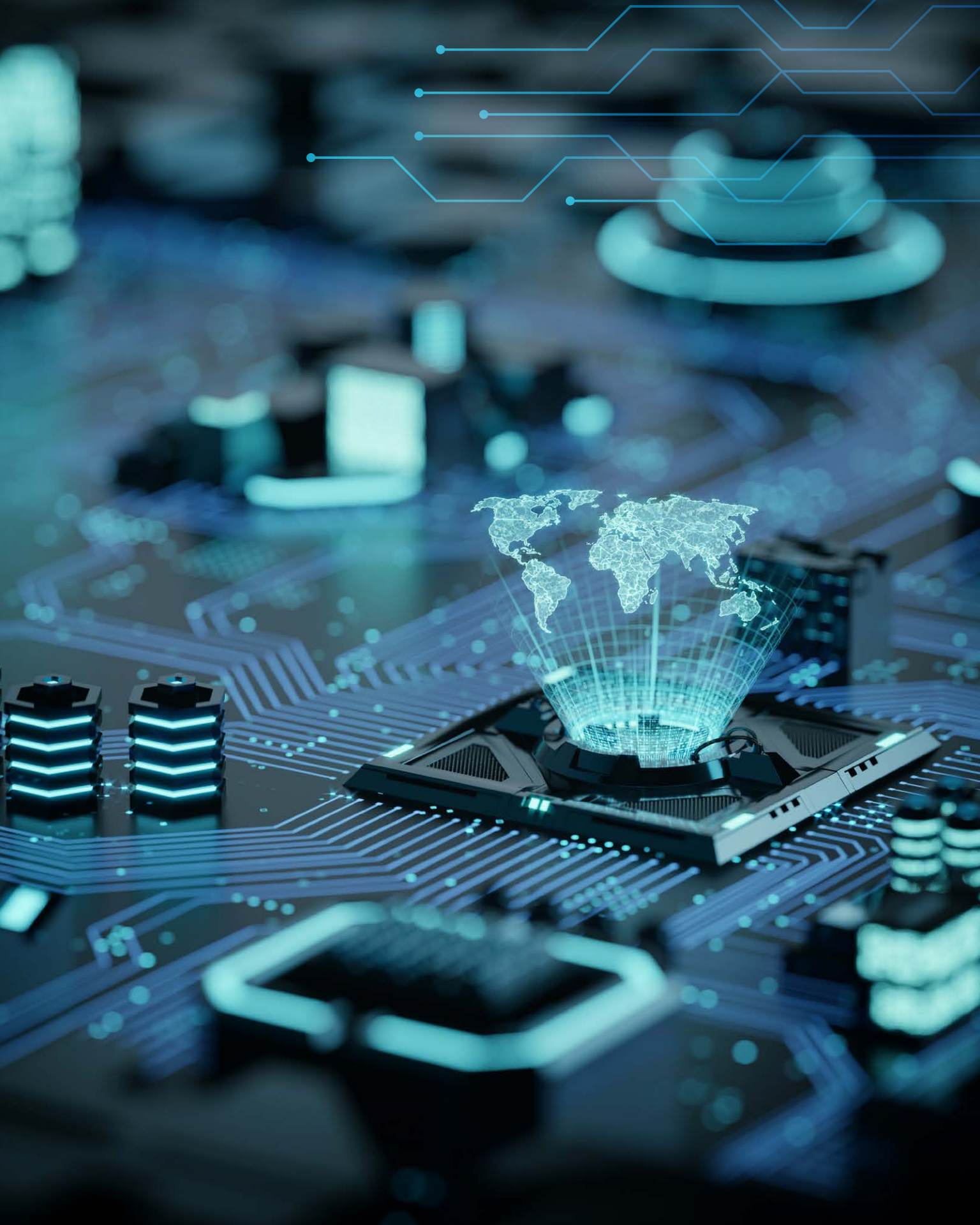
> ANALYSIS & DECISION SUPPORT >>>

1 Allow Observation and Developing Data Collection

A. Allow the workgroup to see an **existing or developing data collection and analysis framework** that may be replicated to meet the analytical needs of a Digital Campus.

2 Develop Recommendation

A. Using the iExcel study and the community expertise, **develop a recommendation** for using current institutional resources and/or adding new applications and services to create a Digital Campus Analytics and decision support system.

> SUMMARY OF STATUS

⊘ Completed Initiative (2018 – 2023)

✔ **1.A.** Allow the workgroup to see an **existing or developing data collection and analysis framework** that may be replicated to meet the analytical needs of a Digital Campus.

✔ **2.A. Develop a recommendation** for using current institutional resources and adding new applications and services to create a Digital Campus Analytics and decision support system.

Completed

✔ 1.A. Data Warehouse

The University of Nebraska Enterprise Data Solutions team and the UNMC Office of Institutional Research constructed the first reporting warehouse adding admissions information to help understand the process of student migration.

The collaborative team continues to work on supporting census reporting.

There is a strong need for ongoing investment in developing and building a data warehouse for UNMC software and databases to provide analytics for planning, predicting, and problem-solving.

✔ 2.A. Develop a Recommendation

The proposed Information Technology budget for fiscal years 2023 – 2026 has been submitted to UNMC leadership. The proposal includes a full-time employee to serve as a data analyst.

> SPECIAL THANKS TO LEADERS & PARTNERS >>>

For their ongoing commitment and strategic vision empowering the UNMC community to transform into a mature digital campus. The success of the multiyear initiative was not possible without the contributions and leadership of:

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Gary Lovely
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Jeff Bergholz
Executive Director of Operations, Information Technology

> WORKGROUPS

Digital Campus Workgroup(s) have been charged to:

> Identify the major issues that should be addressed within the workgroup area

> Selection of top three issues

> Bring potential ideas without money or resources considerations as a barrier

> Compose recommendations to resolve these issue(s)

> Identify metrics of success for identified issue(s)

> Identify the communication and dissemination strategies be for your recommendations that occur to all the different constituents (students, faculty, staff)

STUDENT EXPERIENCE – *the learning environment and all student touchpoints*

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DIGITAL SKILLS – *faculty, staff & students succeed if technology seamlessly ingrates into their work*

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TECHNOLOGY INFRASTRUCTURE – *all connections and programs that will make this work*

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ANALYSIS & DECISION SUPPORT – *the potential gaps in systems & operation to ensure data can contribute to planning and decision-making*

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